

Workplace learning in the South African Police Service (SAPS): Themes and perspectives in teaching research methodology module

by

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- ✚ To my Saviour, thank you Lord for giving me strength and wisdom to record and share our learning experiences with others.
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DEDICATION

Karin, this one is for you!

DECLARATION

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ABSTRACT

This study captures the transformation of a research methodology module and the workplace learning resulting from teaching research to senior police officers. Using ethnography, the study explores the initial development and transformation of the research module content and the ways in which the police trainers developed their practices to teach research methodology in the regulated police work environment. Through interviews, observations, document analyses and an ethnographic essay, the researcher uncovers the experiences and construction of knowledge at a SAPS Academy where research was taught and in the workplace during the ensuing experiential learning. The study revealed how the research module evolved through compensations made for shortcomings in the initial design. This was done by addressing changing organisational expectations and responding to specific needs of the adult learners. The trainers subsequently adapted their teaching approaches to cater for the specific needs of the learners and the organisation. At the same time, they also protected the reputation of the organisation and the integrity of the research module. The findings indicate that informal learning, constructed unintentionally, was more prominent in the workplace than the intended development of research skills. Evidence suggested that learning is indeed reliant on personal agency and that learning in communities of practice is very effective for the community. However, culture can become a barrier to learning when newcomers resist entry into such community or when its sub-culture conflicts with that of the bigger organisation. These experiences and lessons enabled the construction of a new three-phased research teaching model for organisations that wish to inculcate research as a problem-solving mechanism. The study has implications for policy-makers and educators as it emphasises the need to understand the theory of workplace learning and the necessity of making a deliberate effort to support learning in the workplace. When learning is not supported, employees develop undesirable skills to cope with the pressure of having to work and learn simultaneously. The study contributes to the existing knowledge of workplace theory, ethnographic research in police settings and research teaching pedagogy. The study highlights the need for further exploration of knowledge construction in communities of practice in regulated work environments where sub-cultures are in conflict with the organisational culture.

KEY TERMS

Teaching, Research, Ethnography, Workplace learning, Informal learning, Communities of practice, Agency, Police culture, Constructivist pedagogy, Research teaching model.

LIST OF ABBREVIATIONS

ADIP	– Service Delivery Improvement Programme
AIM	– African Institute for Mentoring
CAQDAS	– Computer Aided Qualitative Analysis Software
CoP	– Community of Practice
DivCom	– Divisional Commissioner
EDLP	– Executive Development Learning Programme
EDP	– Executive Development Programme
ETD	– Education, Training and Development
GRCD	– General Research and Curriculum Development
HRD	– Human Resource Development
JMLP	– Junior Management Learning Programme
LMID	– Leadership, Management and International Development
MMLP	– Middle Management Learning Programme
NQF	– National Qualification Framework
NYC	– Not Yet Competent
P	– Participant
PC	– Provincial Commissioner
PoE	– Portfolio of Evidence
RPL	– Recognition for Prior Learning
SAPS	– South African Police Service
SAQA	– South African Qualification Authority
SASSETA	– Safety and Security Sector Education and Training Authority
SBL	– School of Business Leadership
SSEDP	– Safety and Security Executive Development Programme
TAS	– Training Administration System
UNISA	– University of South Africa

TABLE OF CONTENTS

CHAPTER: 1 ORIENTATION	1
1.1 INTRODUCTION.....	1
1.2 BACKGROUND TO THE RESEARCH	4
1.2.1 Theoretical framework.....	4
1.2.1.1 Appropriate introduction of unfamiliar content	4
1.2.1.2 Creation of ontological shifts	5
1.2.1.3 Empowerment of learners for critical dialogue	6
1.2.1.4 Vibrant collaboration between academia and the workplace.....	6
1.2.1.5 Teaching implications for the SAPS	8
1.2.2 Conceptual framework	9
1.2.2.1 Adult learning	9
1.2.2.2 Traditional learning theories	10
1.2.2.3 Locating the study within theoretical perspectives	11
1.2.2.4 Workplace learning theory	12
1.2.2.5 Implications for SAPS	14
1.2.3 Current status and reason for study	16
1.3 PROBLEM STATEMENT	22
1.4 AIMS AND OBJECTIVES.....	24
1.5 RESEARCH DESIGN AND METHODS.....	25
1.5.1 Research design	25
1.5.1.1 Research paradigm	25
1.5.1.2 Qualitative Research Approach	25
1.5.2. Research strategy	27
1.5.3 Research methods.....	28
1.5.3.1 Selection of participants.....	28
1.5.3.2 Data collection.....	30
1.5.3.3 Data analysis	32
1.5.3.4 Trustworthiness	33
1.5.3.5 Ethical considerations	33

1.6	CHAPTER DIVISION	35
1.7	SUMMARY.....	36
	CHAPTER 2: LITERATURE REVIEW - THEORETICAL FRAMEWORK.....	37
2.1	INTRODUCTION.....	37
2.2	SAPS RESEARCH POLICY FRAMEWORK.....	37
2.2.1	SAPS research policy framework.....	38
2.2.1.1	Education, training and development (ETD) provisioning practice.....	38
2.2.1.2	Implementation guidelines for the recognition of prior learning	39
2.2.1.3	Implementation guidelines for the assessment strategy.....	39
2.2.1.4	National Instruction 1/2006: Research in the Service	39
2.2.1.5	SAPS ETD Research Policy 2013 (3rd draft)	40
2.2.1.6	Guidelines for a research ethics committee.....	40
2.2.1.7	Guidelines on the SAPS workplace learning programme	41
2.2.2	Teaching research at the SAPS Academy	42
2.3	THEORETICAL FRAMEWORK.....	46
2.3.1	Appropriate introduction of unfamiliar content	47
2.3.1.1	The need for introductory modules	47
2.3.1.2	Reducing learner fear.....	49
2.3.1.3	Learning design.....	51
2.3.1.4	The Nature of Learning	53
2.3.1.5	The Principles of Learning.....	55
2.3.1.6	Section Summary	57
2.3.2	Creation of Ontological Shifts to become Critical Thinkers.....	57
2.3.2.1	Reflection.....	57
2.3.2.2	Problem-solving	61
2.3.2.3	Sameness and Variation	62
2.3.2.4	Participation after competence	65
2.3.2.5	Summary.....	67
2.3.3	Vibrant collaboration between academia and workplace.....	67
2.3.3.1	The learning Environment	68
2.3.3.2	Informed Adult Learning Educators.....	71

2.3.3.3	A new kind of adult learner	75
2.3.3.4	Learning transference and the workplace	77
2.3.3.5	Understanding the role of Workplace Learning	83
2.3.4	Empowerment of learners for critical dialogue	86
2.3.4.1	Empowerment of novice researchers	86
2.3.4.2	Extended educator support	93
2.4	PRIORITIES FOR EMPIRICAL INVESTIGATION	94
2.5	SUMMARY	97
	CHAPTER 3: LITERATURE REVIEW - CONCEPTUAL FRAMEWORK	99
3.1	INTRODUCTION	99
	SECTION 1: THE ADULT LEARNER AND LEARNING	100
3.2	THE ADULT LEARNER	100
3.3	LEARNING THEORIES	102
3.3.1	Behaviourism	103
3.3.2	Constructivist Perspective	104
3.3.2.1	Cognitive Constructivism	104
3.3.2.2	Social Constructivism	105
3.3.2.3	Radical Constructivism	106
3.3.3	Variation/ Phenomenographic Perspective	107
3.3.4	Socio-Cultural Perspective	107
3.4	LEARNING THEORIES APPLICABLE TO ADULT LEARNING	108
3.4.1	Andragogy	109
3.4.2	Transformative Learning Theory	110
3.4.3	Situated Cognition Theory	111
3.4.4	Action Learning	112
3.4.5	Experiential Learning	114
3.4.6	Self-Directed Learning	114
3.4.7	Project Based Learning	114
3.4.8	Workplace learning	115
	SECTION 2: WORKPLACE LEARNING THEORY	116
3.5	GROWING IMPORTANCE OF WORKPLACE LEARNING	116
3.6	LOCATING THE STUDY WITHIN THEORETICAL PERSPECTIVES	118

3.7	PERSPECTIVES ON WORKPLACE LEARNING	121
3.7.1	Work.....	122
3.7.2	Place	123
3.7.3	Learning.....	124
3.7.3.1	Workplace learning occurs at different levels.....	125
3.7.3.2	Reflection is prominent in workplace learning.....	132
3.7.3.3	Workplace learning as mostly informal	134
3.7.3.4	Organisational support is crucial for workplace learning	1399
3.7.3.5	The role of work is changing in workplace learning	145
3.8	PRIORITIES FOR EMPIRICAL INVESTIGATION.....	148
3.9	SUMMARY.....	151
	CHAPTER 4: RESEARCH DESIGN AND METHODS.....	152
4.1	INTRODUCTION.....	152
4.2	RATIONALE FOR ETHNOGRAPHIC RESEARCH.....	153
4.2.1	Rationale.....	153
4.2.2	Delimitations	155
4.3	RESEARCH DESIGN	156
4.3.1	Research paradigm	156
4.3.1.1	Ontology	156
4.3.1.2	Epistemology.....	157
4.3.1.3	Personal experiences and views.....	158
4.3.2	Research approach.....	159
4.3.2.1	Rediscovering Qualitative Research.....	159
4.3.2.2	The nature of qualitative research	160
4.3.3	Research strategy	162
4.4	RESEARCH METHODS	168
4.4.1	Selection of participants	168
4.4.1.1	Research process overview	168
4.4.1.2	Location of participants	172
4.4.1.3	Selection of participants.....	173
4.4.2.1	Interviews.....	177
4.4.2.2	Document analysis.....	179

4.4.2.3	Participant observations.....	180
4.4.2.4	Personal experience	182
4.4.3	Data analysis	183
4.4.4	Measures for trustworthiness.....	187
4.4.5	Ethical measures	190
4.4.5.1	Entrance, practical concerns and ethics	190
4.4.5.2	Data capturing, storing, retrieving and safeguarding.....	191
4.4.5.3	The role of literature in data analysis	193
4.5	SUMMARY.....	194
CHAPTER: 5 EMPIRICAL FINDINGS		196
5.1	INTRODUCTION.....	196
5.2	RESEARCH PROCESS	197
5.3	DATA ANALYSIS	197
5.3.1	Biographical data.....	197
5.3.2	Analysis of data	198
5.3.3	Empirical data	199
5.3.3.1	Initial considerations for developing the research methodology module.....	199
5.3.3.2	The research module evolution.....	208
(i)	Adapting to learner needs	208
(ii)	Responding to changing organisational needs	213
(iii)	Protecting credibility.....	230
5.3.3.3	Delivery of the research module	232
(i)	Dealing with fear.....	232
(ii)	Adult learning principles	237
(iii)	Ontological shifts through problem-solving	239
(iv)	Empowerment for fieldwork	241
(v)	Learner support in the workplace	246
(vi)	Dealing with challenges to learner fairness	248
5.3.3.4	Experiencing the shaping of the Research Methodology.....	250
(i)	Workplaces are volatile learning environments.....	251

(ii)	Negotiating learning in the disconnect between research expectations and trainer capacity.....	258
(iii)	Informal learning through work.....	261
(iv)	Development of administrative systems through problem-solving.....	266
(v)	The effect of police culture on learning	268
(vi)	Developing critical thinking skills.....	271
5.4.1.3	Lessons learned during the teaching of research	272
(i)	Misconceptions and unrealistic expectations.....	272
(ii)	Developing coping mechanisms.....	275
(iii)	Reflective practices used for teaching and learning	278
(iv)	Affordances and active participation.....	281
(v)	Communities of practice and newcomers	285
(vi)	Workplaces and police identities	290
(vii)	Experiential learning and guidance	297
(viii)	Integration of learning into practice.....	301
5.5	SUMMARY.....	304
CHAPTER: 6 DISCUSSION OF EMPIRICAL FINDINGS		305
6.1	INTRODUCTION.....	305
6.2	DATA INTERPRETATION.....	305
6.2.1	How has the SAPS Research Methodology <i>module content</i> evolved since its inception?.....	305
6.2.1.1	Initial considerations.....	305
6.2.1.2	The evolution of the module.....	315
6.2.2	How has the delivery method of the module developed to its current form?.....	334
6.2.3	What were the experiences of those involved in shaping the Research Methodology Module of the SAPS?	335
6.2.3.1	Workplaces as volatile learning environments	336
6.2.3.2	Negotiating learning in the disconnect between research expectations and trainer capacity.....	341
6.2.3.3	Informal learning through work.....	346
6.2.3.4	Development of research administration systems through problem- solving.....	351

6.2.3.5	The effect of police culture on learning	354
6.2.3.6	Developing critical thinking skills	358
6.2.4	Which lessons have been learnt teaching Research Methodology?	359
6.2.4.1	Misconceptions and unrealistic expectations.....	359
6.2.4.2	Developing coping mechanisms.....	362
6.2.4.3	Reflecting practices for teaching and learning	364
6.2.4.4	Affordances and active participation.....	368
6.2.4.5	Communities of practice and newcomers	371
6.2.4.6	Workplace learning and police identities	381
6.2.4.7	Experiential learning and guidance	387
6.2.4.8	Integration of learning into practice.....	390
6.3	SUMMARY.....	395
6.4	TOWARDS A NEW THREE-STEP RESEARCH MODEL	396
6.4.1.	The research Pre-Course phase	396
6.4.2.	The research Delivery phase	398
6.4.3.	The research Post Course phase	402
6.4.4	The value of the Three-Step research model.....	403
6.5	CONCLUDING REMARKS.....	403
	CHAPTER 7: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	405
7.1	INTRODUCTION.....	405
7.2	SUMMARY OF RESEARCH FINDINGS.....	406
7.2.1	Chapter 2.	406
7.2.2	Chapter 3	407
7.2.3	Chapter 6	408
7.2.3.1	Initial design, evolution of the module.....	408
7.2.3.2	Developing research delivery methods	410
7.2.3.3	Role Player experiences	412
7.2.3.4	Lessons learned about learning in the workplace	420
7.3	RESEARCH CONCLUSIONS.....	431
7.3.1	<i>First main question: how did SAPS learn to teach research methodology to its senior managers?</i>	<i>432</i>

7.3.1.1	How has the SAPS research methodology module content evolved since its inception to become of a notable standard?	432
7.3.1.2	How has the delivery method of the Research Methodology Module developed to its current form?	432
7.3.2	<i>Second main question: what workplace learning has taken place during the teaching of research methodology in SAPS?</i>	433
7.3.2.1	What were the experiences of those involved in the shaping of the research methodology module of the SAPS?	434
7.3.2.2	Which lessons were learnt in the process of teaching research methodology to senior police officers?	435
7.4	RECOMMENDATIONS.....	437
7.4.1	National and Public Service Level.....	437
7.4.2	SAPS	438
7.4.3	DIVISION: HRD	440
7.4.4.	SAPS Academy Paarl	442
7.5	AVENUES FOR FURTHER RESEARCH	443
7.6	LIMITATIONS OF THE STUDY	443
7.7	THE ‘GOODNESS’ OF THE STUDY	444
7.7.1	Reflexivity	445
7.7.2	Peer debriefing.....	446
7.7.3	Audit trail, credibility and dependability	446
7.7.4	Authenticity	447
7.7.5	Transferability	447
7.8	CONCLUDING REMARKS.....	448
7.8.1	Theoretical contributions	448
7.8.2	Methodology.....	450
7.8.3	Practical value	450
7.8.4	Policy	451
7.9	PERSONAL REFLECTIONS	452
8.	REFERENCES.....	454

List of Tables

Table 4.1	Extraction of code strengths in interviews	1855
Table 4.2	Abridged interview data collection history	189

Table 5.1: Biographical information of participants	198198
Table 5.2: Proposed pre-course workshop	2055

Table of Figures

Figure 4.1: Simplified administrative process of EDLP research projects.....	1701
Figure 4.2: Data collection and analysis process.....	186
Figure 5.1: The EDLP research model as at 2011-01-19	2155
Figure 5.2: Location of research problems identified.....	218
Figure 5.3: Progress made on identified problems in research model.....	223
Figure 5.4: EDLP Research module activities	2311
Figure 6.1: Research Team as Community of Practice.	376
Figure 6.2: Research Pre-course Phase.....	398
Figure 6.3: Research Delivery Phase.....	401
Figure 6.4: Research Post Course Phase	402
Figure 7.1: Research Findings.....	431

Table of Annexure

Annexure A: Interview schedule (email): Participant 3.....	483
Annexure B: Document Analysis Worksheet.....	493
Annexure C: Request to enter research setting for data collection.....	497
Annexure D: Permission to collect data at setting.....	499
Annexure E: Approval from SAPS to conduct research.....	501
Annexure F: UNISA ethics approval.....	502
Annexure G: Invitation to participate in research.....	504
Annexure H: Excerpt of interview transcript (P5).....	507

CHAPTER: 1 ORIENTATION

1.1 INTRODUCTION

Our intellectual ambition drives our desire to know and understand ourselves, and what we do at home, at work and in society. Knowing and understanding are products of learning, which, for the bulk of society, is a product of informal or incidental social encounters, but for a few, results from scientific research discoveries and rigorous testing. This study attempts to capture how learning, both formal and informal, are constructed in the workplace where research methodology is taught to senior police officers of the South African Police Service (SAPS).

The development of a capable and innovative research capacity takes time. Universities, other educational organisations or research institutes that manage to establish such research capacity thrive on the output of their research. Not only is research output a reflection of the depth of knowledge situated in that workplace, it also testifies to the commitment of the organisation and its leadership to invest in the development of such capabilities. Universities and organisations with research components frequently attend colloquia to demonstrate the depth of their capacity (SAPS Annual Report 2014-2015:92). Universities, worldwide, build their research capacity by expanding their networks of knowledge repositories to other universities and to cooperating countries (Norwegian Police University College 2014:29). More exposure for researchers normally results in learning new skills or the construction of new knowledge. The more versed the research cadre, the more likely is the possibility of publications, which in turn may result in better funding for research (The Research Outputs Policy 2015:6). The research output therefore contributes largely to the reputation and image of a university. South Africa is no exception to the practice.

The development of research capacity in non-traditional education settings however, is less academically inclined and more focused on solving workplace problems. Public universities

in South Africa are largely funded by public funds, donations and agreements with other private entities (The Research Outputs Policy 2015:6), but other government institutions such as the Department of Police have to find the funding of such research capacity development in its allocated budget, specifically in its provision for skills development in the organisation. The South African Police Service (SAPS) draws from this skills development budget to fund the development of all personnel, including its senior management cadre. Apart from benchmarking and study tours to other countries, senior police officers are also given development opportunities in executive development programmes such as the SAPS Executive Development Learning Programme (EDLP) or other outsourced leadership programmes of universities (SAPS Annual Report 2014-2015:13). The realisation that the SAPS senior management need research skills to approach workplace or crime-related problems differently, prompted the organisation to include research methodology in its executive development programme. Being a member of the BRICS agreement South Africa will have to work together with the other countries (Brazil, Russia, India and China) to address cross-border crimes and find ways of fighting crime that would stimulate peace and economic growth. It was evident that police officers research ability and problem-solving skills would eventually contribute to South Africa's economic growth. This is where my journey with research in the SAPS started.

I have been involved with the presentation of the SAPS Executive Development Programmes since 2007. Elements of research comprised part of all of these programmes, but started to play a more prominent role in 2009 when the SAPS rolled out its EDLP in Paarl. Several trainers, administrative personnel and assessors had to find ways of working together to become a team that supported EDLP learners through their research journeys. I have been part of this research team and, as such, have spent many years teaching and developing research skills in the organisation. I have a vested interest in documenting this contribution to the SAPS as it will not only capture the learning journey and history of research in SAPS education, training and development efforts, it will also enable me to leave a notable career footprint.

The demand for better skills levels and competencies has changed the relationship between jobs and education (Brown & Lauder 2006:26). A renewed focus has therefore been placed on workplace learning (Matthews 1999). Similarly, in the SAPS, this renewed focus has resulted in more emphasis on the development of police trainers because they play a major

part in facilitating learning to leaders of the organisation. However, even though police trainers of the SAPS Academy in Paarl are police officers by profession, their main activities are more academic in nature. These police trainers are thus viewed as trainers, rather than police officers. This background was used to task two of the Academy's trainers with presenting a research module to police executives. Their task involved the development of research course material, teaching research methodology, leading students in their field research and assuring quality of acceptable academic standard in research outputs.

Little is known about the experience and effort of the police trainers in their journey to develop and implement the research module for the organisation at the SAPS leadership academy. While several studies have focused on client service rendered by the SAPS (Mofomme 2004; Schwartz 2004; Schwartz, Schurink & Stanz 2007) others focused on organisational change in SAPS (Marks 2003; Kiley 1997; McNeil 1995), but none to date have ever recorded the inception and evolution of research methodology as a problem-solving mechanism for the SAPS as an organisation. With this study, policy makers of SAPS and other police agencies in Southern Africa, BRICS countries and perhaps the Western world, will gain perspective of work-related challenges when new skills programmes are rolled out in a policing context and through re-evaluation of own organisational policies, they will be able to assess the likelihood of gaining return on investment.

By conducting this study, I intend to contribute to the existing literature on the teaching of research methodology in organisations such as SAPS, in particular the ethnographic account of teaching research methodology in a police education setting (the culture sharing group). I will also build on the work of Humphreys (2006) who conducted an autoethnographic study as an account of his own parallel experiences of teaching qualitative research methods. To this end, my contribution will be restricted to the use of an autoethnographic essay to share personal experiences which will offer data of equal value and standing than that obtained from other sources through observations, document analysis and interviews. However, in sharing my personal accounts, the study will not take on an autoethnographic approach.

However, the study will also expand on the knowledge base of adult learning, workplace learning and distance learning since the study will be conducted in an adult learning environment where all learners are mature adults who are situated in demanding workplaces that are not enabling for learning and that mostly takes the form of distance learning. In

particular, the study will contribute to February, Koetsier and Walters (2010:972) who argue that most research places adult students at the centre, but very little is known about those who teach students and what these lecturers' experiences and insights are in relation to provision of quality teaching and learning.

1.2 BACKGROUND TO THE RESEARCH

1.2.1 Theoretical framework

This overview of relevant literature will serve as initial theoretical framework for the data collection process. The literature draws strong linkages between teaching success and the appropriate introduction of unfamiliar content to learners, the creation of ontological shifts, the empowerment of learners for critical dialogue and finally, a vibrant collaboration between academia and the workplace.

1.2.1.1 Appropriate introduction of unfamiliar content

New content should always be presented by drawing on the familiar and moving to the unfamiliar content when new concepts are introduced. As Kolb (1984:31) argues, teaching new content should start with the experience of learners, as this could become a crucial point in whether or not the adult learner will see the need for learning new skills.

Such new content, especially in an environment where the adult learner has no choice in deciding on whether or not to complete the course, should rather be introduced in the form of an introductory module as practiced by Fourie and Krooden (1999) in their offering of an introductory post-graduate module in Research Information Skills (RIS). Fourie and Krooden (1999) argue that an introductory module for any course should be put in the context of the learners or students' subject or discipline. The content should be revised and improved continuously by benchmarking with other institutions.

Effective assessment strategies and explicit articulation of learning outcomes and assessment criteria are critical information needed by adult learners (Nduna 2012:234; FitzSimons 2000). Not only will adult learners be informed of what the new learning content may entail, in research methodology offerings it will also help the learner in the identification

of research problems. The introductory module will serve as orientation towards research methodology as the adult learner can reflect on their workplaces and the challenges experienced there. Reflection in this case refers to situations where adult learners are confronted with problems that cannot immediately be explained or solved within their field of work. Learners will realise that they must seek additional information to formulate their identified research problems (Frick, Albertyn & Rutgers 2010:81).

1.2.1.2 Creation of ontological shifts

Building onto the foundations laid in an orientation or introductory module that precedes the actual research offering will enable the adult learner to do some introspection. Adult learners need to develop the skill of reflecting internally on themselves, because they undergo different personal and cognitive experiences through exposure to their own life experiences, which distorts their personal values. This process of reflecting is a new way of enriching their understanding of themselves and their perspectives of the world. Each individual's assumptions and intellectual framework are thus embedded in a fundamental domain, known as the self or the person (Frick et al. 2010:81). Adult learners derive their knowledge from the meaning and structures that form their frame of reference, including their previous social and cultural experiences. However, this frame of reference can only be challenged if students reflect and step out of their normal way of thinking via the process of radical questioning. To this end, reflection will lead to a reconstruction and shift in the adult learners' way of being and knowing (Sieler 2003).

This change in the way of thinking should result in critical thinking, a skill that a prospective researcher should master (Frick et al. 2010:83). Unfortunately, this skill is not simple to master by mature adult learners, as the majority of these learners are products of a schooling system that failed to develop relational and conceptual reasoning in pupils. This problem in itself is a social dilemma that could not be rectified in the Outcomes Based education system in South African schools (Bradbury & Miller 2011:1, 7). The inability of many adult learners to reflect and think critically, relationally and conceptually leaves the adult learner in a state of 'under-preparedness' as explicated by (Bradbury & Miller 2011:1-8).

1.2.1.3 Empowerment of learners for critical dialogue

Adult learners need to be empowered for research modules that require field-work. Moreover, the power relationship that is inherent in the supervisor-student relationship needs careful consideration as power discrepancies may negatively affect a learner's progress (Frick et al. 2010:87). Adult learners who regard the study leader or supervisor as the gatekeeper to a qualification may experience negative or counterproductive moments that could adversely affect the progress of their learning (Lee-Davies 2007: 683). Research lecturers or supervisors must help adult learners to explore their research question(s) from different angles and assist them to take ownership of the research process. Learners should be able to develop their own scholarly voice and it is the role of the supervisor consciously to guide the student towards such ability (Frick et al. 2010:88). The power aspect refers to understanding the dynamics involved in the supervisor-student relationship. However, supervisors are often ill equipped to guide students in a strategic and learner-centred manner and often end up doing the work for the learner or give up on the learner (Frick et al. 2010:89).

The empowerment of the adult learner stretches further than just managing the power relationship between supervisor and student. It also requires the research supervisor to assess the readiness of learners on the use of computers and if necessary prepare prospective researchers for utilising computers and other information and communication systems in gaining access to information sources. Fourie and Krooden (1999) explicate that computer skills could be a source of empowerment if they are offered at the appropriate level of difficulty for the learner.

1.2.1.4 Vibrant collaboration between academia and the workplace

This concept has several dimensions, but for the purposes of this proposal only a few will be deliberated on. The first dimension centres on the relationship between the research lecturer (trainer/ presenter /supervisor) as representative of the academic setting and the academic institution. As representative, the lecturer will reflect the organisational culture and ethos, the capability of the institution to present a research offering in terms of competence and continued professional development and the ability to mentor students in the workplace during fieldwork (Nduna 2012:234). This statement is also true for visiting, guest or part-time lecturers. It is thus crucial that heads of department ensuring that -fulltime and part-time

lecturing staff be informed of academic developments and academic development opportunities within the department (February et al. 2010:982). The authors suggest that all faculty information relevant to academic staff, but especially part-time staff, be registered centrally to afford equal and appropriate staff development opportunities according to individual needs. To this end, there is strong argument for the development of a workload model that will reflect the ability to manage workplace learning (Hull 2006). Adversely, as February et al. (2010:982) posit, little is known about the experiences of the part-time lecturer (and for that matter fulltime research lecturer) experience. This aspect does not contribute positively towards the professional or academic development of research lecturers.

A second dimension centres on the support provided to adult learners in their 'new' roles as learners in a workplace that is demanding and the focal point of their careers. Adult learners are in a peculiar position as their dedication to the business of being a student is less meaningful to them, as Walters and Koetsier (2006:97) argues. They posit that "... More than half of those in modern higher education systems are adults in the sense of having left full-time education for other roles before returning later to full- or part-time study. Such students commonly combine study with other major life roles; work, family and community" (Walters & Koetsier 2006:99). Their dedication to the business of being a student is therefore less focused than that of a full time student.

However, comprehension of these challenging conditions of adult learners is not enough. Extended support is needed from research supervisors. Adult learners should be supported through the use of workplace educational technology that enrich the learning experience and simultaneously serve as a reflective tool to assist in personal development (Nduna 2012:234). Nduna (2012:234) continues to cite various authors in support of his argument that learners need adequate infrastructure and resources in the workplace for success, including site or field visits (in the workplace) to monitor students and to provide for reflection opportunities. The opportunity for reflection is argued to be extremely important for learning (Illeris 2011), but the environment within which such learning occurs is either constraining or enabling for learning, depending on the relationship between adaptive and developmental learning. Enabling environments maintain a balance between the two types of learning whereas constraining workplaces limit developmental learning opportunities (Ellström 2010). The latter argument is also true for the provider of education such as the SAPS Academy. Support

personnel must also work in an enabling learning environment in which they can learn how to support adult learners in the workplace (Nduna 2012:234).

1.2.1.5 Teaching implications for the SAPS

The literature highlights crucial concepts that impact on the success of the development of adult learners, in this case the development of senior police officers in research methodology. Whereas the ratio of adult learners in South Africa is at 50% of all students in higher education (February et al. 2010:982), the ratio of adult learners in the SAPS is 100%. These learners are not students at heart, but career police officers who are compelled to undergo a research methodology module and to conduct research in the field. The SAPS lecturers responsible for presenting the research module have to foster vibrant collaboration with the workplace to negotiate research staff development for those functioning in the 'Research Community of Practice' (Wenger 1998a) and to enable learning in the workplace through extended learner support. The works of Elstrom (2010), Illeris (2011) and Nduna (2012) are particularly helpful in guiding organisations towards more effective learning in the workplace and becoming enabling learning environments.

In addition, research presenters must empower adult learners to excel in their development by helping them to utilise computers and other educational technology more effectively and with confidence. The social and educational drawbacks of inability to develop relational and conceptual reasoning in schools should be borne in mind as it could result in a state of 'under-preparedness' in adult learners. This 'under- preparedness' of learners could be detrimental to the learning experience of senior police officers should this be the case. To counter this effect, adult learners should be empowered to master the basics needed for critical dialogue. Adult learners must be able to make an ontological shift to become critical thinkers.

To this end, research lecturers should embark on an orientation programme to introduce new and unfamiliar concepts such as research methodology. This will allay fears of the unknown and clarify expectations and outcomes of the development offering. However, the role of the research supervisor should be explained to reflect the power relationship between supervisor and learner and to avoid any idea of being regarded as the gatekeeper towards the qualification.

1.2.2 Conceptual framework

Chapter 3 offers the conceptual framework used to understand how learning in the workplace takes place. I have developed this conceptual framework, based on learning theories to explain the learning processes in the workplace where SAPS trainers teach research methodology. The framework, situated in constructivist and socio-cultural perspectives, consists of two sections. Firstly, I explore concepts such as the adult learner and provide an interview of relevant learning theories, and secondly, I offer my framework for workplace learning. The second section explores the elements of workplace learning: work, place and learning. The discussion on learning is built on four main propositions about workplace learning, specifically that learning takes place at different levels, that learning is both informal and formal, that the role of learning in the workplace changes, and that support in the workplace is crucial for learning.

1.2.2.1 Adult learning

Silberman and Auerbach (1998) explicate that there are individual differences between adults and youth and adults bring with them vast and different experiences than youth do. (Knowles, Swanson & Holton 2005). Silberman and Auerbach (1998) explicate that there are individual differences between adults and youth as far as their background, learning styles and motivation for learning, interests and needs, and ultimately their goals are concerned. Merriam (2001:5) uses Knowles' andragogy to describe the adult learner as someone who has an independent self-concept, who can direct his or her own learning, who has accumulated a rich source of life experiences for learning who, has learning needs that relate to his or her social roles and who is interested in the immediate application of knowledge. Such knowledge should be problem-centred to stimulate learning and the adult should be motivated by internal rather than external factors to learn. Walters and Koetsier (2006) posit that adults are far less focussed students. Merriam and Caffarella (1991) explicate that intrinsic motivation encourages adults to use learning opportunities to build social relationships, creating new associates and forming friendships that stimulate further learning. However, learning is not something that is simply acquired. Learning theories illuminate the complexity of learning, and although it is not the focus of this study, a brief overview is therefore offered.

1.2.2.2 Traditional learning theories

While there are various theories that attempt to explain how learning takes place, there is little consensus about the number of theories about learning and how it should be categorised or grouped. It appears from the literature that theories are broadly clustered by how they provide insights into the adult learning process. Green (2002:11) explicates that these different approaches or perspectives are categorised into “the behaviouristic approach of Thorndike, Pavlov, Watson, Guthrie, Hull, Tolman, and Skinner; cognitive theories of Koffka, Kohler, Lewin, Piaget, Ausubel, Bruner, Gagne and Tolman; the principles of humanism (from Maslow, Rogers, Knowles), the social learning theory as mentioned by Bandura and Rotter and constructivism described by Dewey, Montessori, Piaget and Vygotsky”. For Marshall and Case (2010:15), learning theories separate into two broad strands, being the individual perspective, which build on the works of Piaget, and socio-cultural perspectives that build on the work of Vygotsky. It has also been argued that learning theories such as behavioural, cognitive, constructivist and social learning theories fall within the territory of psychological theories (Wenger 1998a). Other theories such as the activity, socialisation and organisational theories, which moved away from exclusively psychological approaches to learning, have also emerged.

Behaviourism as a learning theory rests on three pillars (Green 2002:11). Firstly, it proposes that learning has taken place when there is an observable change in behaviour. The theory is therefore not focused on the internal thought process of adult learners, but rather whether learning has manifested in a different behaviour. Secondly, the elements present in the environment of the individual, and not the elements internal to the individual, determines what the adult learner internalises. Finally, the theory rests on the assumption that learning becomes more likely when events happen shortly after one another and is more likely to happen when the event repeats itself (Green, 2002:11). The essential epistemological tenets of constructivism as argued by von Glaserfeld (1984, 1990 in Doolittle 1999) are that knowledge is the result of active cognising by the individual and that cognition is an adaptive process that makes an individual's actions more viable in a particular environment. Von Glaserfeld further argued that cognition organises and makes sense of one's experience even though it does not have to correspond to the reality, and that knowing has roots in the biological or neurological construction, and social, cultural and language based interactions (Doolittle 1999). Constructivists acknowledge the learner's active role in the creation of own

knowledge and the importance of experience gained on an individual and social level. According to the variation or phenomenographic perspective, learning takes place when individuals are able to judge or discern, but in order to do that, individuals need exposure to a variety of similar situations (Marton & Trigwell 2000). However, from a socio-cultural perspective, much learning takes place in a community of practice, a place of shared practice (Wenger 1998b). These traditional learning theories formed the basis on which other adult learning theories such as andragogy, transformative learning and situated cognition (Laher 2007), action learning, experiential learning, self-directed learning and project-based learning are based (Conlan, Grabowski & Smith 2003).

1.2.2.3 Locating the study within theoretical perspectives

Having briefly touched on some of the learning theories, I realise that all theories can be relevant to either formal or informal learning. However, as far as workplace learning is concerned, I am guided by the examples set by other scholars such as Warhurst (2006), Torraco (1999) and McCormack et al. (2010) who approached workplace learning from a situated learning approach. Billett (1995), Blåka and Filstad (2007), and Zhao and Kemp (2012) framed their studies within the socio-cultural approach of communities of practice. Henning (2008) relied on Vygotsky's cultural historical and activity theory (CHAT) to study developing researchers in the workplace. Both constructivism where the individual is an agent of his own learning, and social constructivism where learning is a process and product of social interaction, are the predominant theories for studying workplace learning (Vaughan 2008; Armson & Whiteley 2010). I approached this study in similar fashion, but similar to Dison (2007) also focussed on the socio-cultural theory to study workplace learning.

Not all scholars agree with this point of view. Hager (2004 in Tynjälä 2008:131) advocated for the development of workplace learning research from its own starting points. Hager (2004) differentiates between a standard paradigm to learning and an emerging paradigm of learning. The standard paradigm of learning is based on three assumptions. It has a focus on the mind (cognitive processes of forming and improving mental structures), interiority (separating the mental life from the outside world and the focus on learning by thinking rather than learning through action) and transparency (measurable outcomes and inferiority of non-transparent learning). The emerging paradigm is described as action in the world (Tynjälä 2008:131). The change in learning is therefore not only in the individual's mind, but also in

the individual's environment. Learning has thus become more contextual because of the individual's creation of new sets of relations in the environment and the workplace (Tynjälä 2008:131).

1.2.2.4 Workplace learning theory

The concept of learning in the workplace is described on different levels: individual level, group or community level, and organisational level. While workplace learning is mostly regarded as informal in nature, it is dependent on organisational support, especially in view of the changing role of work in workplace learning.

Malloch and Cairns (2010:3) also explored the concepts of work, place and learning. They argued that these terms should be considered more broadly due to the considerable changes of the last number of years and due to the new thinking inspired by the combination of these concepts. In terms of work, Malloch and Cairns (2010:4) argue that work is much more than the completion of tasks, either individually or with another, which contributes to productive endeavours to achieve goals in exchange for payment (or without payment). The workplace has therefore become a personal and negotiated location where one often does work without being paid, or where employed time may not be spent working. Malloch and Cairns (2010:6) conclude that work is intentional; it requires effort and purpose. Remuneration is thus for all practical reasons not a necessary element of the concept of work.

The term 'place' has several interpretations as it can relate to the place where the job is done as the site of work, or even to a virtual location. Billett (2002b:56) explains that when it comes to learning, educational settings and workplaces are seen as places of learning because they merely represent different instances of social practices in which learning occurs through participation. From a psychological perspective, the term place can refer to where we find ourselves in our minds at any given time. The mind is the place where we think and solve problems and consider ourselves (Malloch & Cairns 2010:7). For Warhurst (2006:114), the place of learning could be structure or entity where individuals feel that they belong. Warhurst (2006:114) explicates that membership of a community is an intrinsic condition for learning and that belonging to a community results in participation in practices at work.

Learners learn on individual, group, community or organisational level. Employees learn on their own accord when they observe, imitate and initiate work activities and interactions, but these efforts are not enough to make informed judgements (Billett & Choy 2013:267). Employees also learn socially in communities of practice in the workplace, but they tend to have control over what they learn and when they learn due to personal agency and discretionary utilisation of development affordances in the workplace. Learners exercise agentic intent in their interactions with the social environment and with others to learn (Bandura 2001 in Malloch & Cairns 2010:10). Billett and Choy (2013:268) argue that affordances to learn from experienced workers are one aspect of learning in the workplace. Another aspect is the level of interest, motivation and ability of the learners to learn intentionally through such engagements. An aspect that needs clarity is why engagement in authentic work activities is so effective in building the required knowledge needed for work performance (Billett & Choy 2013:269).

Workplace learning is mainly informal. Jacobs and Park (2009:141) argue that informal learning recognises that the acquisition of knowledge and skills in the work setting does not occur from organised programmes only. They assert that informal learning occurs in situations that are usually not intended for learning, especially in the workplace. Individuals learn in the workplace because of their intellectual curiosity, self-directedness, and self-efficacy (Beckett & Hager 2002). Billett (2002a) explains that workplace learning involves both structured and unstructured learning which takes place through on-the-job activities, but Cross (2007) argues that workplace learning should not be underestimated as approximately 87% of learning that impact on jobs are informal in nature and taking place over time and in the social context of the workplace.

Workplace learning is dependent on organisational support. Hodkinson, Hodkinson, Evans, Kersh, Fuller, Unwin, and Senke (2004:21) argue that the learner is simultaneously part of their workplace and separate from it. It is not entirely correct to argue that learning is in the hands of the individual by ascribing agency to the learners while the workplace provides the structure for working and learning. Hodkinson et al. (2004:21) propose enhancing learning opportunities to improve workplace learning by creating more expansive learning environments that are in line with what learners' want, their needs and what they respond to. The learning opportunities that learners want should then be prioritised over that which management think they need and taking into account power differentials and workplace inequalities. To provide organisational support or learning initiatives, one needs to

understand the needs of the workers. Pillay et al. (2003:437) found that older and younger workers have different conceptions of the workplace, which result in different needs.

The role of work in workplace learning is changing. Chappell et al. (2000:3) argue that some knowledge cannot be transferred in a workplace, but has to be generated at the site of work. Knowledge is also becoming increasingly short-term due to constant change in the workplace. The authors explain that learning in the workplace is an ongoing process that signals the transitory nature of knowledge and emphasizes the importance of situated formal and formal learning. Sambrook (2005) expands this idea by arguing that opportunities for workplace learning exist outside the boundaries of the workplace, such as when different departments of the same organisation work together on a project, or when two or more separate organisational teams work together on an initiative. Engeström's (2001) contemporary activity theory proposed that learning takes place across boundaries. In this view, learning takes place across different activity systems that interact with one-another, such as the workplace and a university. Employees who work together on a project jointly with the workplace and the university, for instance, will learn from each other during project meetings (or boundary clinics as referred to by Finlay) where they assimilate the language, culture and technical knowledge of the other workplace for use in their own workplace or activity system (Finlay 2008:86).

1.2.2.5 Implications for SAPS

By drawing from the literature and taking the context of the study into consideration, a case can be made for a number of arguments to be relevant workplace learning in the SAPS, as the site of work and learning (Chappell et al. 2000:3).

The concepts of working and learning are moving ever closer as we learn to work and work to learn. Workplaces are changing and it brings with it new ways of working (Malloch & Cairns 2010:4; Billett & Choy 2013:266) and the SAPS is no exception. As the nature of crime changes, it forces the organisation to find alternative ways to combat and prevent new forms of crime. Such changes necessitate new strategies, which require senior managers to adapt their way of work and locate their practices in new work environments such as the virtual crime arena. Police officers have to negotiate learning through problem solving during all hours of the day, which frequently means taking their work home. Working is not just located at a physical or virtual place alone, but also rests in our minds when we are not at the

geographical work location (Malloch & Cairns 2010:7). The boundaries of work and home, and working at the office and resolving work-related problems in the mind when at home, have thus become blurry.

Individuals exercise more control over their learning because of personal agency and the construction of their professional identities (Hodkinson et al. 2004:21). While older employees still show strong reliance on formal education qualifications, their younger counterparts value the learning journey in which they can learn what they want to, and when they want to (Pillay et al. 2003:437). Formal teaching therefore necessitates exposure to a real work environment in which they can practice their learning (Warhurst 2006).

Informal learning has also taken a stronger position in the workplace. Employees have come to realise that the situatedness of their learning, which they have gained through activities at work and because of work, is valuable for the performance and production of the organisation. They seek recognition and reward for that at a faster pace than their older colleagues, relying on formal learning (Vaughan 2008:14).

Learning takes place through active engagement on both individual level (constructivism) and participation through affordances (Billett 2002b:56) in social settings, the socio-cultural contexts, in which the individual can construct meaning of the experience (Warhurst 2006). While the CoP theory may be relevant to the SAPS Academy where the training intervention starts due to its supporting structures, it might not be the case in the learners' own work environments (Jawitz 2009:613). In their workplaces, they are confronted by a stronger police culture that might not be as enabling as believed to be by the course developers (Billett & Choy 2013:271). However, their learning may still be taking place in an authentic, legitimate practice.

The theory of workplace learning might only find its feet in the SAPS when there is buy-in from its senior management. Employees need support from supervisors, access to mentors and expertise in the workplace from which to learn Billet (2011:12). For SAPS this means that its senior managers will have to understand the situatedness of learning and the value of the social aspect of the workplace (Warhurst 2006) and move away from a reliance on formal learning based on a general 'one size fits all' skills development approach. However, even when formal learning is structured along the lines of andragogy, the contents and skills

should still be made relevant to the learner' needs (Doolittle 1999). Teaching adult learners therefore requires different approaches (Merriam & Caffarella 1991:306) and trainers should be careful not to rely on standardised approaches or single learning theories to facilitate learning.

1.2.3 Current status and reason for study

The South African Police Service (SAPS) has embarked on the development of executive and senior police officers to improve its leadership and for them to become efficient in their roles as managers. This process started in 2006 when the African Institute of Mentoring trained the first group of police executives. The Executive development Programme (EDP) was later reworked to have more of a police flavour to it and presented as the Executive Development Learning Programme (EDLP) at the SAPS Academy, Paarl.

The plan was to include a research methodology module in the first EDLP pilot programme (SAPS 2011a). The research component was not a new addition to the EDP presented by the African Institute of Mentoring. In the AIM model, research was a learning project integrated into the presentations of the rest of the EDP modules or subjects. In other words, learners had to work on their research projects while they whilst being taught on the other modules. The AIM model of the EDP provided for six contact sessions of three days each and a group research project presented to a panel of assessors. Whereas the individual work of learners reflected their individual competence, the research component of the AIM model measured the group's competence. Each member was assessed individually on his or her presentation skills. This model did not satisfy the SAPS' need for development of research capacity in each of its senior police officers. The SAPS therefore did not continue with this model of the EDP and set out to develop its own tailor-made Executive Development Learning Programme (EDLP).

After several programme development meetings between stakeholders in the organisation, SAPS produced the EDLP as substitute for the AIM EDP. The final version of the EDLP was approved after the launch of a pilot programme in 2009. The SAPS EDLP made provision for one and a half days of research methodology designed to introduce learners to research. The research skills would then be applied during group projects that required learners to conduct field visits to nearby police stations to assess service delivery and to propose improvements

to the station management. The idea was novel, but the reality raised serious questions. The time set aside for research was clearly not enough to consider introducing the subject of research. It is unknown whether any of the learners had done research before or what level of exposure they had had to research projects. Moreover, the time set aside for teaching was shared with course administration activities such as completing course registration forms.

Compared to the rest of the EDLP pilot programme, the presentation of the research module, which kicked off the EDLP, was unsuccessful. The research facilitator who agreed to present the module had resigned from the SAPS shortly before the start of the programme. Nevertheless, the EDLP had to continue as the first cohort of learners had already been called-up for the course and their travel arrangements had been paid for. Learners representing all provinces of South Africa were called to attend the course. A substitute facilitator was identified in Gauteng province and rushed to the SAPS Academy in Paarl to present the research module. A brief meeting between a professor from a nearby university and the substitute facilitator from SAPS resulted in an agreement that the professor would provide an overview of research methodology and then hand over the lecture to the SAPS facilitator. As prearranged, the EDLP kicked off with the professor delivering a two-hour introduction on what research is and what it is not. Thereafter the SAPS facilitator presented the research methodology chapter on his own, supported by the course coordinator of the SAPS Academy. The research methodology presented to the class covered an overview of an introductory research textbook in the form of a slideshow presentation.

Since that first course in 2009, numerous EDLP meetings were held during which progress towards better research in the SAPS has been designed (SAPS 2011b; SAPS Academy Paarl 2011c). The course content has been reworked and amended several times. In the process, the need for a better research module and more time in the EDLP received more attention. The time set aside for research methodology was increased to three days and later to five days, to take place at the start of the EDLP, followed by another day session at the end of the EDLP contact session. The research presenters increased to two.

The research module still presented challenges, but the philosophy of 'learning as we go' and 'improving as we learn' was adopted by the research facilitators. The development of formative and summative assessments proved more challenging than expected as the principle of fairness to the learners was regularly compromised. Assessments were generally

on a far higher level that the teaching in class and different role players in the assessment process had unrealistic expectations from learners. Subsequently, more than half of each class failed to complete the EDLP due to the higher levels of assessment. However, these differences were addressed continuously as the SAPS preserved in shaping the EDLP into a perfect training solution.

The EDLP has changed its face in the process of continuous improvement. Instead of the single once-off contact session at the SAPS Academy, the programme ended up having three phases namely the institution phase, the experiential learning phase and the panel presentation and SDIP phase. The third phase is a research phase that was combined with another course; the Service Delivery Improvement Programme. These phases are described briefly:

The Institution Phase. Senior police officers with the rank of Brigadier or Major General, who have indicated a specific need for strategic-level decision-making skills in their personal development plans, are being identified and selected to attend the EDLP. Once identified, the senior police officers are officially instructed to report for training at the SAPS Academy in Paarl where the programme is presented. On arrival, these attendees are provided with accommodation for the duration of the six-week first phase of the learning programme.

After the official opening, the attendees become learners. An overview of the programme is then discussed with the learners. The programme curriculum provides for seven modules. These are:-

- Research Methodology;
- Personal Excellence;
- Team Excellence;
- Management Excellence, focussing on strategic management;
- Resource Management, focussing on finance, supply chain management and human resource management;
- Service Excellence – service strategy; and
- Service Excellence – quality management and project management.

In terms of assessment, Personal Excellence and Team Excellence made use of assignments and observations to determine individual competence. Management Excellence

and Resource Management relies on open book examinations to assess competence while a group research project forms the basis for assessment of competence during a panel presentation by the group. The latter assessment is done during the third phase of the EDLP because by then the learners are supposed to have gained the research skills needed to complete their group research projects.

The research module is presented in the first week of the programme, but class time is not limited to the first week only. Learners are given formative assignments during the first week of the programme to determine their learning progress. Thereafter, their progress is monitored continuously through interviews and reviews of their research proposals. The learners' research proposals are submitted to the SAPS Human Resource Development (HRD) Research Committee in the fourth week when the research proposals are at an acceptable standard. The SAPS HRD Research Committee conducts 'assessment of competence' of each learner's research skills, based on the quality of the research proposal. Only when the proposal is accepted and approved, is the learner provided with a letter of approval that allows them to continue with the research project.

Phase one concludes where learners are handed statements of results. Learners are allowed to progress to phase two when they have successfully completed the six management modules and have received approval from the SAPS HRD Research Committee to continue with their research. Learners who have been found competent in all the modules, but failed to obtain approval of their research proposals are given an additional opportunity to submit their proposals to the HRD Research Committee. Once their proposals are accepted, they may continue with their studies. However, in such instances, the time allocated for their research projects is not extended.

The Experiential Learning Phase. In this second phase, learners are expected to roll out their research proposals over twenty weeks. They have to conduct the studies in the way that it was proposed and submit a research report to indicate their findings and proposed solutions for the research problem. The research projects are work-related problems that had been identified and discussed with managers in the workplace prior to the start of the EDLP. Two study leaders who guide and review the draft chapters of the report support learners. Learners are also given the opportunity to take time off from their normal tasks to work on their research projects during office hours. However, they are required to keep record of the

hours used and they are not allowed to accumulate hours for more than eight hours per week on the research project since they still have to fulfil their daily responsibilities. Nevertheless, the research report has to be complete when it is submitted for assessment on the first day of phase three.

The Panel Presentation Phase. As indicated earlier in this section, learners still have to attend lectures of the Service Delivery Improvement Programme (SDIP) during the third phase of the EDLP. This two-week programme draws on the product of the EDLP and the research skills of the learners to visit a police station and to identify service delivery gaps, analyse the collected data to interpret and draw conclusions on the root causes of the service gaps. The findings are used to develop implementation plans for the station management to remedy the service gaps.

Learners work in groups and organise themselves to conduct literature reviews, engage in data collection, compile the SDIP project report and develop a slideshow presentation on the project. The presentation is then presented to senior police officers, including the Station Commander of the police station where the study was conducted.

However, attending the SDIP is only one part of the third phase of the EDLP. The other part entails the research component. This aspect deals with the assessment and presentation of research findings. The research reports are assessed while the learners are attending the service improvement intervention. Feedback is provided to learners as soon as their reports are assessed in order to allow enough time for them to prepare their presentations. The sequence of feedback also determines the order of presentations. This sequencing approach focuses on fairness as it ensures that all learners get enough preparation time for their panel presentations.

Different assessment rubrics are used to assess the research report and the presentation of the research findings, but in essence, it measures the same principles of the research process. In addition, it provides the opportunity for panel members, who are all experts in their own fields, to ask questions about the methodology, the soundness of the findings and the value of the study for the organisation. A typical research panel would consist of a chairperson who facilitates the process, a research methodologist, a subject matter expert in the field of study, a senior police manager who can assess the value of the study in terms of its appropriateness of the suggested implementation plans for SAPS to address similar

workplace problems to what was studied, an administrator who keeps records of the proceedings and a monitor who evaluates the fairness of the assessment process.

During this phase researchers are not only expected to share their findings, but also have to defend the scientific nature of the research project. The panel assessment further serves as a testing mechanism, albeit not the purpose of the panel sitting, whether or not the presenter of the research findings was indeed the person who conducted the study by posing questions about particular decisions made during the execution of the study.

Only once a learner has been declared competent at this research panel presentation will the learner be found to be competent in the EDLP as a complete intervention.

However, with a clear comprehension of what research in the SAPS should be, to what it should contribute and why it should be included in training interventions of the SAPS was not enough to ensure the proper rollout of the research methodology module. Every model of the EDLP used to incorporate research skills into the workplace created challenges. The research module proved to be a module that has evolved into a meaningful learning intervention. Yet it is far from ideal and still needs revision and improvement.

Nevertheless, it is the extensive methodology of developing the research module content, development of assessment instruments, methods of presentation and student guidance that needs to be explored, described and explained. The research module, as imperfect as it may be, needs to be documented as an integral part of the development package of the SAPS for the organisation's senior police officers to address workplace problems. This development offering could be put forward as an asset during the SAPS' negotiations and quest for a partnership with a leading university in South Africa. It is part of the SAPS's history that needs to be captured.

Taking a broader perspective of the value of research in organisations a mechanism to identify and solve problems, this study is necessary as it can serve as a real case study from which other sectors of government can learn from, particularly as it involves role players at various levels of decision making, takes place in a multi-cultural educational setting. The study further contributes to position research skills in the hands of the average employee who otherwise would not have been exposed to research, particularly how those learners who do

not have an academically strong background resulting from economic marginalisation. The possibility of improving problem solving capability through research skills is as real for police agencies on the African continent as it is for Western countries. Finding and establishing an improved research teaching model will as a result assist to bridge the gap in research output between Western and African countries, and as far as policing is concerned, contribute to make its mark in solving cross-border crimes.

1.3 PROBLEM STATEMENT

The aim of SAPS to develop its research capacity at both an individual and an institutional level depends greatly on the knowledge and competence of a single trainer of the SAPS Academy in Paarl (South Africa) who was qualified at doctorate level. However, with the initial assistance of one other trainer, who was still studying towards a Master's degree, and later a limited number of SAPS role players, the organisation succeeded in developing its research methodology module and offering to such an extent and level that it could be used to attract a partnership with an existing public university. The research modules continued to form part of the EDLP and, to date, more than three hundred senior police officers have been exposed to the research module of the SAPS of which approximately a hundred learners successfully completed the research module.

While the Human Resource Development (HRD) Division was the driving force behind the development of the research capacity, the development of course material, presentations, assessment instruments and study guidance were in the hands of the two EDLP trainers and two administrative personnel. However, the formalisation of the research methodology module learning content was done later with the review of the whole EDLP. The curriculum and content were designed and developed by the HRD Division. Regardless of the changes in the learning content redesign of the model, the teaching was still left to the trainers to handle without providing external or internal guidance or support. Nevertheless, several management meetings reiterated the need for - and importance of - better quality research output by EDLP learners.

Recently the research module formed the basis of the SAPS entering into a historic partnership with a well-known public university, due to its high levels and high standards. This

partnership enabled SAPS to offer university degrees and other accredited short learning programmes. To this end, SAPS and the UNISA School of Business Leadership (SBL) developed a new executive development programme for SAPS. The EDLP alignment with the Executive Development Programme of SBL programme resulted in the accreditation of a new Safety and Security Executive Development Programme (SSEDP) that consisted of eight modules. One of these modules entails a research project that forms 22 % of the new short learning programme.

Additional negotiations with another private South African university resulted in acknowledgement of the research quality of the EDLP research reports and possible recognition of prior learned research skills of learners should they enrol for tertiary qualifications at the university (Vorster 2014).

However, all of the history and growth of the research module in all versions of the executive development programmes of the SAPS are residing in the minds of the research trainers and hidden in the archives of the organisation. Unless the workplace learning experiences of the people involved in the offering of the research module in SAPS is properly documented, they will be lost to both the organisation and other educators. This critical part of SAPS history and the journey that the researchers took to get the research module at an acceptable standard requires documentation so that other departments or institutions can learn from it without having to make the same mistakes. The focus of this study constitutes the research problem: to offer an ethnographic account of the history of the making, shaping and offering of research methodology to SAPS senior managers and in doing so, to uncover themes and perspectives of the learning that took place in the workplace.

To this end, the following two main research questions have been set for the study:

First main question: How did SAPS evolve to teach research methodology to its senior managers?

Sub-questions:

- How has the SAPS Research Methodology *module content* evolved since its inception to become of a notable standard?
- How has the *delivery method* of the Research Methodology Module developed to its current form?

Second main question: What workplace learning has taken place during the teaching of research methodology in SAPS?

Sub-questions:

- What were the experiences of those involved in the shaping of the Research Methodology Module of the SAPS?
- Which lessons have been learnt in the process of teaching Research Methodology to senior police officers?
- What were the experiences of SAPS lecturers in supervising learners in their research?
- What has been learned by the senior police officers who attended the research methodology module of the EDLP during their research projects?

1.4 AIMS AND OBJECTIVES

The study intends to describe and explain how the EDLP trainers developed, presented and implemented research methodology for senior police managers in a training academy of the SAPS. It attempts to capture the learning that is taking place as well as recording the history of the existence of research in SAPS.

The objectives are:

- To describe how SAPS learned to teach Research Methodology to its senior managers.
 - To understand and explain how the SAPS Research methodology came into existence.
 - To uncover the ways and means that the EDLP trainers used to develop the Research Methodology course content.
- To determine what workplace learning took place during the teaching of Research Methodology.
 - To document the experiences and lessons learnt during the development and evolution of the Research Methodology Module and the supervision of learners in their research projects in addition to learner experiences.

1.5 RESEARCH DESIGN AND METHODS

1.5.1 Research design

Being interpretive in nature, this study will follow a particular design that will serve as a plan during the execution of the project. I discuss this plan, or design, by focussing on the research paradigm, the specific research approach and the strategy for data collection

1.5.1.1 Research paradigm

The study positions itself within the constructivist paradigm. My constructivist ontological position is that reality can only be known by those who experience it personally. Bryman (2012:33) asserts that the actors in a social setting not only continually accomplish phenomena and its meaning, but they also constantly revise such meanings. I am further guided by (de Vos, Strydom, Fouché & Delpont 2011:311) that the truth is a narrative truth. In view of my epistemological position, I believe that those who are personally experiencing such reality, or truth, construct knowledge through a process of self-conscious action (de Vos et al. 2011:1-11). This study will also become the product of my own construction of reality, because as a researcher I will present only a specific version of reality rather than one that might be regarded as definitive, as argued by Bryman (2012:33).

1.5.1.2 Qualitative Research Approach

The study attempts to uncover and describe how police trainers learned to develop and implement a research methodology module, including research fieldwork. The study therefore leans towards a combination of explorative and descriptive approaches, rather than being explanatory or correlational. It attempts to explore an area where little is known, and to describe how the research module offering in SAPS has evolved by uncovering the learning that took place in the SAPS Academy, where the module is presented (de Vos et al. 2011:1-10). An insider view is required from the actors in the setting. The study will therefore follow a qualitative approach,

A closer look at the characteristics of qualitative and quantitative studies is necessary in order to assess the suitability of the research approach proposed for this study. To this end,

quantitative research is more positivistic in nature and relies on measurements as objective facts (de Vos et al. 2011:89). It is this emphasis on objectivity in its sampling techniques that makes a quantitative approach in this study undesirable. I am part of this social world in which all the other participants work and all participants in the setting (the Executive Centre of the SAPS Academy) form part of the study. I discriminated against all other employees of the Academy based on their non-involvement with the teaching of research to senior police officers. Moreover, I was interested in determining how things happened and evolved over time, which in my view made the qualitative approach more appropriate. The quantitative research paradigm produces quantifiable and reliable data that is usually generic to the target population. It usually has some form of measurement or comparison to baseline data, which in this study, was not the case. The data collection in this study focussed on data that were difficult to quantify or measure such as data obtained from observations, a technique that fits into the qualitative approach (Mouton 1996:34-40)

Qualitative research on the other hand entails the exploration of how social reality is constructed and how cultural meaning is given to it. It focuses on interactive processes and events (de Vos et al. 2011: 89). Schurink (2005a) explains that there are four principal features that distinguish qualitative research from quantitative research and they are found in the description of data, its process, the context and holism, and flexibility of the design.

- Qualitative data contains the words, narratives and quotations that illustrate and substantiate the presentation of results. No attempt is made by the qualitative researcher to reduce or transform the volumes of written text into numbers (Bogdan & Biklen 2003:5).
- Qualitative researchers attempt to uncover how people negotiate meaning in the social processes and the sequence of occurrences in their worlds.
- Researchers tend to focus on the events, actions and processes in context in order to holistically understand these events within the natural environment and context in which they occur (Babbie & Mouton 2001:272).
- Qualitative researchers approach their data collection differently by not prescribing their designs and methods of data collection before the inquiry starts. Their approach is flexible

in order to optimise discovery, capturing, describing and obtaining of insight into the social reality of the participants.

This study follows a qualitative approach in the ethnography tradition in order to collect data in a setting that is well known to me as researcher; a setting that has its own organisational culture; a setting in which research methodology is taught and practiced (the SAPS Academy). Conducting research in such a familiar setting is an advantage to researchers (Rist, 2000).

1.5.2. Research strategy

I followed an ethnographic approach in this study, more particular participant observation. Bryman (2012:431) points out that scholars moved away from pure ethnographic (anthropological) studies, in which researchers merely report and describe their findings without getting involved with actors in the setting, to participant observation in which researchers apply methods such as interviewing, participant observation and document analysis to collect data. The researcher gets immersed in the social setting for an extended period of time and makes regular observations of the behaviour of the members of the setting (Bryman 2012:432). The researcher also gets an understanding of the culture of that group and of people's behaviour within the context of the culture of the group and writes detailed accounts of the setting. While Tedlock (in Denzin & Lincoln 2000:455) explicates that ethnography is useful in educational settings, she adds that, with ethnography being both a process and a product, ethnographers' lives are embedded within their field experiences. Tedlock (in Denzin & Lincoln 2000:455) posits that such an experience is meaningful because human behaviour derives from and is educated by this immersion in the culture. In this regard, I have been working in a small team of two research methodology presenters and two administrative clerks for a period of over four years and am actively involved in shaping the research methodology module of the SAPS. I know the setting, the culture and the actors involved. Tedlock (in Denzin & Lincoln 2000:455) locates ethnography somewhere between interiority of autobiography and the exteriority of cultural analysis due to the prolonged nature of fieldwork that helps to connect personal experiences within an area of knowledge. Ethnography is thus seen as a continuation of fieldwork rather than a transparent record of past experiences in the field. I found support for my decision to pursue an ethnographic

approach to the study in Brewer's statement (in Firmin & Brewer 2006:3) that ethnography and qualitative research honours both the education context and the genuine perspectives of those who live in it.

1.5.3 Research methods

Following my research design, I discuss the methods employed to select research participants for the study. I then explicate the data collection and data analysis process, followed by the steps taken to ensure trustworthiness. A discussion on the ethical considerations of the study concludes the section.

1.5.3.1 Selection of participants

The population refers to the whole scope of possible subjects that can be used in researching a topic (de Vos et al. 2011:222, 391). The research team of the SAPS Academy, consisting of two trainers and two administrative clerks, and all other actors that from time to time interact with the research team constituted the population of the study. The research sample refers to a selection of participants in a population that best represents the views and opinions of the population. In this study, the whole population forms part of the study. Even though the sample size is of lesser importance in qualitative research, it is also important to include the experiences of other role players that have an influence on the research offering of the EDLP for the SAPS. To this end, I have applied mainly purposive sampling during which such other role players were specifically selected due to their particular involvement, and were invited to share their experiences and opinions. Snowball sampling was applied to reach information rich actors of the SAPS HRD Research Committee for possible participation in the study. While it was difficult to state exactly how many participants would take part in the study, it was possible to identify the role players in the research module. I planned for the following:

- One Component Head: General Research and Curriculum Development (Major General) – the participant was involved in the decision-making process of the research module inclusion in the curriculum of the South African Police Service's Executive Development Learning Programme. The participant has specific *knowledge of the processes and strategies employed by the police to inculcate a culture of research in the organisation* and chaired the Research Committee of the police and as such can share valuable

information about *the learning processes involved in managing and deciding on the approval of research proposals in the evaluation processes.*

- One acting Divisional Commissioner: Human Resource Development (Major General) – the participant managed the *roll-out process* of the research module in the Police Service at strategic level. The participant has specific knowledge and experience of the purpose of the research module and its anticipated benefits for the police leadership. The participant has *knowledge and experience of the difficulties encountered at strategic level and criticism of senior managers towards the research module.*
- One research curriculum developer (Colonel) – the participant has first-hand experience of the Research Committee that evaluated the quality and suitability of research proposals. The participant can share his experience of any improvement in the research proposal quality over time and has knowledge and *experience of how he and the Research Committee members of the police learned to evaluate research proposals.*
- Four trainers who teach research methodology (Lt Colonels, Captain and Warrant Officer) – the participants have first-hand knowledge and experience of how they *learned to teach research methodology individually, together and in a community of practice in the workplace.* The participants have knowledge and experience of developing research modules over a period of five years. They also have intimate knowledge of how they learned to assess research reports.
- Two research panel assessors (Brigadiers) – these participants have knowledge of how they *learned to assess research competence and how they learned to conduct research assessments while part of Research Assessment Panels* in the police.
- Two administration clerks dealing with Research Methodology – the participants have specific knowledge and experience of keeping record of research and administering learner reaction sheets and about learner experience of the teaching sessions. The participants can share *the learning that took place in the process of doing administrative work* for the research trainers.

- Four learners (Colleagues who work at the Academy and who have attended the research module) – the participants could share how they have learned to do research in the workplace. They have specific knowledge and experience of drawing from the teaching and guidance of study leaders and they are in best position to say what worked for them and which strategies failed. This data can shed light on the strategies employed by the research trainers and their opinion of *whether the teaching method was successful and can be validated or rejected*.

An attempt was made to include as many as possible of these actors, but in the end very few of them accepted my invitation to participate in the study. I ascribed it to the small research population and the fear of identification, which could jeopardise their careers if their contributions were not flattering for the organisation. Nevertheless, I managed to interview eight participants and shared my own experiences in an ethnographic essay.

1.5.3.2 Data collection

The research process could not be planned in detail beforehand, as data collection in ethnographic studies is situational, coincidental and individual. However, the researcher's skilful activity in each situation determines the strategy for data collection. To this end, data collection is guided by the initial and preceding literature review. As advised by de Vos et al. (2011:304), the literature, or theoretical perspectives, serves as frame of reference for data collection and not to provide a theoretical base for the study or to describe any particular theory. It is used to provide context to the study or a point of departure.

I was guided by Tedlock (in Denzin & Lincoln 2000:455) who explicated that ethnography involves an ongoing attempt to place specific occurrences, events and understandings into a more meaningful context. It is not merely the production of research data that matters, but rather the way in which such information is transformed into a written form that matters as it "... produce[s] historically, politically, and personally situated accounts, descriptions, interpretations, and representations of human lives."

Hemmings (in Firmin & Brewer 2006:11) explains how she views data collection in ethnographic research:

“Ethnographers who do rigorous research engage in participant observations in classrooms, corridors, and in other natural settings; conduct open-ended formal and informal interviews with several “native” people; and gather relevant documents, pictures, art, artefacts, and other archival materials. As the primary instrument of data collection, they do their best to forge rapport with participants in order to uncover “emic” viewpoints on complex social and cultural phenomena. They interact with participants over a prolonged period of time rather than meet with them only once or twice for an hour or two. This is how they generate the thick and trustworthy data they need to make worthwhile contributions that benefit scholarship, policy, and, hopefully, the people who participated in the research.”

My data collection process, in addition to writing an autoethnographic essay, involved three methods to ensure a positive contribution to society in order for the society to get a thorough and truthful account of the world in which research is taught and learned. Firstly, a document analysis on the learning curriculum and pedagogy by studying learning material development, method of delivery, assessments and minutes of meetings held since the inception of the research module to get a feel for the timeline or turning points in the history of the learning intervention. The trainers’ jobs are not restricted to preparing for class, facilitation of learning and assessment of competence only. Although their actions are guided by the SAPS ETD policy (SAPS 2015a), their responsibilities encompass much more than SAPS policy regulated aspects, such as dealing with plagiarism and ethical conduct of researchers. An analysis on police correspondence and minutes of EDLP and management meetings was therefore also needed to understand how stakeholders influence research presenters and other role players in delivering a research product for the SAPS.

Secondly, semi-structured and unstructured one-on-one interviews were conducted to gain understanding of actions and behaviour of research presenters in the SAPS Academy environment. These interviews were more in the form of conversations in the natural setting than formal interviews, similar to what Bryman (2012:432-441) describes as listening to and engaging in conversations. Interviews were in reality broken into shorter conversations about particular topics. As full member of the social setting (EDLP research team) I have followed an overt approach to data collection. Elaborate use of field notes was made as advised by de Vos et al. (2011:316).

Thirdly, observations were conducted in the setting to ensure triangulation of data. These observations were done concurrently with interviewing to collect data on trainer actions, habits and police culture that might influence the research team's behaviour and decisions. Such observations were necessary to uncover linkages that helped me to get a clear portrait of the setting and actors involved. I offer a more detailed account of the natural history of how I collected these data in Chapter 4.

1.5.3.3 Data analysis

The idea of data analysis implies some kind of transformation of data to useable information. Qualitative data analysis is a process of inductive reasoning, thinking and theorising. It uses a variety of analytic strategies that involve the interpretation of data by sorting, organising and reducing them to segments that are more manageable and then exploring ways to reassemble them (de Vos et al. 2011: 399). Ethnographical studies mainly employ interpretive methods that involve descriptions of the phenomena. The main aim is to write objective accounts of lived experiences.

The initial data analysis process entailed the following: Firstly, the preparation and organising of data involved the clear marking of each source of data in ink in the top right-hand corner of each page and dating it. The data source document was then recorded in a data source register. Data were sorted according to its preliminary classification, which broadly covered the type of data and the focus point of the data. All data were then, in accordance with its classification and a brief preliminary analysis of the content, stored in purpose made data containers. Each class of data had its own container. In my effort to manage the large volumes of data, I read the articles, reports, field notes a few times before writing brief memos about the content and its relevance to the study. These memos were attached to the data source.

Further analysis of data was done by using ATLAS.ti software that is suitable for qualitative data analysis. The software assists with the transformation of large volumes of data into useful knowledge.

1.5.3.4 Trustworthiness

In order to protect the trustworthiness of my study, I paid attention to the guidance of Guba and Lincoln (1994) who assert that trustworthiness has four criteria. These are:

- *Credibility* – researchers has to show that they applied sound research methods (good practice) and that they correctly understood the social world. This could be achieved through member validation or triangulation.
- *Transferability* – researchers should provide thick descriptions of the data to provide others with a database for making judgements about the possible transferability to other settings.
- *Dependability* – researchers should keep proper record of all their activities and evidence and proof that proper procedures were followed during the study. The documents should be available for scrutinising.
- *Confirmability* – researchers should indicate their objectivity and show that they have not overtly allowed personal values or theoretical inclinations to influence their findings.

I describe in more detail how I applied the principles.

1.5.3.5 Ethical considerations

I support Plummer (2001:288) who describes the general ethical principles as the principles of “respect, recognition and tolerance for persons and their differences, promoting the caring of others and promoting equality, fairness and justice, freedom and choice and minimizing harm”.

I have consulted various sources to ensure that I follow acceptable ethical guidelines. I complied (in particular) with the standard of good practice confirmed in the Declaration of Helsinki for ethics in research. The Declaration of Helsinki emphasises the practice of beneficence which entails researchers to do positive good, the principle of non-malaficence to caution researchers not to harm to their subjects or the environment; the principle of obtaining informed consent from subjects or respondents before conducting research, and the issues of confidentiality and anonymity and sensitise researchers to respect agreements pertaining to confidentiality and anonymity with participants. The Declaration of Helsinki

emphasises the principle of researcher veracity which requires researchers to tell only the truth in their research.

I opted to conduct value-adding research by applying relevant and appropriate research and reporting methodologies. I complied with sound ethical research principles.

I achieved objectivity and maintained integrity in my research by not offering my own opinions as data, neither bribing anybody nor deceiving any person to partake in my study, and by reporting truthfully.

I have recorded and disclosed my own data by collecting empirical data through interviews, participant observations and document analysis and reporting on it. Data were collected without assistance of other researchers. Interviews followed a semi-structured approach to allow for as much dialogue as possible.

I have stored research data safely and will keep such data for a period of five years after publication in a protected and lockable cabinet to avoid contamination or loss of data through fire, water or theft.

I am accountable to society in general, and the South African Police Service and the University of South Africa in particular and this accountability includes protecting the integrity of both institutions. I take responsibility for my own actions during and after this study. No classified information to which society in general is not entitled, or which might harm the country, the local community or the workplace have been included in the report.

I have protected the participants from harm (including physical, psychological and emotional) by obtaining informed consent at the start of the study, allowing them to withdraw from interviews at any time and providing them with a copy of the report to reassure them that they will not be harmed or negatively portrayed. I have also explained to them that their contributions will be amalgamated with other data so that nobody can identify them.

I protected the integrity of the environment (the SAPS Academy) by not disrupting ongoing processes and activities while collecting data.

In particular, I respected the participants' right to anonymity and confidentiality, and respected their indication of withdrawal at any time during the research. I refrained from using descriptions of participants that might reveal their identities. However, the research team is small and this was a real risk, but due to my good relations at work I could clearly explain what I intended to do. As a result I did not experience any problems obtaining informed consent and participation from my colleagues. I was sensitive to, and respected, the participants' right to full disclosure about the research by using an informed consent agreement and an information sheet that explained the purpose of the study.

I took care not to plagiarise others' work and acknowledged their authorship. I have also tested my work for originality before offering any written text as my own work. In addition I have followed ethical publishing practices, such as giving recognition to my study leader and university, in the report and will do so if publishing is considered.

Being sensitive about institutional codes of ethics, I followed and abided by the Code of Ethics of the University of South Africa and general research ethics guidelines. The SAPS is still in the process of developing its own Code of Ethics for research. I nevertheless followed the process of applying for permission to conduct research in the SAPS as stipulated in the National Instruction (NI): Research in the Service (SAPS 2006).

1.6 CHAPTER DIVISION

The research project is presented as chapters in the research report. AN outline of chapters follows:

Chapter 1 introduces the research topic and provide the background of the study. The research question is contextualised;

Chapter 2 covers the literature review of the report and largely focuses on what is known about offering research training interventions;

Chapter 3 presents the philosophy and perspectives on workplace learning;

Chapter 4 explains the methodology and the key decisions taken during the study, in particular how it was applied in the research;

Chapter 5 reveals the results of the study. Data is displayed in illustrations of relationships in the data and excerpts are used to give participants a voice as to how they developed and learned to present research methodology in SAPS;

Chapter 6 offers a discussion of the data presented in chapter 5; and

Chapter 7 will be the final chapter and will contain the recommendations, avenues for further study, limitations of the study and conclusions.

1.7 SUMMARY

In this chapter, I provided the backdrop against which I formulated the research problem of the study. I offered the objectives of the study and stated the research questions that would lead me to uncovering the history of the development of the SAPS research module. At the same time, the study enabled me to record the relationships in a natural setting, where SAPS role players learned to work together in receiving its research intervention.

The rationale for the study explicated how it could contribute in practical and theoretical levels. The research approach and methodology applied provided insights into the choices I made in terms of the design of the study, being qualitative in nature and following an ethnographic methodology. The discussion explicated my application of theory during data collection and analysis.

As mentioned earlier in this chapter, I explore the best approaches to deliver research modules to adult learners in Chapter 2, while Chapter 3 focuses on the theory and perspectives of workplace learning.

CHAPTER 2: LITERATURE REVIEW - THEORETICAL FRAMEWORK

2.1 INTRODUCTION

The focus of this chapter is to describe and explain how the EDLP trainers developed, presented and implemented research methodology for senior police managers in a training academy of the SAPS. It also attempts to capture the learning that is taking place as well as recording the history of research in SAPS. The objectives are to describe how SAPS learned to teach Research Methodology to its senior managers and to determine what workplace learning took place during the teaching of Research Methodology. In this chapter, the focus is on the teaching of research methodology to adult learners. The chapter sets out to explore and learn from pragmatic approaches in the teaching of research learning programmes. A closer look is taken at the dimensions involved in the teaching of adults. The chapter explains how educators need to deal with new kinds of adult learners who are based in challenging workplaces, and to understand the role of adult learning and workplace learning in their teaching of critical skills. They also need to help learners make ontological shifts for better problem-solving skills. These aspects are explored and discussed below.

2.2 SAPS RESEARCH POLICY FRAMEWORK

This study is conducted in the SAPS which is a highly regulated work environment. The operations and conduct of the organisation are regulated by policies, national standing orders, national instructions, provincial instructions and various directives that are issued by commanders and top management. The Division: HRD is no exception to the rule. Within the Division: HRD, all ETD related practices are governed by policies and guidelines for ETD solutions and practices. Each of these policies indicates the legal framework within which it finds its existence. These regulatory instruments are reviewed every third year, but also as the need arises. The Division: HRD therefore serves as evidence of the current accepted standardised practices within the ETD environments such as the various SAPS Academies and experiential learning workplaces. I discuss only those regulatory instruments that are relevant to dealing with research in the SAPS. I therefore briefly discuss the SAPS research policy framework, the Education, Training and Development (ETD) provisioning practice

guidelines 2015-2017 (version 3), the Implementation guidelines for the recognition of prior learning (RPL) 2012-2014 (8th version), the Implementation guidelines for the assessment strategy 2013-2015 (8th version), the National Instruction 1/2006: Research in the Service, the SAPS ETD Research Policy, 2013 (3rd draft), the Guidelines for the establishment and functioning of a research ethics committee in the South African Police Service (1/2012) and the Guidelines on workplace learning programme in the SAPS (2/2013-2015).

2.2.1 SAPS research policy framework

The South African government's view on research is that research policies such as the South African Research Outputs Policy 2015:6 (2015) must aim to sustain current research strengths and to promote research and other knowledge outputs required to meet national development needs. The purpose of the South African Research Outputs Policy (2015), for instance, is to encourage research productivity by rewarding quality research output at public universities. However, the SAPS is not a tertiary institution as defined by the Council for Higher Education (Council on Higher Education 2004). Therefore, only the policy framework that regulates the SAPS EDLP research is offered in the following paragraphs.

2.2.1.1 Education, training and development (ETD) provisioning practice

The ETD provisioning practice, in support of the Education, Training and Development Policy for the South African Police Service 2012 (SAPS 2012a), serves as the standing operating procedure for the provisioning of ETD solutions to employees of the SAPS. It intends to ensure standardisation in training interventions such as the EDLP. Learning outcomes are therefore based on predetermined standards of the intervention, which in turn, is based on either employee or organisational needs (SAPS 2015a:1-3). The EDLP was developed from an organisational need in 2009, but in its earlier version of 2006, called the EDP, individual needs were analysed in order to derive organisational needs. The ETD provisioning practice guidelines also prescribe the pre-course planning activities, the delivery and administration of the learning intervention and the recording of learner achievements during the course. All administrative tasks are stipulated in terms of how they should be filed and stored for audit purposes. The delivery and administration of the EDLP, including the research module, is thus regulated in terms of the ETD provisioning guidelines (SAPS 2015a:15-26)

2.2.1.2 Implementation guidelines for the recognition of prior learning

The purpose of RPL in SAPS is to address the imbalances of the past by recognising skills gained in working life and to provide access to further education and training. RPL also aims to identify gaps in a candidate's competence and to assist in his/her development, education and training activities as well as devising a development plan to address these gaps in competence. Another goal of the RPL is to grant advanced status and advanced standing to the candidate, and to credit and certify learners for parts of, or the whole qualification. The RPL process is made available so learners may apply for unit standards or qualifications which are related to the functioning of the SAPS and that are available for RPL. The process is voluntary and is thus the responsibility of the learner to apply for RPL. However, this guideline is not available for EDLP learners to apply for, because a management decision within the Division: HRD has ruled that no application could be made for the research methodology module of the EDLP (SAPS 2012b:2).

2.2.1.3 Implementation guidelines for the assessment strategy

The assessment strategy of the SAPS is contained in its ETD assessment implementation guidelines, which provide a generic approach to assessment. The strategy is based on the principle that assessments fit the purpose of the training, produce highly skilled people, are periodic and focus on outcomes, and consist of formative and summative assessments as well as the integration of skills (SAPS 2013a:1). In terms of outcomes based assessment, such assessments should measure applied competence. It is this aspect of measuring applied competence that swayed the decision to implement the practical workplace research project of the EDLP.

2.2.1.4 National Instruction 1/2006: Research in the Service

In terms of National Instruction 1/2006: Research in the Service, the term 'researcher' will also refer to the person who applies for access to a record or information in the possession or under the control of the Service for the purpose of conducting research (SAPS 2006:1). While this National Instruction 1/2006: Research in the Service deals with research in general, the EDLP research is controlled by the HRD Research Committee that was

established in 2011 by the SAPS Division: HRD. The HRD Research Committee mainly handles research resulting from SAPS ETD interventions.

2.2.1.5 SAPS ETD Research Policy 2013 (3rd draft)

SAPS ETD Research Policy defines a researcher as 'All persons who have been designated by the Research Committee to do research'. The SAPS ETD Research Policy defines a developing researcher as 'a researcher who completes a research proposal or conducts research as part of as SAPS course' (SAPS 2013b:2).

The SAPS ETD Research Policy 2013 (3rd draft) supports researchers by:

- Considering all research proposals;
- Determining areas for research;
- Approving all research topics conducted internally, externally and internationally;
- Ensuring that appropriate scientific research processes are followed;
- Ensuring that all research initiatives are managed and monitored;
- Ensuring that a research record data base is kept;
- Ensuring that all research is recorded digitally;
- Ensuring that research ethics are adhered to;
- Giving support and guiding learners/researchers involved in research in SAPS;
- Identifying external examiners for SAPS for research; and
- Awarding funding for research (SAPS 2013b:4).

A candidate's intention to publish research findings should be indicated in the application to conduct research in the SAPS, and dealt with in agreement with SAPS ETD Policy.

Researchers may only undertake research that has been approved by an appropriate SAPS Research Committee (SAPS 2013b; SAPS 2006; SAPS 2012c)

2.2.1.6 Guidelines for a research ethics committee

The purpose of this guideline is to outline the principles of ethical research and provide guidelines for the structure of the Research Ethics Committee of SAPS (SAPS, 2012c:3). The Research Ethics Committee will endeavour to safeguard the dignity, rights, safety and well-being of all research participants. A secondary role would be to ensure the authenticity of the research undertaken by the researcher/s.

These research guidelines aim to ensure that the research does not cause harm to the participants involved in the research, and that the research must contribute to the greater good of the participants and the broader South African nation. Research in the SAPS must also respect and protect the rights, dignity and autonomy of participants (SAPS 2012c:3). However, the Research Ethics Committee will control research in the organisation by focussing on elements of external control imposed by legislation, legal, administrative and contractual arrangements, sanctions, or implementation of technical solutions. The Committee will also control research in terms of internally imposed regulations such as that of internal educational programmes, educational components within social research training courses, and professional codes of ethics and best practice (SAPS 2012c:4). The research Ethics Committee may approve or reject proposed studies by considering the proposal against a set of criteria that ensures scientific research methodologies and protects participants rights such as the right to privacy (SAPS 2012c:6).

2.2.1.7 Guidelines on the SAPS workplace learning programme

The guidelines on the workplace learning programme in the SAPS (SAPS 2013c) defines workplace learning as any non-formal structured ETD intervention in the workplace aimed at improving the employee's skills, knowledge and attributes in order to improve service delivery in SAPS. It refers to non-formal learning as any structured learning that does not offer certificates, but is structured in terms of objectives, time and support. Such learning is not provided by an ETD Academy. The guidelines further state that mentoring a protégé is a form of workplace learning. While the custodians of the EDLP research module refer to the practical part of the research methodology module as experiential learning, it does not really fall within the scope of the definition of workplace learning for SAPS. To this end, the product of the learners' encounter with research will result in intended formal learning or in informal learning such as learning from colleagues, or else from both.

However, in this study, I am not framing the EDLP research module with the SAPS' definition of workplace learning. Instead, I turn to the definition of Jacobs and Park, (2009:134). The authors assert:

We define workplace learning as the process used by individuals when engaged in training programs, education and development courses, or some type of experiential learning activity for the purpose of acquiring the competence necessary to meet current and future work requirements.

For all practical reasons then, the research project of the EDLP will be regarded as workplace learning that may result from experiential learning while doing research.

2.2.2 Teaching research at the SAPS Academy

The teaching of research methodology forms part of several learning programmes presented by the SAPS. The inclusion of research methodology, or at least parts of it, is aimed at stimulating the search for accurate and relevant information on topics of interest and to guide learners towards problem formulations and critical dialogue. The offering of a research methodology module comprises several levels. The lowest one is conducting brief literature searches as part of a communication module of a *Junior Management Learning Programme*. The next level requires the candidate to develop research proposals during Middle Management Learning Programmes while the uppermost level involves conducting a complete project as part of experiential learning that forms part of the Executive Development Learning Programme (EDLP). All three short learning programmes are presented within the institution to police officers who are serving as commissioned officers in the SAPS. To this end, the junior police officers with the rank of lieutenant or captain will attend the Junior Management Learning Programme while officers with the rank of major, lieutenant colonel and colonel will attend the Middle Management Learning Programme. The EDLP is offered to Brigadiers and Major-Generals. While one would expect that the junior learning programme is attended by younger police officers and the EDLP by older police officers, this is not necessarily the case. The only similarity is that all short learning programmes are being offered to qualifying adult learners in the SAPS.

Since the focus of this study is to explore learning that takes place during the teaching of research, from the initial lecturing of theory to the final presentation of the findings of the research project, the focus of the study will be limited to the offering of the research module to the learners of the EDLP.

The EDLP's research module consists of three phases:

The first is the institution phase that entails, among other learnership modules, a research methodology module that is presented over five days. The module covers the key theoretical concepts of research and the process of conducting empirical studies. During the following four weeks, learners are given assistance with developing a research proposal. This phase involves practical exercises to help learners 'discover' the ingredients of scientific research. They have several interviews and one-on-one sessions with the lecturers to clarify the research topics, problem statements and proposed methodology for the study. The research proposals are then submitted to a HRD Research Committee for ethical clearance and approval of the research proposal. Learners return to their workplaces at the end of the six – week institution phase.

Phase two starts when the learner receives the letter of approval for the research proposal. Learners have to execute the research project in the workplace and periodically submit chapters of their work as they progress. The learners receive guidance from two lecturers at a minimum ratio of ten learners to one supervisor. However, due to the demand of the training plan of the SAPS, the ratio is normally closer to fifty learners to one lecturer who also acts as study leader. The learners submit their research reports for final assessment after twenty weeks. Phase two represents the experiential learning phase of the EDLP.

Phase three starts after assessment of the learners' research reports and the learner having been found to be competent in the execution of a research project in the workplace. This phase involves the presentation of the research project and its findings and recommendations to a panel of subject matter experts and research methodologists. The learner be declared competent in the research module as a whole once the research panel approves the research project in terms of its quality and value to the organisation, and subsequently for the complete learning programme.

It does not take much effort to identify the numerous challenges for the police officers who attend this learning programme. Not even half the number of learners enrolled in the EDLP complete the second phase successfully, leaving less than 25% of the learners competent. These results beg serious questions that needed to be asked from an organisational point of view, that was how well the SAPS research module compared, in terms of the way it was

structured and presented, to those of other institutions. Surely, SAPS learners, being adult learners, can hardly be classified as being so individualistic that they cannot relate to adult learners in other professions and occupations. It was therefore befitting to explore the methods employed by educators, scholars or researchers in other institutions when teaching research methodology. Moreover, the challenges and best practices required a closer look.

Until recently the executive centre was managed by a colonel, two trainers at middle management level (lieutenant colonels) and three administrative clerks. The housekeeping is managed by a housekeeper and three cleaners. Currently, all personnel report to the training manager of the academy.

The main responsibility of the personnel is to plan and coordinate the training programmes (EDLP). An average of four programmes are presented per calendar year. Each programme is attended by 25 learners on average. The coordination required includes the travel and accommodation arrangements of a number of visiting trainers. These are trainers that work operationally and who contribute technical knowledge during the six-week first phase of the EDLP. The academy trainers provide the generic skills and ensure that the training intervention is delivered professionally in terms of the SAPS Education, Training and Development policies.

The planning for the EDLP is done by one of the two research trainers who act as the coordinator for the duration of the six weeks. The coordinator receives the learners on arrival and ensures that they are comfortable in their accommodation. The coordinator also ensures that there are enough trainers available to present all modules of the EDLP. Trainers have to submit a lesson plan to the coordinator at the start of each module. The coordinator also ensures that the learners' competence assessments are done and that their achievements are recorded on the police's training administration system.

The administration clerks are responsible for the drafting of name cards for the lecture room, the registration of learners on the police training administration system, the recording of assessment marks and the safekeeping of the learners' portfolios of evidence after the programme. They also handle enquiries about the EDLP. One of the clerks provide a learner support service which assists learners with their travel arrangements, financial claims, emailing and faxing of documents and visits to doctors.

Because there are three phases, the research module is managed differently from the other models of the EDLP. The research process starts when the learners consider a suitable research topic that is relevant to their workplaces long before they report for the training programme. Once their immediate supervisors and provincial or divisional commissioners have given consent for the initial research topic, the approval document is submitted to the course coordinator of the EDLP who keeps the topics on file until the start of the course. Learners may amend the topic but must then have it approved again.

Learner progress is monitored during teaching, through formative assessments in the form of a skeleton research proposal (4-Pager), and through three improved drafts of their complete research proposals. This is filed in the learners' portfolios of evidence. The final proposals are then submitted to the SAPS HRD Research Committee for ethics clearance and approval of the research topics. The proposals and approval letter are then handed to the learner for acknowledgement and signature before a copy of the proposal and the approval letter is filed in the learners' portfolios of evidence.

Every submission, whether for guidance or assessment, is filed in a separate learner research file. The research file is a record of the progress of the learner and creates a history of the movement of documents and communication between the learner and the research supervisor. The complete reports that are submitted for assessment are recorded in a separate file to account for the receipt and allocation of reports to and from assessors. Reports are booked out and back against a signature to ensure that no reports are lost.

Assessors sign for receipt of the research reports then use a marking rubric to assess them. Learners are informed of the outcome of the assessment by means of a letter which contains feedback about the quality of the report. Learner progress and feedback is also captured on a separate database that serves as a back-up system as well as a record for handling learner enquiries. Thereafter, the assessor feedback and marking rubric is scanned and emailed to the learner before being filed in the learner's research file.

If the learner is declared competent, he/she has the opportunity to address assessor concerns, affect final amendments and compile a slideshow presentation. The assessment based on the marking rubric and final decision of the research panel serves to reflect the

learner's competence. The learner receives a certificate if declared competent, but only after the achievement is captured on the SAPS training administration system. The presentation, research report, marking rubric and assessment decision feedback is filed in the learner's research file while a copy of the assessment decision is placed in the learner's portfolio of evidence.

This, however, is not the end of the process as the learner's research report has to be edited and quality checked again to minimise the risk of plagiarism and to add relevant findings to the knowledge repository in the SAPS libraries. An entry to this effect is made on the electronic research database of the EDLP. An electronic copy of the final report and presentation is kept at the Executive Centre and another at the office of the Head: General Research and Curriculum Development at the Division: HRD at the Head Office.

2.3 THEORETICAL FRAMEWORK

Teaching research methodology to adults who have already had some degree of exposure to research is challenging enough, but teaching research to someone who has never been exposed to more than occupational development is a daunting task. Not only will educators have to deal with the fear of the adult learner, but they will also have to pay close attention to the design of the learning intervention, the preparation of the learners and the methods used to teach the unfamiliar content. However, as the literature reveals, there are other factors such as the environment, the educator as an instrument of learning, and power plays in the environment that impact directly on the learning experience of the adult learner.

These factors have been used to formulate compelling arguments for finding ways to achieve a number of related goals such as introducing the research methodology appropriately to learners, managing the creation of ontological shifts, promoting a vibrant collaboration between the research educator and the workplace, and ensuring the empowerment of learners so as to enable them to engage successfully in critical dialogue.

2.3.1 Appropriate introduction of unfamiliar content

2.3.1.1 The need for introductory modules

Not much was known about the adult learner in South Africa in the past, and as far as research is concerned, it only started receiving attention in recent years (Walters & Koetsier 2006:97-108). However, in 2002, it was found that more than 80% of adult learners in South Africa were at undergraduate level (Walters & Koetsier 2006:100). Koen, (2001:21 in Walters & Koetsier 2006:104) concluded that only 30% of part-time adult learners in the University of the Western Cape could complete a 3-year degree in three years 16% completed the degree in four years, with 12% completing the degree in more than four years. A staggering 42% of learners dropped out before completing their studies. It is clear that the success rate of learners in higher education at UWC at the time of the study was relatively low. However, these figures are just as relevant to adult learners in other environments. Koen's (2001) results compare well to the dismal completion rates of the SAPS EDLP (Schwartz & Human 2012).

Part of the argument as to why adult learners drop out or fail to complete courses successfully is that adults have other roles and are not exclusively students (Walters & Koetsier 2006:99). Adult learners share a background of having had a break after school and having experienced adult life before returning to learning as part time students. Very often the time of learning is shared with other life roles such as being an employee who reports to a supervisor at work, and having parental responsibilities at home. Adult learners find it hard to balance their time for learning with their other responsibilities. However, some scholars take a more positive view of adult learners who start new learning experiences. Bourgeois, Duke, Guyot and Merrill (1999:17) argue that part time adult learners tend to be more focussed and directed in their learning journey (Walters & Koetsier 2006:99).

To this end, it could also be argued that not all learners engage in learning opportunities of their own accord. Many employees are for instance, compelled to up-skill or learn new skills that are needed in the workplace. Such employees may show resistance to learning due to an expectation of change placed on them by their supervisors. Resistance to change and learning new skills often result from adults' own selective perceptions and biased views of the situation. These perceptions are based on adults' own interpretations of the 'real' world

they are living and working in (Mullins 1999:824). There is thus no guarantee that all adults want to learn, but all adult learners, whether or not they want to learn, will experience some degree of fear for the unknown elements in the new learning programme or intervention (Mullins 1999:824).

Osman and Castle (2006:517) highlight Cross's factors (1981:97-108) that cause adult learners to struggle to participate in learning. These are clustered into three broad categories, namely situational barriers resulting from adults' life situations, institutional barriers resulting from physical location, course entry requirements, time tables of the programme and other teaching practices, and finally, dispositional barriers resulting from self-esteem, opinion of other learners, past experiences and attitudes towards learning.

To counter these barriers posited by Cross (1981) and Mullins (1999) and to 'convince' adults that they should engage in the learning process, Kolb (1984:31) proposes that teaching new content should start with the experience of learners as this could become a crucial point in whether or not adult learners will see the need for learning new skills. Fourie & ten Kroonden, (1999:1) followed this approach when they introduced an introductory module in Research Information Skills. This is important, especially in view of the fact that many adult learners have no choice in attending training programmes. However, such introductory modules should be put in the context of the learners' field of work or interest and should be relevant to the 'real' world and time of the adult learner (Fourie & ten Kroonden 1999:6).

An introductory modular approach to learning will also help to address the fears experienced by many previously marginalised South Africans in the sense that their 'epistemological access' is influenced by the knowledge that they have acquired at school and their experience of education in an apartheid-driven political era (Osman & Castle 2006:517). This argument is particularly important for the older learner who left school at an early stage, gained experience at work, and developed through informal and non-formal learning. Entering into further development might be overwhelming and intimidating, but entry into formal education is mostly unreachable as entry requirements are stated in the form of previous qualifications (Osman & Castle 2006:518). Not being in possession of a formal qualification could seriously affect the adult learner's confidence. Introductory modules to learning programmes can thus play an emancipating role in many adult learners' lives and careers.

On the other hand, even well qualified professionals experience difficulty in assuming the learner role while having a professional career to maintain. Moreover, when new ways of communication are to be learned, professionals find it very challenging to move into such unfamiliar territory. Osman and Castle (2006:522) explicate that journalists found it challenging to transcend from journalistic writing to academic writing and that extra sessions with a writing centre and one-on-one support had to be provided in addition to the actual learning programme they attended.

From this position one can draw inferences that there is a definite need for an introductory programme that consists of various supporting modules that either introduce learners to the new content of the actual learning programme or provide support by addressing specific barriers to learning on an individualised basis. Cleary (2011:39) studied how basic writing workshops contributed to adults' academic writing skills. She explicates that the writing workshops are based on the principle of "*scaffolding students' lifelong development*". Adult learners are developed as writers by building on what they know and expanding their understanding of writing processes to enhance their self-assessment and metacognitive skills. Cleary (2011:36) argued that adult learners became more successful in their learning programmes when they started negotiating ways of addressing their barriers to learning.

As far as teaching research is concerned, using introductory modules can serve as an orientation towards research methodology as adult learners can reflect on their workplaces and the challenges experienced there. By doing this, they may also confront their fears for engaging in new learning initiatives. Reflection in this case, concerns situations where adult learners are confronted with problems that cannot immediately be explained or solved within their field of work. Relating learning challenges to real life situations will prompt learners to realise that they must seek additional information to properly formulate their identified research problems (Frick, Albertyn & Rutgers 2010:81).

2.3.1.2 Reducing learner fear

From an educator's perspective, much can be done to allay adult learners' fears. An underestimated characteristic of adult learners is that they are confronted by their own self-assessment of whether or not they are ready to obtain new knowledge and learn new skills. Learners formulate a subjective opinion about their ability to learn new material as they reflect

on their mental ability, goal orientation and level of experience (Blanchard & Thacker 2007). Adults draw from this subjective opinion before they commit to partake in learning opportunities. It is thus critical to facilitate clear understanding of what the learning intervention demands in terms of commitment and effort, and what learners can expect to achieve.

Nduna (2012:234) and FitzSimons (2000) share the sentiment. They argue that effective assessment strategies and explicit articulation of learning outcomes and assessment criteria are critical information needed by adult learners. Not only will adult learners be informed of what the new learning content may entail, but in research methodology courses these learners will be helped to identify real problems worthy of further research. Identifying such problems will draw learners closer to realising the need for development. Osman and Castle (2006:518) argue that institutions that offer adult learning programmes should adapt to students and not the other way round. Institutions, therefore, need to engage with the social worlds where students perform their life roles at home, as well as with their work in order to design interventions that will stimulate adult learners' need to know and put them in a position to perform better at work (Coetzee 2013:210).

While the setting of clear learning outcomes for research modules are proposed by FitzSimons (2000) and Nduna (2012: 234) there is also a move away from setting specific work-related objectives during the design of a learning programme. Torraco (1999:262) proposes a behavioural approach since most employees' performance is subjected to measurement at some point in time. In the behavioural approach, the objectives of the programme determine learning expectations, learning content, evaluation methods as well as other aspects of the programme. Learners are thus participating in the design of the learning programme, which reduces the need for the pre-planning and design of these programmes. Torraco (1999:262) identified some emergent considerations in designing learning programmes that involve activities in the workplace. The role of skilled colleagues is more significant than in traditional pre-planned programmes. In the new framework, there is a focus on developing a collective consciousness among learners who interact meaningfully during the learning process as well as on providing clarity about the resources available for learner support during the learning programme. Knowing what support is available may reduce learners' fear and render them ready to take on new learning.

The way in which learning activities are structured is instrumental in adult learning. Not all learners are performance driven. Some learners are more concerned with mastering new concepts and attaining competence. They are inclined to be more flexible in their approach to learning. Learners that follow this mastery orientation will regard mistakes as part of learning whereas performance driven learners may withdraw from learning activities when they fail or when they feel that they are put on the spot. The design and curriculum should therefore accommodate all learners' approaches to learning as they will not all learn at the same pace or show the same level of involvement in learning activities (Coetzee 2013:210).

2.3.1.3 Learning design

Learning design entails creating formats for presenting learning material and assessing the outcome of learning processes against predetermined unit standards or criteria. Whereas formal qualifications and curricula are developed in South Africa by using nationally standardised processes other non-accredited learning programmes and courses are not relying on such quality mechanisms (Coetzee 2013:187). When the design is sound the learning intervention will not only result in improving individuals' performance, it will also take into account the needs of all stakeholders (Bushnell 1990 in Coetzee 2013:187).

In this regard, the DeSeCo Report published by the Organisations for Economic Contribution and Development (OECD) in 2005 argues for the implementation of a framework of key competences when learning programmes are designed. The DeSeCo report argues that the development of competencies should take three underlying features of competencies into consideration:

- Firstly, learners should be able to move beyond taught knowledge and skills by being adaptive, innovative, creative, self-motivated and self-directed.
- Secondly, learners must be able to exercise reflective thought and action by critically thinking about their understanding of a particular technique, changing or adapting such mental techniques and then following through by aligning their actions to their new thought processes.
- Thirdly, learners should be able to draw on various competencies in any situation and context. (OECD 2005:8-9).

Schulze (2009:995) and Schober, Wagner, Reimann, Atria, and Spiel (2006:74) provide more clarity on how these features can be incorporated into the teaching of research methods. They propose a constructivist approach when designing a research module in which constructivist principles are addressed in its goals. Schober et al. (2006:74) provide these goals. They are:

- Learners should gain factual knowledge by studying textbooks and journal articles;
- Learners should gain competence through self-regulated learning that involves forethought, performance and self-reflection;
- Learners should develop collaborative learning abilities by working together in teams and thus, through the resulting social integration, success and autonomy, they will gain intrinsic motivation; and
- Learners should gain e-competence since they will be working on electronic platforms throughout their studies.

However, the literature is quite sceptical of any one single approach to designing learning programmes for adult learners even when the needs of the learners are taken into account. Torraco (1999:260) for instance studied the use of the Instructional Systems Design (ISD) model to develop work skills that are of a technical nature. Torraco (1999:260) cited various authors who criticised the ISD model for being too prescriptive, linear, time-and resource-dependent and too intensive for the context of practice. Richey (1995 in Torraco 1999:260) argued for specific changes to enhance the ISD model by drawing from the influences of the general systems theory, cognitive learning theory, constructivism, situated cognition, and chaos theory and taking into consideration the concerns of authors such as Brown, Collins and Duguid's (1989:32) who argue for more situated learning experiences, Streibel (1989:4) who support the situated learning approach, You (1993) who questioned the use of systems design in today's work environment, and Gustafson (1993:27-32) who calls for new ISD models.

Richey (1995) subsequently suggests enhancements to the ISD model to focus more on the role of analysis and evaluation, greater learner control of instruction, transfer of training, and the continued integration of instruction with technology. To this end, Torraco (1999:260) points out that although these are positive suggestions to enhance the ISD model, it is not always enough to address the needs of the workplace, especially when the new context-sensitive learning and computer technology cannot fully integrate with the workplace.

Designers of learning programmes should thus cater for both individual and group development by using models that put learning in the context of the work (Torraco 1999:261).

Schulze's (2009:1000) study revealed similar concerns expressed by research students about the design of the research module offered by tertiary institutions. Students cited the lack of practical application of the work (learning content) and not having a wider choice of problems to research as being a disadvantage. At the same time, learners expressed a need for less emphasis on factual information and more exposure to useful information. These findings, to some degree, highlight the assumptions contained in the argument of Schober et al. (2006:74) that factual knowledge should play a big role in teaching research. However, the findings also echo the argument of Richey (1995) that learners need greater control over instructional design.

Giving learners more control could be an important matter to consider when a learning programme is designed, but is it realistic? Nevertheless, learning designs need to take the real needs of both the workplace and the learner into consideration. The literature suggests underlying features that should be taken into account when developing skills and at least some framework for the design of a research course which could be incorporated into an introductory module.

2.3.1.4 The Nature of Learning

It is only when one considers the statement of what learners want in a learning programme design that one becomes aware of individual preferences underlying the nature of learning. Stevenson and Palmer (1994) argue that people generally learn through both implicit and explicit learning. Coetzee (2013:205) explains that implicit knowledge is the kind of knowledge we use on daily basis and we tend to be consistent in the application thereof. When we do something without conscious control, when it occurs automatically, we construct implicit knowledge. Learning a mother tongue language is an example of gaining implicit knowledge as we learn to speak it without necessarily understanding it at first. Yet we are able to respond to it.

Explicit learning, the other form of learning, is more relevant to this study as it entails deliberate and conscious thought and effort. Learners are assisted with analysing their

thoughts and the meaning of things, with learning how to remember information and to solve problems. Explicit learning therefore centres on memorising, understanding and problem solving (Stevenson & Palmer 1994).

Learners who rely on memorising detail to recall such detail later will have a shallow understanding of their learning and will resultantly have limited ability to critically analyse and interrogate complex content. However, everyone uses memory to learn as we store data in our short-term memory when we argue about facts. This deliberate attempt to remember important facts when we learn forms part of our explicit learning (Stevenson & Palmer 1994).

Understanding builds on the use of one's short-term memory and requires the ability to think about the matter and deliberately control knowledge and thought processes. The 'thinking' part is also described as a cognitive activity whereas 'understanding' is a deliberate action that seeks links between the old knowledge and the new. Existing knowledge informs the new knowledge and the new knowledge changes the existing knowledge. This is a critical aspect for adult learners who need to use their existing knowledge to master new learning. This point is exemplified in Kolb's experiential learning cycle (Coetzee 2013:218).

Problem solving has to do with reaching a goal that is beyond a person's reach due to lack of resources or information (Stevenson & Palmer 1994). The process of solving the problem helps the individual to gain new knowledge of how to solve such problems and how to solve similar problems in other contexts. Problem solving therefore stimulates learning. More importantly, learners do not have to have prior knowledge to solve problems and to learn from them. They can rely on problem solving and memory to learn, but it could be at the cost of fully understanding what they are learning (Stevenson & Palmer 1994).

Jonassen and Rohrer-Murphy (1999: 70-71) postulate that learning environments as emphasised in activity theory for instance, consist of several interdependent components that involve problem solving, understanding and memory. These components are:

- It should contain a problem-project space which challenges learners to solve an interesting but poorly structured problem that is relevant to their work environment or a real life situation;
- Learners should be exposed to related experiences through case reviews that could be used to obtain information learn from the variety within these cases;

- There should be enough information sources such as information banks that learners can access to support problem solution;
- Cognitive tools are needed in the programme to enable learners to develop their problem solving techniques. These tools refer to observational, conversational and interpretational skills.
- Conversational and collaboration tools are required to enable learners to learn in communities, teams and groups in order to solve problems together (Jonassen and Rohrer-Murphy 1999: 70-71).

This section strongly suggests that learning programmes should encourage learners to draw from all three elements of explicit learning. Whereas memorising is not advantageous for learning research, it does help with the understanding and problem solving processes. However, learners tend to rely on their problem solving skills without fully comprehending the new learning. Learners should therefore be tasked with critically engaging with learning content and should be able to explain their newly gained knowledge. Then again, the manner in which learning programmes are packaged and the principles of learning applied, impact on how much learning really takes place.

2.3.1.5 The Principles of Learning

The notion of having an introductory or preparatory module for a research programme implies careful consideration of the role that lecturers will play during this intervention. While the role of lecturers will be deliberated upon elsewhere in this chapter, it seems fitting to offer some aspects of the principles of learning as posited by Landy and Conte (2004).

Educators will have to build enough activities into the learning programme to provide opportunities for practising the new learning. Although there are compelling arguments for the learning principle of practice, there is also the danger of overlearning. Whereas practice provides the setting and opportunity to think and reflect to gain understanding during learning, overlearning exposes learners to practicing a task that they have already mastered (Landy and Conte 2004). While practice results in competence, overlearning leads to automaticity. The latter describes a situation in which the learner does not really think about the task while doing it. The danger of overlearning is that when learners return to the workplace they tend to apply the learning routinely without thinking, even when the context in which the skills have

to be applied changes. Learners should not be presented with extra learning opportunities once they have shown competence or mastery of a task.

As discussed earlier in this chapter, adult learners want to learn when the new learning is related to their work or real life situations. In other words, they want to see the benefit of the learning. This need of adult learners relates to the principle of fidelity. The tasks contained in the learning programme must be identical or similar to those the learners encounter in the workplace. Werner and DeSimone (2009 in Coetzee 2013:223) argue that physical fidelity in the training tasks mirror the physical features of the actual work situation, which consequently increases the benefit of training on job performance.

Werner and DeSimone (2009 in Coetzee 2013:223) explicate that psychological fidelity is an indication of how strongly learners attach related meanings to both the training environment and the work environment. In cases where learners experience psychological fidelity, learning programmes provide support to learners in developing knowledge, skills, attitudes and ability.

Another important consideration for educators is the principles of whole learning versus part learning. This has particular bearing on the way that a learning programme is structured. As much as one would want to avoid overlearning and ensure strong fidelity in learning programmes, one also has to consider the demands of the learners' workplace before developing a learning programme. Whereas there are instances where the learning programme can be offered as a once off event, the compilation of the programme really depends on the complexity level of the learning content to be mastered and the interrelatedness of sub-tasks (Landy & Conte 2004).

Whole learning occurs when the whole task is practiced during one intervention, while part learning breaks up the mastering of skills into sub-tasks that are mastered separately and combined later to complete the whole learning exercise. Research could be one of those learning programmes that require learners to master sub-tasks such as formulating a proper research problem, conducting a literature review, designing a project or analysing data instead of mastering the whole in one event.

Finally, educators should consider whether or not they would engage the learners in mass or distributed practice. When everything has to be learned in one continuous event, learners will be exposed to massed learning. However, when learning is spaced over time, learners will be exposed to distributed learning. The latter is more suitable for learning of complex matters (Landy and Conte 2004).

2.3.1.6 Section Summary

The proposition of effectively introducing unfamiliar learning content to adult learners finds strong support in the literature, especially as it helps to reduce the high dropout and failure rates as stated by Koen (2001:21 in Walters & Koetsier 2006:104). Fourie and ten Kroonden (1999) subsequently argue for appropriate introduction of learning modules that are closely associated with the learners' work environment. While Cross (1981) and Mullins (1999) outline why adult learners fear new learning, Osman and Castle (2006:518) propose ways of reducing such fear. Adult learners could, for instance, be engaged in setting learning goals and designing learning programmes (Torraco 1999). However, there are certain underlying features of competencies that should be incorporated into the programme design (OECD 2005). Richey (1995), Schober (2006) and Schulze (2009) responded with approaches to offering research modules to adult learners. However, adults learn at different paces and through different methods. Stevenson and Palmer (1994) explicate that learning takes place through memorising, understanding and problem solving. Finally, programme designs should take the principles of learning into consideration (Landy & Conte 2004; DeSimone 2009 in Coetzee 2013:223).

2.3.2 Creation of Ontological Shifts to become Critical Thinkers

2.3.2.1 Reflection

Building onto the foundations laid in an orientation or introductory module that precedes the actual research offering will enable adult learners to do some introspection. Introspection is important as this is how they confront their own self-assessment of whether or not they are ready to learn new things. On the one hand they need to establish whether or not they really need to learn new things, and on the other hand, they become aware of their ability to learn

the new material as they reflect on their mental ability, goal orientation and level of experience (Blanchard & Thacker 2007:1006). However, as much as authors argue for the exposure of learners to processes of problem solving, decision making, critical analysis and evaluation during learning (Schulze 2009), one first needs to deal with the question of whether learners have the ability to solve problems, to critically analyse and to make informed decisions.

Lee-Davies (2007) cites the inability to see that there is a problem as a perceptual barrier to learning among adult learners. Moreover, some adult learners may indeed also experience intellectual barriers to learning such as having limited intellectual ability and memory limitations. These barriers to learning highlight the issue of whether or not a person is ready to learn (Blanchard & Thacker 2007).

Unfortunately, many adult learners encounter these barriers to learning as they are products of a schooling system that failed to develop relational and conceptual reasoning in pupils. This problem is an educational dilemma that could not be rectified by the Outcomes Based Education system in South African schools (Bradbury & Miller 2011:1. 7).

However, the problem is not just confined to South Africa. The concern over the ability of school leavers to participate fully in society was also studied in 1997 by the OECD in their programme called the Programme for International Student Assessment (PISA). The assessment centred on reading, mathematics, science and problem solving. The subsequent DeSeCo report (p10) argues that students need three broad categories of key competencies to function effectively in today's demanding world. Students need to be able to use a variety of tools such as language or technology to interact effectively with the environment, and they need to understand those tools well enough to adapt them for use in alternative scenarios or for their own purposes. Students must have the ability to interact and engage with others in heterogeneous groups and lastly, students must be able to manage their own lives in broad social contexts and act autonomously. These categories of key competencies are interrelated and having these competencies should enable students to think and act reflectively (OECD 2005:5).

Reflection not only assists learners to routinely apply a particular method when they are confronted by a situation, but also assists them to deal with change, learn from their experience and act with critical stance (OECD, 2005:5). Many adult learners struggle with the

skill of critical thinking. It is also a skill that prospective researchers should master (Frick et al. 2010:83). Adult learners also need to develop the skill of self-reflection, because they all undergo different personal and cognitive experiences through exposure to their personal worlds. This process of reflecting is a new way of enriching their understanding of themselves and their perspectives of the world. Each individual's assumptions and intellectual framework are thus embedded in a fundamental domain, known as the self or the person (Frick et al. 2010:81). Adult learners derive their knowledge, the meanings they create in life and the structures they operate in from their personal frame of reference, including their previous social and cultural experiences. However, this frame of reference can only be challenged if students reflect and step out of their normal way of thinking via the process of radical questioning.

To this end, reflection will lead to a reconstruction and shift in the adult learners' way of being and knowing (Sieler 2003) while the inability of adult learners to reflect and think critically, relationally and conceptually could leave the adult learner in a state of 'underpreparedness' (Bradbury & Miller 2011:1-8) and not being able to change ontologically.

Reflection, however, has several interpretations in the literature. Dewey (1933 in Coryell 2013:302) explicates reflection in learning as constituting a process that starts with a problem and then progresses through a set of steps, in which action and thinking are viewed as separate steps. Dewey's (1933 in Coryell 2013:302) steps involve:

"reflection, thinking without action, a feeling of unease, development of a working hypothesis and data gathering, a proposed solution connected with reasoning and situational context, hypothesis testing and refinement, and, finally, post-reflection."

Dewey (1933) further argues that reflection on past experiences guides a person's future behaviour and decision making. Dyke (2009:304) builds on this view by suggesting the elements of the reflective process. Dyke (2009:304) posits these as:

- doing (practice, primary experience, experimentation, application, creativity and/or expression);
- knowing (formal theory, research or practice knowledge, and secondary experience);
- reflecting (reflection, thinking and contemplation); and
- interacting (engaging with others in different social contexts, situated learning and communities of learning).

Ferraro (2000:2) and Steinert (2000:46) explicated in a more general approach that reflection involves thinking about and considering one's own beliefs and experiences. When knowledge is applied in practice, a continuous cycle of self-observation and self-reflection is created. Reflection therefore forms an important element in being able to think critically. Reflection stretches beyond methodological and epistemological concerns as it engages the students' being as they are ontologically moving from being a student to becoming a responsible scholar (Lin & Cranton 2005).

In order for learners to make that ontological shift towards becoming critical thinkers they need to consciously develop that skill. Frick et al. (2010) argue that "novice researchers, for instance, move from dualism to relativism and finally, to reflective thinking". At first they are dualistic thinkers and are often unable to develop balanced, reasoned and well-thought through arguments (dualism). They initially find it hard to address the complexities of an issue or topic, but later on they learn to read and think about it. In the process, they start contextualising knowledge and understanding the complexities of having an intellectual stance towards a topic (relativism). In the third and final stage (reflective thinking), learners become reflective thinkers who realise that their opinion is one of many and that some opinions are better than theirs. Yet, they evaluate and commit to their opinions for their own particular reasons (Frick et al. 2010: 85).

Hargrove (2002) explicates that researchers go through a three-phase learning process to acquire critical skills when they engage in research. The first phase of learning, referred to as single-loop learning, does not allow students to construct new knowledge or radical innovation, nor does it really change their values. Students' limiting mental models also limit the depth and quality of their arguments. The second phase of learning (or double-loop learning) enables the student to move to a thoughtful level involving critical thinking. Students start to view things from a different perspective and realise that any kind of knowledge is based on assumptions, premises or paradigms and is able to be transformed. In this phase, mental models are challenged and expanded to include different models of thinking and different perspectives. In the third phase (triple-loop learning), learning moves beyond the levels of behaviour and cognitive patterns to influence the person's fundamental level of being and their level of wisdom. This is at the level where the learning affects the student's identity. Students experience a shift in the way they see themselves and the world. Ontologically, one

can attribute this shift in their worldview to their expansion of knowledge which includes new ways of thinking and learning. At this level of learning, we transform who we are and how we observe, think and do things.

2.3.2.2 Problem-solving

For Billett (1996:6), problem solving, learning and transfer are similar processes. However, in order to understand the relationship between problem solving and learning, one has to consider the concept of knowledge construction.

Billett confirms two types of knowledge delineated in cognitive literature. Firstly, knowledge that other scholars have classified is propositional knowledge that comprises facts or information. This propositional knowledge is noted by Anderson (1982, in Billett 1996:2), as comprising stateable facts or concepts (Evens 1991 in Billett 1996:2) as well as the understanding of relationships among concepts (Novak 1990 in Billett 1996:2). Secondly, Billett (1996:2) confirms the existence of procedural knowledge that comprises the employment of skilful action and techniques to secure goals (Stevenson 1991 in Billett 1996:3). Procedural knowledge is classified by Stevenson (1991) into three levels. These are:

- First order procedures are employed to achieve specific goals;
- Second order procedures such as monitoring, evaluation and strategy selection are used when first order procedures are not enough to achieve goals, for instance when tasks are ill defined and need to be broken up into sub-goals (Green & Simon 1988 in Billett 1996:3); and
- Third order, or higher-order procedural knowledge which acts on lower order knowledge, comprising monitoring and organising activities (Stevenson 1991 in Billett 1996:3).

Of importance here is the fact that although both propositional and procedural knowledge is drawn upon and constructed in all of our activities, it is mostly the role of higher order procedures that addresses the challenges of non-routine problems.

To this end, Billett (1996) provides clarity on what is meant by routine and non-routine problems. It is easy to address routine problems as the variables are known and solving the problem relies on schemata in memory and requires little effort to engage cognitive structures (Billett 1996:5). Getting dressed and deciding what to wear to work is an example of a routine

problem. Non-routine problems are problems of which not all the variables are known and which require “extensive conscious thinking and searches of existing schemata in memory”. However, an individual may treat problems as routine or non-routine depending on how they interpret the problem. Further, what could be considered a routine problem for one could be a non-routine problem for another. It is thus only natural that in a classroom situation some learners will find a particular challenge to be a routine problem-solving exercise while others in the same class could regard the same challenge as being novel.

This could explain why some learners may experience difficulty in making ontological shifts as solving problems requires the utilisation of cognitive structures to manipulate the problem situation. (Anderson 1993 in Billett 1996:6). Where learners fail to draw from existing knowledge or cannot manipulate it to solve novel situations they will also find it hard to look at the problem differently and thus not be able to make different representations of the problem. To this end, Welman, Greyling and de Bruin (2002:96) explicate that: “the situation is more serious than defining problems clearly”. They further argue “learners who engage in research often reach wrong conclusions in their studies due to a lack of critical thinking skills”. Not being able to think analytically indicates an inability to detect and correct conceptual inadequacies that are present in non-concrete or operational definitions of constructs under investigation.

Since learning, problem solving and transfer are similar processes (Billett 1996:6), not being able to conceptualise a problem situation will ultimately also result in limited learning taking place. Moreover, when learners are confronted with the challenges of learning to do research and analysis, they need to know how to solve non-routine problems where the variables are not all known. They have to look at problems from different perspectives. Not being able to conceptualise research problems could be an indication that learners cannot solve non-routine problems and cannot adapt existing knowledge for application in new situations. Thus, particular effort should be made to construct higher order procedural knowledge among research learners.

2.3.2.3 Sameness and Variation

Closely related to learning through problem solving are the notions of sameness and difference in transfer (Marton, 2006) and variation (Marton & Trigwell 2000). Marton and

Trigwell (2000:382) argue that learning through repetition is still very relevant today as we all tend to repeat tasks until we master them. Memorisation, which implies repeated acts of reading, doing and thinking, can thus also be a means to understanding (Watkins & Biggs 1996 in Marton & Trigwell 2000:382) and learning. The problem with memorising is that we tend to do things over and over again in the fashion that we remember them, but this habit of repeating actions the way we remember them does not keep up with changes in the spaces in which we find ourselves in society. This concern is based on the concept that repetitions of actions that draw from memory seldom represent exact repetitions of previous actions (Marton & Trigwell 2000:383). Following from this, one may argue that, although learning occurs when one utilises memory to draw on previous actions in order to execute another, memory merely serves as a catalyst for learning to act in new contexts.

Adults are continuously confronted by numerous concurrent situations that prompt them to make decisions, but relying on memory may not result in the most appropriate decisions, as the memory that we draw from may be inappropriate for current conditions. Different information is needed to make judgements that are more relevant to current conditions. It is during this process of making judgments - while drawing on similarities and variation in situations - that we learn.

To this end, one has to understand the concept of similarity in order to follow the importance of variation in learning. The extent to which we can use something we have learned in one situation to handle another depends on the similarity between the two situations (Marton & Trigwell 2000:385). Similarity can be experienced either consciously or unconsciously, but it must have an effect on the person to mean anything. This is important because similarity is recognised only when variation has been experienced. In other words, we can only experience or notice similarity, when we have experienced variation in situations.

For adults who have to master research methodology, the concept of variation is extremely important, but in South Africa this challenge originates from as far back as the education received at school. This relates to Bradbury and Miller's (2011:1, 7; Malan, Ndlovu & Engelbrecht 2014:1) argument that our schooling system has failed to develop relational and conceptual reasoning in pupils. If learners' assessments or learning experiences did not provide for enough variation in exercises, they will not be able to recognise similarities. Moreover, the more similar the school tasks are, the more likely they are to be different to the

pupils' other everyday tasks and thus, the less likely that these pupils will be able to apply this learning in their other social contexts (Marton & Trigwell 2000:386). The question is: 'how can that which was learned earlier be used in new contexts?'

Marton and Trigwell (2000:386) explicate that we "discover critical features in our experiences and responses to situations". When we experience the same situation differently, we become aware of differences in the critical features of the same situation to which we are responding. Our responses depend on our discernment of the differences in critical features of the situation. To this end, we can argue that our experiences of our personal life worlds depend on our own discernment. Marton and Trigwell (2000:381) argue that there is "no learning without discernment and no discernment without variation". The discernment or experience is always the discernment of variation or experience of difference. This does not mean that we do not make mistakes when we learn to discern. In fact, error-free learning hardly exists. More importantly, making mistakes is a necessary element of learning (Marton & Trigwell 2000:389).

Adult learners should thus be allowed to make mistakes as they learn discernment. Simulations of a variety of real life situations could therefore be utilised to expose adult learners to sameness and variation during their learning process. In classroom situations, the variation is typically introduced by helping students to experience how their own understanding varies from that of their peers. The dimensions related to the object of learning in which variation could be experienced create the space for learning (Marton & Trigwell 2000:391). To this end, Marton (2006: 499) argues that although it helps to know that learners manage to do something in a particular situation because they have experienced something similar in the past, it is not enough. Learners must also be able to draw on past experience and do something different when confronted with new situations. In other words, more attention should be given to the transfer of what was learned in one situation to another.

Marton (2006: 530) explicates that we should not just ask 'What is learned?' or 'What is transferred?' but also 'What should be learned?' and 'What should be transferred?' This would assist us in identifying ways in which learners can learn in to handle future situations. Marton (2006: 512) argues by presenting six criteria for the consideration of both sameness and variation in the transfer of learning. Marton emphasises (1) the role of discernment in the transfer of learning, (2) the necessity of differences in the transfer of learning, (3) that

“learning one thing makes learning another possible because the two things are different”, (4) that due to differences, one experience modifies another, (5) that our “preparation for transfer to unknown situations requires variation”, and (6) that “transfer effects may increase with time, experience and differences”.

2.3.2.4 Participation after competence

Casey (2013:46) explored the connection between participation and learning. He argues that a systematic approach to building competence is not enough and that learning is more than just measuring competence or the achievement of skills and abilities. Casey (2013:47) therefore argues for an alternative, an extension of the concept of competence, namely participation that takes learning beyond competence. In this regard, he explicates that participation should not be viewed as an activity that follows competence but rather the involvement of the learner during the teaching process. Casey (2013:48) therefore posits that competence is merely a set of circumstances whereas participation implies activity, which puts the learner in the centre of practicing what was learned.

Casey’s (2013:48) argument emphasises the fact that learning in the workplace does not happen in isolation, simply because the term itself implies that the learner is a party to the learning process. Participation, according to Lave and Wenger (1991:51), is based on negotiation and renegotiation of meaning in the world. It is a process in which understanding and experience is in constant interaction. The authors explain that learning is embedded in the process of participation in social practice and in communities of practice. The latter concept is discussed in detail in the next chapter. For this chapter and for the purpose of emphasising the need for learners to make ontological shifts in the way that they approach learning, the concept is only touched on briefly.

Wenger (1998b: 4) argues that participation in a community of practice does not automatically result in new learning. It is the process of learning in social contexts that facilitates new meanings. Meaningfulness therefore plays a vital role in learning in communities of practice. Wenger (1998b:4) reminds us that the social world is where the work gets done, where meaning is constructed, where learning takes place every day, where innovation originates and where identities are formed. He suggests that learning can be encouraged by both

opening possibilities for participation in communities of practice, and membership to such communities of practice. Legitimate forms of participation should be encouraged.

Corryell (2013: 303), who studied university students' personal perceptions about adult education and integrated learning and knowing in international settings, argues that significant learning (transformation) is individual and social and dependent upon the context of the environment. The beliefs, perceptions and assumptions that constitute our frames of reference mediate our educational experiences. To this end, Corryell (2013:303) draws from Mezirow (2000) to posit that there may be multiple phases of learning involved in the transformation process and, through self-reflection, learners explore new roles, relationships and actions. A reinterpretation of one's experiences therefore leads to new expectations during transformation. This implies that we consciously shift our boundaries and expectations in the process of participating in communities of practice. Corryell (2013: 316) concludes in her study that learning does not have an end-point but is continual and situated in participative practices that emphasise knowing, partaking and doing in a critical pedagogical journey.

Malan et al. (2014) argue differently. They posit that South African students have not learned to take ownership of their own learning due to the teacher centred approach followed at schools. Malan et al. (2014:1) explain that the traditional way of teaching does not encourage self-reflection and self-direction but rather strengthens learner dependency and superficial understanding. To this end, the authors propose a problem-based learning approach in which learners are at the centre of teaching. Learners are provided with an environment in which real life problems are used to encourage student involvement in their own learning right from the start. Students work in small groups and take responsibility for their learning process. Participation therefore forms an integral part of learning in problem-based learning approaches. In order to transform students from passive learners to active problem solvers who can reflect on their own progress and learning, we need a shift from covering learning content to problem engagement. Lecturers thus become coaches (Malan et al. 2014:2).

Irrespective of the learning approach followed, learners will have to apply the new learning in the workplace or social setting for it to have meaning. Learner competence is not enough, as it does not necessarily result in active participation in social spaces. Learning interventions that facilitate learner engagement and participation throughout the intervention are more likely to inculcate problem solving and participation in workplaces.

2.3.2.5 Summary

It is clear that learners have to make a paradigm shift from being passive 'receivers' of content to active partners in the learning process. This section emphasises the learners' role in their own development and learning. Learners have to become critical thinkers if they are to make any ontological shifts in the way they approach learning. They have to use reflective skills to reconstruct and shift their way of being and knowing (Sieler 2003). If they fail to do this, their inability to reflect and think critically, relationally and conceptually could leave them in a state of 'underpreparedness'. Adult learners can be taught to engage in problem-solving methods during the learning process. However, solving problems successfully requires the utilisation of cognitive structures to manipulate the problems. (Anderson 1993 in Billett 1996:6).

Learners who fail to draw from existing knowledge or cannot manipulate it, find it hard to look at problems differently and are thus not able to envisage different representations of a problem. We also learn when we discover critical features in our experiences and responses to situations. When we experience the same situation differently, we become aware of differences in the critical features of the same situation to which we are responding (Marton and Trigwell, 2000:386). Our responses depend on our discernment of the differences in critical features of such situations. Our experiences of our life worlds depend on our own discernment but this is always the discernment of variation or our experience of difference. Marton and Trigwell (2000:381) argue that there is no learning without discernment and no discernment without variation. Lastly, Casey (2013:47) adds that a systematic approach to building learner competence is not enough and that more is needed to create learning than just measuring competence or the achievement of skills and abilities. An alternative is needed; an extension of the concept of competence, namely participation, that takes learning beyond competence.

2.3.3 Vibrant collaboration between academia and workplace

Learning research methodology and conducting research involve more role players than just the learner and the study leader. However, more focus is placed on the learner (Malan et al. 2014; Ditole, Sandy & Thupayagale-Tshweneagae 2013; Corryell 2014). Other studies focused on the application of learner centred approaches (Hassan 2010; Corryell 2014) but

few have studied the experiences of those who teach adult learners (February, Koetsier & Walters 2010). To this end, a closer look at the learning environment, the teacher, the other role players who are involved in the learning journey of a research student, and the workplace is needed to get a better view of the collaboration needed between academia and the workplace.

2.3.3.1 The learning Environment

The workplace is much more than just a place for generating profit or rendering services. It is a place where learning occurs in ways other than in an informal and incidental nature. Workplaces, in contrast to formal education settings - where learning takes the form of knowledge acquisition - require employees to be active participants in knowledge creation (Tynjälä 2008). The workplace therefore provides the context in which formal and informal learning occurs.

However, the importance of formal and informal learning for both the education environment and the workplace emphasises the need for a close relationship and cooperation between workplaces and formal education settings. On the one hand, education providers should include practical (real life) experience in their programmes; while on the other hand, workplaces should seek acknowledgement or formalisation for learning at work (Tynjälä 2008).

Workplaces offer an abundance of learning opportunities to individuals who perform tasks, share activities, solve problems and work with others whilst drawing from previous learning. Unfortunately, not all adults make use of such learning opportunities in the workplace, because learning environments are personal and are constrained by their history (Govender 2001:18). Lorschbach and Tobin (1995 in Govender 2001:18) explicate that the conception of a learning environment is the construction of the individuals in a given social setting. The learning environment is also perceived to be a combination of an individual's socially mediated beliefs about the opportunities he or she has to develop and the extent to which the social and physical milieu constrains such development. The meaning of a workplace for an employee is derived from the personal experiences of that individual and its value is determined by the nature of development opportunities, the frequency thereof and the contribution it makes towards career growth. Workplaces that offer limited career growth and

development opportunities may not be perceived as an enabling learning environment. Moreover, what happened in the past will influence the nature of the learning environment (Govender, 2001:18).

The workplace can therefore be enabling or restraining for learning and learning transfer. Yamnill and McLean (2001:203) argue that an organisational climate has an impact on learning in the workplace, but it is overlooked during training interventions. Caffarella (1994 in Brookfield 2005:627) explains that the transfer of learning in a workplace is further influenced by institutional, political and community factors. Trade unions, for instance, make use of bargaining, partnership strategies and social dialogue to promote workplace learning (Stroud & Fairbrother 2008:8). Employees are exposed to varying levels of organisational support for learning and development in working conditions that are affected by change brought about by the aforementioned factors. Tynjälä (2008:141) elaborates on this, arguing that the most important contextual factor related to workplace learning is the way in which work is organised. Where work is organised in a narrow scope, there is little opportunity to learn and for making autonomous decisions because such work is normally repetitive in nature. However, in work situations where employees are confronted with new challenges, experience job rotation and are exposed to opportunities for autonomous decision-making, they will be in a position to learn more.

Fuller and Unwin (2004 in Tynjälä 2008:142) state that there are three types of learning opportunities central to expansive learning environments. These are: the opportunity to engage with different communities of practice in and outside of the workplace, the organisation of work that allows for co-construction of knowledge and expertise and the chance to deal with theoretical knowledge in off-the-job courses. Sambrook (2006 in Tynjälä 2008:142) approaches workplace learning in a similar fashion by summarising the factors that influence it into three categories, namely organisational factors, functional factors and individual factors. Organisational factors relate to 'organisational culture and structure, senior managerial support, organisation of work, work pressures, tasks, and task vs. learning orientation'. Of particular importance here is the organisational culture. Functional factors relate to how one defines the role of human resource development and factors such as the number of personnel, expertise, availability of information and the use of information (communication) technology. Individual factors refer to managers' and individuals'

responsibility for learning, their motivation to learn, time factors, their confidence and information technology skills.

The time spent balancing an employee's time spent on production and on development - when considered in terms of monetary value - presents difficulties to organisations. However, both activities are equally important for learning. When considering time spent on production, learning takes place while mastering existing standardised skills and the reduction of variation in performance between employees (learners). In terms of developmental learning, learning takes place by mastering new skills through encouragement to innovate and develop new thinking (Ellström 2010:106). As argued earlier, the work environment within which such learning occurs either constrains or enables learning, depending on the relationship between adaptive and developmental learning. Enabling environments maintain a balance between the two types of learning whereas constraining workplaces limit developmental learning opportunities (Ellström 2010:107).

Educators therefore not only have to understand the intricacies of the workplace and the balancing act between productivity and employee development, they also need to understand the contextual factors impacting on development opportunities if they want to promote better collaboration with the workplace. However, the work environment also has to deal with power plays that affect workplace learning (Järvensivu & Koski 2012), situated gendered learning (Tanggaard 2006; Garson 2012) and understand the boundaries of workplace learning (Illeris 2004). In spite of these challenges, the workplace can still offer conditions that enable learning. Educators need to understand that the ultimate acceptance of the learning opportunity lies in the hands of the employee.

Illeris (2004) argues that learning in the workplace involves learning content and learning dynamics on the individual level and the technical organisational learning environment and the social-cultural learning environment on a social level. To this end, Pillay, Boulton-Lewis, Wilss and Rhodes (2003:429) explain that if learners do not consider learning as part of their conception of work, they will not explicitly include learning in their practice, because they see work and learning as two distinctively different things. Pillay et al. (2003:437) found in their study concerning the integrated nature of work and learning, that, in the workplace, younger employees did not associate well with changes involving innovation, creative and autonomous thinking. In contrast with older employees, younger employees' held lower level

conceptions of work and learning. The findings of the study of Pillay et al. (2003:437) emphasises the need for informed educators.

2.3.3.2 Informed Adult Learning Educators

Educators in adult learning environments need to understand themselves, their roles in adult education and the workplace of the learners if they want to have a positive impact on the learner. Nduna (2012) studied the relevance of workplace learning and curriculum development at a university of technology where the course curricula required that students continue the experiential part of their courses in the workplace. Nduna (2012:232) highlighted numerous challenges with the education quality management system of the university. The study further emphasises the fact that the educator has to be informed about the curriculum and circumstances in the workplace. The educator does not function in a vacuum and does not deliver graduates that will only be able to function in one particular context. Such a system will only be an extension of a poor schooling system that does not enable learners to think outside the scope of textbook scenarios taught in class. The adult educator therefore needs to link the learner with the reality of society and the workplace and not be just a link to textbook knowledge. Moreover, adult learning educators need to understand their learners and their needs. While the adult learners' characteristics are discussed in more detail in the next chapter, a few important aspects are mentioned here.

Lieb (2011:4) posits that adult learners must retain the information received from classes to benefit from it and it is the educator's responsibility to make that happen. He then explicates that learners must be able to use the new information learned in class in new settings. Such transference is most likely to occur when learners can associate the new information with something they already know or if the information is similar to what they already know. Further, transference will be higher if the degree of original learning was high or when the information contains critical elements pertaining to their jobs. This view supports that of Nduna (2012) that the implication for educators is that they should be informed about the workplaces and work experience of adult learners. However, being informed and sharing information does not equate to 'education' (Bichelmeyer 2006:512). Educators have to understand the difference and avoid offering information as if it is teaching. For an offering to qualify as education it at least has to contain the following five elements: -

- Learners should be involved in solving real-world problems;

- Existing knowledge is employed to serve as a foundation for new knowledge;
- New knowledge is not only explained to the learner, but demonstrated;
- Learners need to apply newly 'acquired' knowledge to solve problems; and
- Learners should be urged to integrate their new knowledge into their workplaces (Bichelmeyer, 2006:513).

Educators who teach adult learners also have to recognise that their learners spend a substantial portion of time working (Walters & Koetsier, 2006:97). They are not school leavers. In fact, more than half of learners in modern higher education are adults who have left full-time education for other roles before returning to full- or part-time study. Adult learners are not exclusively students. Adult learners usually combine their studies with other roles such as being parents at home, employees or employers at work and members of communities.

February, Koetsier and Walters (2010:982; Boud & Griffin 1987:223) explicate that teachers are in fact also learners. They need to improve their skills continuously to stay relevant in times of constant change both in the world and in the workplace. Nduna (2012:234) argues that lecturers reflect organisational culture and ethos and the ability to present learning interventions and mentor learners in the workplace. There seems to be consensus in the literature that educators should understand the workplace and they should, in fact, actively endeavour to gain such understanding of the workplace. February et al. (2010:982) and Nduna (2012:234) add that even the administrative and support personnel and part-time or visiting lecturers should be given personal development opportunities in order to serve adult learners more effectively. Adult educators need to understand their roles as learning facilitators and to be able to function in roles applicable to the situation. Drawing from the work of Boud and Griffin (1987) and Brookfield (1994), Engelbrecht (2000:38) posits different educator roles when teaching to adults. These roles are:

- Presenters of expertise;
- Learner centred guides;
- Providers of access to resources;
- Supporters and encouragers;
- Critics and stimulators of critical reflections; and
- Challengers of assumptions.

Hutchins (2013:22) explicates how she moved between roles during her teaching of aspiring researchers. Initially she had to provide technical feedback in terms of the quality and presentation of the class assignments and draft articles intended for publication. As learners progressed and received more feedback and guidance from her, she noticed that her students became anxious about feedback. Hutchins then changed her role of coach and advisor to 'ghost writer' who started correcting some of the students' work for them. This change in role assisted her to regain their confidence.

However, educators need to execute these roles with caution. Rossiter (1999:64) argues for the minimising of 'wounding learning practices' where learners suffer 'injuries' at the hand of lecturers. Rossiter (1999:64) explains that in such instances the lecturer and curricula always featured at the centre of the learning intervention instead of the student's life-worlds, aspirations and experiences. Learners who suffered through wounding learning practices found it hard to complete their studies. Educators therefore have to have a thorough understanding of the philosophies underpinning their teaching methods.

To this end, one argues for the fair and uplifting treatment of adult learners, but on the other hand, one asks how academics see themselves when they teach adults. Jenkins (2011) provides more clarity on this matter as she explores the connection between teaching philosophies and practice of adult education teachers. Although Jenkins's (2011:79) participants did not clearly display a position towards any particular philosophy of being liberal, progressive, behaviouristic, humanistic or radical, they did indicate that they were all learners who develop their practice in response to learners' needs. She found that her participants' beliefs indicated that they found value in understanding their own rationale for their beliefs and they recognised formal pedagogical knowledge as influential. Another important finding was that educators' own experiences influence their teaching philosophies. Alarmingly, most of Jenkins' (2011:84) participants did not see themselves as contributing to the larger adult education policy debate, but rather that their contribution to adult education is the end of the line.

Heaney (1996:11) sees the role of adult educators differently. He argues for the transformative impact of adult education in society. Heaney (1996:30) cites the works of Merizow (1989:172) and Brookfield (1987) to explicate that the real work of adult educators is to facilitate learning conducive to perspective transformation in learners. The aim of such

transformation could be on both individual and collective levels and should challenge but not reinforce dominant institutions and social practices. Hutchins (2013:22) used reflective thought of her role in teaching to transform her students' writing skills from drafting class assignments to writing publishable work. Learners not only learned the style of academic writing and the practice of publishing their thoughts, they also gained the knowledge of how to reach society through written media. This is but one example of how educators can use their experience and reflection to affect change in both individual and community through printed media.

In view of Jenkins' (2011) findings and Heaney's (1996) arguments, Laher (2007:385) indicated that educators have to be adaptable. Laher (2007) offers some reflections on how she had altered her teaching approach when dealing with part-time adult students. She found that part-time students were generally more mature and more professional than full-time students were. They also expected that same level of professionalism. Part-time students have more experience and can often contribute to discussions from an expert's point of view. They involve themselves with discussions in class more actively and challenge traditional theories more readily. Part-time students have other personal and work commitments that prevent them from meeting on a regular basis at lectures. Alternative electronic consultations are thus more acceptable to them. However, part-time students also experience more anxiety than mainstream students do. Laher (2007) emphasised the challenges that adult learners who study part-time due to work or other commitments, endure. It is thus easy to comprehend that adult learners may suffer 'injury' during teaching as Rossiter (1999) postulates.

Educators need to be informed of technological advancements and the effect of globalisation to make a paradigm shift in their approaches to teaching. The influence of globalisation is also experienced in education due to the fast changing nature of technological resources. Being adaptable to the needs of adult learners also means that educators relook their use of traditional learning theories, as their approaches have to move from 'instructional design' to 'learning design'. The redesign of learning experiences requires educators to acknowledge that the learning space has changed. The traditional classroom has now expanded to the workplace, to offices and to virtually any space where a learner can access the learning institution or content electronically (Massyn & Wilkinson, 2014:100).

In summary of this section, some key aspects have been identified that teachers of research can take note of. It is evident that educators will have to be much more than experts in their teaching discipline who happen to have the technical teaching skills. They have to understand the needs of their learners who are mostly part-time studying adults (Walters & Koetsier 2006) and be informed of what is happening in the learners' world and workplace (Nduna 2012). However, sharing of information is not teaching (Bichelmyer 2006) and educators must understand their own roles (Engelbrecht 2000; Hutchins 2013) to ensure that transference of learning takes place (Bichelmeyer 2006). Educators are learners too (February et al. 2010; Boud & Griffen 1987). They acknowledge that they are learners (Jenkins 2011; Hutchins 2013) and that they need to adapt their teaching approaches to changes in the environment such as advancements in technology (Massyn & Wilkinson 2014). Educators must also care for their adult learners and avoid teacher and curriculum centred approaches that cause 'injury' to learners (Rossiter 1999). Laher (2007) explicates that adult learners generally are mature and professional and expect to be treated as such by their teachers. Educators should thus give full support to their learners, even if they have to change roles (Hutchins 2013; Laher 2007; Heaney 1996).

2.3.3.3 A new kind of adult learner

Learners not only expect their educators to be informed of the challenges they face in their life-worlds and to be experts in their discipline, they also expect their teachers to understand that there are different generations of learners with different needs. Although most adult learners are older than 30 years of age (Walters & Koetsier 2006) there are also younger adult learners who are entering the education system for the first time. Adult learners therefore make up a very diverse group of students.

A recent study by Ezeokoli (2014:71) focussed on the effect of psychological factors on adult learning in Nigeria. The study provided renewed focus on the adult learner and provided insight into adult learners in Africa where many adult learners are illiterate and often embarrassed by their inability to communicate in English. Moreover, Ezeokoli (2014:75) established that adult learners' memory, concentration, ability to absorb or recall and to judge have a significant influence on their learning. These are important factors that adult educators should bear in mind. Ezeokoli (2014:75) explicates that adults remember older events better and struggle to remember recently learned materials. Consequently, memorisation of work

should not be considered when teaching older adults. Further, due to their other responsibilities in their social worlds, adults tend to be absentminded, and, when they are involved in mental activities, they find it hard to concentrate. Older people tend to experience a decline in concentration after 45 minutes of an event or activity. Participatory learning exercises may help to overcome this concentration impediment. Older adults find it difficult to absorb and organise new information and as a result, also struggle to recall such learnt information. However, adults tend to rely on their previous experiences and when new information contrasts with these, it becomes difficult to accept the new information as valid. Adults tend to only accept and learn what is proven to be superior to the old information and experience (Ezeokoli 2014:76.) However, Ezeokoli (2014:76) does not provide new insights into the role of judgement other than stating that "...judgement is a matter of previous experiences..."

McCormack, Pancini and Tout (2010) raise the matter of learner judgement. McCormack et al. (2010) provide some insights of what adult learning educators can currently expect to encounter, especially with the inclusion of workplace learning in tertiary education. By implication, the inclusion of the workplace as a site of learning in tertiary education also includes adult learners attending vocational training programmes that are offered in workplaces.

McCormack et al. (2010:41) argue that in these modern times of rapid changes in all spheres of life, approaches to knowledge and learning need to undergo fundamental changes to align themselves to these 'liquid times'. Adult learners will increasingly have to rely on their practical judgement when dealing with undefined, indefinite and emergent habits in their life-worlds, rather than logical application of known concepts in internalised procedures and traditional expertise. One almost gets the impression that McCormack et al. (2010:42) is warning that learning theories, as we know and apply them, may become dated or irrelevant when considering the speed of change in the workplace and the rapid change in skills needed by workers to cope with these changes. McCormack et al. (2010:42) argues that new workplace learning programmes should encourage and develop learners to exercise their own practical judgement in education and in the workplace as that is where learners are exposed to in-situ understanding of work demands. Workplaces will now, more than ever before, link workers (adult learners) with participatory practices, the flow of circumstances, and the awareness of the diversity of role players, activities, tensions, goals and tasks in very

complex situations. For adult learners to excel in their careers they will have to know how to play the game and how to cope in 'circumstances of conflicting complexity' (McCormack et al. 2010:42.). But how does this knowledge influence the educational setting?

The concern is that theoretical knowledge and concepts learned in a controlled classroom situation is inapplicable to live situations without effort or the exercise of practical judgement. Educators therefore need to take note of this fact when the growing importance of workplaces as sites of learning is considered. The mastery of organisational processes, negotiating political tensions and dealing with the atypical areas of informal learning takes place in the workplace, not in the classroom (McCormack et al. 2010:43).

2.3.3.4 Learning transference and the workplace

It might be a misconception to think that an organisations' employees do not get skills development. The London-based Chartered Institute for Personnel Development (CIPD 2008:2) indicated that up to 82% of 751 respondents had received training in the previous 12 months. This might not necessarily be the case in South Africa, but the CIPD report highlights important aspects that require attention. Firstly, recent years have seen a shift from training to learning. Secondly, the success of any learning intervention in the workplace lies with the prior receptiveness, engagement and attitude of the workforce. Thirdly, organisations must have effective strategies to promote learning. These strategies should include a consideration of the wider context and issues of engagement, motivation and preparedness (CIPD 2008:3). These three aspects prompt educators to adapt their training approaches to cater for the context of the learner and satisfy organisational needs at the same time. The workplace therefore plays a more prominent role in adult learning than ever before.

Another revelation was that only 15% of the respondents in the CIPD study preferred classroom teaching. Up to 46% of the respondents preferred to be shown how to do the work and then to get the opportunity to practice it. A further 18% of respondents stated that their choice of learning is through one-on-one coaching. Twenty-five percent disliked learning from textbooks, while 21% did not like learning using the internet. The CIPD (2008) report clearly shows that adult learners tend to lean towards practical or hands-on methods of learning. Educators have to take cognisance of this because it takes practical or experiential learning into the workplace of the learner. Educators also have to consider adult learners' motivation

for learning, as there can be an array of reasons for this. Learners' levels of commitment also vary, which means that adult educators may have to simultaneously play different teaching roles for one cohort of learners. Educators might have to encourage one learner while coaching another, or provide resources to one and support for another.

Coetzee (2013:19) posits the reasons why employers invest in the improvement of skills. Educators have to know why employers have nominated a specific individual to undergo skills development because it may indicate what future roles they will have to play and the extent of motivation and encouragement needed by learners to receive learning optimally. Employers may want to improve employee performance, update an employee's skills or prevent managerial, professional and technical scarce skills or obsolescence. It could also be that employers want to orientate new employees or that they want to prepare them for promotion or managerial succession. On the other hand, the need for an employee's development could also be to cater for an individual's need for development and growth, to solve organisational problems or to promote and accelerate employment equity. Enhancing the employability of designated South African groups and the promotion of employability to sustain livelihoods may also be the motive. Having stated above that adult educators need to understand the context of their learners and their workplaces, one can understand educators being challenged by the idea that they constantly have to deal with learners' fears and expectations, employers' demands and individual resistance. In the end, one wonders whose needs will eventually be satisfied and at whose cost? Nevertheless, research lecturers whose learners engage in research projects in the workplace have to find ways of establishing good rapport with workplace supervisors and employers in order to secure resources and support in the workplace. This might be an unfamiliar role for educators to play.

Many trainers or facilitators who train adults may not be conversant with another challenge; the actual application of the many learning theories available for the transference of learning. Yet they are expected to support transfer of training in organisations. Some clarity of available adult learning theories that educators or trainers can draw from is provided by Yamnill and McLean (2001:196). The authors draw from Holton's (1996) model to explicate how motivation, transfer climate and transfer design act as enablers for learning transference. Each of these factors is supported by a number of theories. I discuss these briefly as offered by Yamnill and McLean (2001:197).

Theories on motivation of transfer. Motivation has to do with the learner's desire to use the knowledge mastered in the training programme in the workplace or on the job. Adult educators can draw from three theories that clarify learners' motivation to transfer learning into their jobs. These are the expectancy theory, the equity theory and the goal setting theory. The expectancy theory was introduced by Vroom in 1964, but the model emphasised an individual's capacity or ability to perform a task rather than the individual's willingness to perform the task. The model was later adapted by Porter and Lawler in 1968 by incorporating employee satisfaction into the model. To this end the expectancy model serves as a predictor of performance or transference by calculating the factors of ability required to perform a task and the level of satisfaction derived, which in turn is dependent on intrinsic and extrinsic rewards (Yamnill & McLean 2001:198).

The equity theory, introduced by Adam in 1953, is based on the premise that people want to be treated fairly relative to others. Yamnill and McLean (2001:198) draw from several authors to explain that the theory rests on three assumptions: (1) people develop beliefs about what they think is a fair and equitable return for their contributions to the job, (2) they compare their own contributions and returns to those of others in the workplace, and (3) beliefs of unfair treatment stimulates motivation to reduce the tension created by inequity in the workplace. Transference of learning is thus influenced by the perceived level of fair treatment of employees in the workplace.

Locke introduced the goal-setting theory in 1968. This theory is based on two determinants of behaviour, namely intentions and values. While intention is viewed as the precursor of human action, values encompass the acceptance of intentions and commitment to such intentions or goals (Yamnill & McLean 2001: 199). The goal forms the aim of the individual's behaviour.

When considering these theories, it is evident that learners leave the training intervention with different levels of motivation to implement what they have learned in the workplace. Educators must therefore know how learners' motivations will affect this transfer of learning. Yamnill and McLean (2001:200) explicate that certain important aspects of the theories influence the learner's experience of intervention fulfilment, learning outcomes, job attitudes and expected payoff. The authors explain how learners tend to be more motivated to apply

their new learning in the workplace when they show positive reactions to interventions, their learning outcomes, their attitudes to their jobs and the utility of learning in their jobs and careers.

Theories on training transfer design. While Holton (1996 in Yamnill & McLean 2001:201) argues that learning designs that incorporate time to practice new skills will enhance transference of learning, he does not provide clear guidance of what such designs should look like. However, Thorndike and Woodworth (1901) provided this guidance with their identical elements theory. They argued that transfer of learning improves if there are aspects corresponding to the workplace in the training and in the performance setting where learners have to use the new skill sets.

The principles theory on the other hand, advocates the teaching of general principles needed to learn a task. The general principles theory of Goldstein (1986 in Yamnill & McLean 2001:201) proposes that learners, equipped with general proficiency or principles, will be able to solve problems in the workplace by applying these general principles. This point of view seems to oppose the view of Thorndike and Woodworth as it proposes that educators do not necessarily have to build too many corresponding elements from the job into the learning intervention. Instead, much of the learning transference devolves on the learner to construct during the process of problem solving in the workplace.

Drawing from these theories, educators will have to consider their learners' workplace job requirements and decide on how many corresponding aspects to incorporate into the learning intervention. Yamnill & McLean (2001:201) offer some guidance to educators. They propose the 'near and far' transfer theory in which near transfer represents the application of learning in situations that are similar to those in which the learning has taken place. Far learning transfer is the application of learning to situations that are not similar to the original learning events. Educators can apply several strategies to improve both near and far learning transfer, and this will be discussed in more detail later in this chapter. In this section, I merely illustrate the challenge of adult learning educators to comprehend all available theories and to apply them appropriately. The complexity of the challenge to training lies in the diverse composition of the learners, each with their own aspirations, needs and attitudes.

Theories that support transfer climate. Finally, Holton's (1996 in Yamnill & McLean 2001:203) third influencing factor of learning transfer centres on the learner's perception of the work environment. The work environment can either support or inhibit the application of learning in the workplace. The transfer climate has a mediating impact on the relationship between the work context and the attitudes and behaviour of the learner in the workplace. Supportive transfer climates will therefore influence transference positively. Conversely, negative perceptions about the work climate will inhibit learning transfer in the workplace. Yamnill and McLean (2001:203) offer two theories to help explain Holton's theory.

Rouiller and Goldstein (1993) offered the transfer climate framework theory which presents two sets of workplace cues for operation of transfer climate. The first set of cues are situational, such as goal cues, social cues, task cues and self-control cues, and may be used to assess opportunities in the workplace where new learning can be applied. The second set of cues, labelled consequence, represent the feedback that learners receive after their application of the new learning in the workplace. These cues are found in positive feedback, negative feedback, punishment or no feedback.

The organisation theory describes the climate in which learning transfer can take place. Yamnill and McLean (2001:203) draw from Kozlowski and Salas (1997) to explain that the need for change, for implementation of training interventions and for the transfer of skills is embedded in the context of work team, sub-unit and organisational levels. The organisational theory emphasises tangible work environment characteristics such as structure, reward systems and decision autonomy that could improve perceptions of the transfer climate. To this end, if the work climate does not actively support the application of new skills it is unlikely that the learners will be motivated to learn.

Yamnill and McLean (2001:206) argue that collaboration with key stakeholders in the workplace is necessary to link new learning to strategic goals, to reinforce organisational priorities and to support related workplace factors. Educators therefore have to engage with managers to communicate clear performance objectives to learners, so that those learners would be motivated to learn because they would know exactly what is expected of them. Managers need encouragement to provide the necessary resources to enable transference of learning. Educators will meaningfully negotiate better learning transfer climates in the workplace by knowing and using the abovementioned relevant transference theories.

However, more effort needs to go into the negotiation process to enlighten both workplace supervisors and the managers of the factors that enable or inhibit transference of learning..

Fasokun, Katahoire and Oduaraan (2005 in Osman 2006:106) argue for a different approach to adult learning in African contexts, but in the process base their arguments on general learning theories found in adult education. Although the authors do not introduce new theories to teaching learners in Africa, they do highlight the need for a differentiated approach to learning in other non-Western learning environments. Moreover, when considering the differences in working conditions, culture and ethos, there is a compelling argument to be made for better understanding of workplace learning in African contexts. Reliance on the learning theories discussed above might not be enough to facilitate adult learning in some cultural contexts.

Nduna (2012:234) follows through on the argument that adult learners should be adequately prepared for the workplace. Nduna (2012:233) argues that the transfer of academic knowledge is complicated by the fact that courses are usually organised in subjects while the workplace requires an interdisciplinary application of knowledge. There should thus be a logical relationship between the learning outcomes of the programme and the outcomes expected in the workplace. The alignment of these outcomes within the context of the workplace therefore plays a vital role in learning (Fasokun et al. 2005 in Osman 2006:106). Even aspects such as multilingualism should be taken into account when adults are prepared for the workplace, because this is an arena where language can be acquired in practical contexts (Francini 2009:44 in Nduna 2012:234). Educators also draw from their experience of the workplace to understand the concept of workplace learning.

Educators interact with both learners in the workplace, and with the workplace where gatekeepers play a role in creating spaces for learning. The educators' ability to show their expertise and knowledge should be evident when they facilitate learning, especially when they have to collaborate with gatekeepers and other stakeholders in the workplace. However, this is not as simple as it may sound. Solomon, Boud, Leontios and Staron (2001:280) for instance, experienced discomfort when they, as seasoned researchers, had to speak openly with other collaborators about the processes they used in their own environments while working on a joint research project. This discomfort occurred even though they had the knowledge of workplace learning and learning theories readily available. The authors had to

revert to reflective processes to understand their position in the project and to legitimise their own learning. If this is the experience of expert researchers and seasoned workplace learning educators, how much more intense will novices and developing educators' experience be of such interaction with the workplace? Educators will not only have to have the skill of teaching, be knowledgeable about their field of expertise and understand the workplace; they will also have to reflect upon their own practices to learn how best to engage with the workplace where gatekeepers control access to learning opportunities. Solomon et al. (2001:280), found that in their project, the role players had different assumptions about what was acceptable and what they were allowed to speak about due to the different practices and cultures of their different workplaces. These differences had to first be clarified.

2.3.3.5 Understanding the role of Workplace Learning

There has been a growing interest in workplace learning from both theoretical and policy perspectives (Billett, 2002a, 2002b, 2003; Beattie, 2006:102; Billett, Harteis & Estelapelto, 2008:1). Moreover, as argued by Estep (2008:9), training has taken a backseat to workplace learning.

Torraco (1999:249) studied the role of workplace learning. He supports the arguments made above that the workplace has changed dramatically. Torraco (1999:249) explicates that workers these days find themselves adding, replacing, enhancing and retrofitting their expertise as changes in the workplace gradually eliminate the need for older skills. He adds that the cases he studied showed that skilled performance could not be developed without affording the employee an opportunity for learning in the context of work (Torraco 1999:256).

The author argues that present instructional models of learning do often not address the features of the task environment. The models used by educators to develop new skill sets for the workplace are outdated - or ineffective - for different reasons. He explains:

Firstly, "successful work strategies are contingent (rather than deterministic) on multiple factors and expressed through pragmatic behaviour". In such contingent strategies, employees "confront novel and poorly defined problems that cannot be anticipated in advance. Successful performance therefore needs employees to solve problems in innovative ways", as the prescribed procedures often do not solve workplace problems.

Secondly, traditional or conservative models tend to view the employee as an individual learner who has to develop competence for the workplace. However, the distributed nature of expertise in the workplace places the individual employee as a member of a group whose expertise collectively solves problems in the workplace. The individual learner concept is expanded in order to view the learner as an aggregate concept. Within the group, learning is regarded as a combined activity of the members of the group which is constructed through their actions within the system. The author argues that high performance is not dependant on groups being fully developed. Educators therefore do not need to facilitate group development before introducing the task. Thirdly, the distinction between work and learning has eroded significantly in today's workplace.

Torraco's (1999:259) point of view is that the present models that are used to develop expertise in the workplace are based on analysis and programme development offered as an intervention that precedes expected workplace performance of employees. Further to these arguments, Torraco (1999:259) proposes the development of new models to promote employee development in the workplace. This is an important aspect that educators ought to take note of, since employees nowadays draw from workplace learning not only to develop presently needed skills, but also to develop future needed skills not taught in controlled classrooms.

McCormack et al. (2010:45), who explored the concept of 'learningful' work, argue that workplace learning is more successful in conditions where workers not only learn to do the job, but also learn how to learn while working (McCormack et al. 2010:46). Opportunities should be created for employees to utilise the learning gained in a previous environment while they learn to do the next job. Employees also learn from legitimate peripheral participation, and by shadowing and observing experienced workers (McCormack et al. 2010:47).

However, McCormack et al. (2010:47) also expressed concern about placing learners in certain kinds of environment. New workers may find themselves in workplaces that do not provide learningful conditions. The authors explain:

"...the stakes of some work are so high, the demand for 'continuous operational reliability' (Weick & Roberts 1993) so imperative, that it would be dysfunctional or

irresponsible to allow students to engage in trial and error on-the-job learning or to exercise their own practical judgement. In such cases, the logic of productivity trumps the logic for learning and opportunistic learning on the job may have to be severely curtailed, even proscribed”

Despite this fairly recent concern of McCormack et al. (2010), the workplace plays an increasingly important role in employee development. Drawing from the work of others, Billett et al. (2008:2) summarised the role of workplace learning as follows:

- Workplace learning experiences offer effective means for keeping skills current throughout working lives (Raelin 2007);
- Workplace learning enables the development of specific skills that are needed by industry and helps to keep older workers effective (Tikkanen, Lahn, Ward & Lyng 2002);
- Workplace learning offers opportunities to marginalised employees, including those with disabilities, who find it hard to access structured learning opportunities (Church, Shragge, Fontan & Ng 2007).

Billett et al. (2008:2) argues that understanding how to address these needs through work and work-based learning can overcome the disadvantages of the workplace for older and marginalised workers and for those for whom there are no course provisions to support their occupational development. In addition, learning through workplace experiences provides the opportunity for adults to realise important social, economic and personal purposes. To this end, Billett et al. (2008:3) explicate that the role of workplace learning encompasses employee empowerment on an economic level by assisting workers to resist redundancy through maintaining their occupational competence.

For Billett et al. (2008:3), the purpose of workplace learning includes the enhancement of the kinds of learning experiences provided in educational settings. Workplace learning supports the effective transition of students from educational settings into the workplace and it addresses the worker’s lifelong need to maintain his or her skilfulness. However, despite the growing interest in workplace learning and the accompanying acknowledgement of the important role it can play in economic emancipation, it continues to be seen as inferior and subordinate to the traditional learning processes and outcomes provided by educational institutions. This view of the workplace as an inferior site for learning with fewer opportunities for workplace learning, emphasises the need for a better understanding of workplace learning

and the need to advance the status of workplaces as legitimate environments in which to learn (Billett 2008:4). The workplace provides the contexts in which the soft skills of a profession are acquired through workplace learning, while technical skills are learned in formal teaching environments (CHE 2011:27).

The Council on Higher Education (CHE), which is an independent statutory body that serves as the Quality Council for Higher Education in South Africa, draws from Harvey, Geall and Moon (1989) who argue that work-integrated theoretical learning, problem-based learning, project-based learning and other similar pedagogies are helpful in preparing learners for successful workplace learning. Where academic staff are unfamiliar with the demands of workplace learning, the assessment of learning through practice, staff development and industry collaboration is required to support learning (CHE 2011:37).

2.3.4 Empowerment of learners for critical dialogue

While acknowledging the importance of critical dialogue for research, it cannot be divorced from the role of learner empowerment and the intrinsic motivational factors of learners. The study will take a closer look at the empowerment of novice researchers, focussing specifically on motivation, critical thinking skills and critical dialogue, before addressing the issue of extended educator support in the workplace.

2.3.4.1 Empowerment of novice researchers

Howard, Tang and Austin (2015:134) cite several authors in their argument that motivation, among other factors including individual differences, training methods, approaches and learning culture, can enhance critical thinking skills. Moreover, Howard et al. (2015:134) posit that critical thinking skills depend on one's ability, motivation and opportunity to use or develop critical thinking. It takes effort to acquire critical skills. Since both individuals and workplaces are involved, one has to consider the development of critical thinking from both organisational development and educational points of view.

Learner empowerment is quite important from an organisational development perspective as it helps employees to experience job satisfaction, while the organisation reaps better productivity. From this perspective, empowerment refers to the act of allowing employees

greater freedom, autonomy and self-control over their work, responsibilities and decision-making (Mullins 1999:652). Workplaces can empower their employees through participation in decision-making, involvement by, for example, valuing their suggestions, commitment to goals and by reducing the management levels in the organisation structure. In return, workplaces can enjoy faster decision-making, a creative innovative employee capacity and committed and involved employees and provide its employees with a sense of achievement (Mullins 1999:653). However, this is not an automatic process. Workplaces therefore do not automatically 'gain' creative employees and innovation, because creativity, it is argued, relies on three major components; expertise, creative thinking skills and motivation that coming from both employee and employer (Howard et al. 2015:135). Innovation depends on 'creativity' to generate original and useful ideas. These factors show a great resemblance to crucial ingredients of employee empowerment, particularly in terms of involvement and decision-making. Mullins (1999: 406) explains that motivation is individual, intentional and multifaceted and results from the degree to which one wants to engage in specific behaviour. Further, intrinsic motivation builds on a number of factors, namely the opportunity to use one's ability, a sense of challenge and achievement, receiving appreciation, receiving positive recognition and being treated in a caring and considerate manner (Mullins 1999:407). The workplace therefore serves as catalyst for abstract and higher order thinking.

From an education point of view, we realise that teaching is not enough and talking is not teaching (Griffard 2010:11). Developing the skills of reflection, problem solving and being able to notice variation - as discussed earlier in this chapter - is not the sole responsibility of the adult learner. Adult learners should be able to make the ontological shift to acquire critical thinking skills. How is this encouraged? How can learners be empowered to develop such skills?

Effective teaching is concerned with creating an environment where learning happens for all learners. To do that, educators working with adults have to acknowledge the complexities of workplace empowerment as well as matters of intrinsic motivation and their learners' particular 'will-skill-thrill-profile'. Similar to Mullin's (1999:406) statement that motivation has to do with the level of engagement to do something, Griffard (2010:10) argues that intrinsic motivation for learning has to do with the *will* to learn, the *skill* to be mastered and the *thrill* of the '*learning moment*'. In this context, the *thrill* component often serves as a placeholder for *will* and *skill* to catch up. Learners' levels of *thrill* experiences can also serve as a measure

of their motivation during learning, especially when challenged to develop higher level thinking skills. The notion of *skill* as a component of intrinsic motivation (Griffard, 2010:10) needs further deliberation in the context of this study.

In this section, the term '*skill*' refers to critical thinking skills, which are needed to make rational judgements and decisions in the workplace as part of the learners' development. Workplaces need to provide opportunities for development of the critical thinking skills that would empower their employees. To this end, Iwaoka, Li and Rhee (2010:69) provided more insight into the components of critical thinking. The authors cite Paul (1995) and Angelo (1995) to define the concept of critical thinking:

“Critical thinking is an on-going process of seeking and analysing an array of information to create a better understanding of more effective problem-solving and decisions-making for complex issues” (Paul 1995 in Iwaoka et al. 2010:69).

“Critical thinking is the intentional application of rational, higher-order thinking skills such as analysis, synthesis, problem recognition and problem solving, inference, and evaluation” (Angelo 1995 in Iwaoka et al. 2010:69).

Iwaoka et al. (2010:69) explain that there are several tests available to workplaces that can measure critical skills gains, but caution that a single test will probably not be able to provide accurate results or a true reflection of one's critical thinking ability. Nevertheless, the authors' application of the Z test of the Cornell Critical Thinking Test (CCTT) provides the general components of critical thinking. These components relate to deduction, induction, assumption, observation or credibility and meaning. Other aspects related to the attitudes or open-mindedness of individuals are not measured in the Z test.

Workplaces can follow different strategies to develop the *skill* as referred to by Griffard (2010:10). To this end, Ritola (2012:661) provides a brief overview of the application of, and the constituent parts of, a critical thinking strategy. The strategy involves gathering the arguments and evidence available on an issue, assessing these from all angles then formulating an overall impression. A belief is formed, based on the overall impression. If there is no impression, there is no judgement.

However, not every scholar agrees to the teaching of critical thinking skills. While Ritola (2012:661) argued in its favour, Huemer (2005) argued that the development of critical thinking skills is not necessary. Ritola (2012:675) subsequently criticised Huemer (2005) for arguing that critical thinking should not be applied, or only be applied, in instances where firstly, something about the experts renders them less able than ordinary people to implement the techniques of critical thinking, and secondly, the experts have not generally tried to implement those critical thinking techniques. Ritola's (2012:675) argument is that teaching critical thinking skills is essential because one cannot just accept what the experts say without questioning who the authorities on a particular question are and whether or not they are reliable. Ritola (2012:676) therefore emphasises the need for the continued teaching of critical thinking skills, providing learner critical thinkers with the tools and training to improve the reliability of their critical thinking processes to help them formulate rational beliefs.

The need for the development of critical thinking skills, especially in the context of work, is also not new (Pinkney & Shaughnessy 2013:346). However, in the context of this study and the development of research teaching skills, one has to ask oneself what is meant by 'critical thinking' in research terms?

Pinkney and Shaughnessy (2013:346) argue that one can refer to Bloom's Taxonomy or Piaget's theory on stages of cognitive development to form an understanding of critical thinking skills. Bloom's Taxonomy encompasses the following components, or skills, which, if summarised, are knowledge, comprehension, application, analysis, synthesis and evaluation. These skills are sequenced in hierarchical levels of difficulty. In Bloom's Taxonomy, one can only move on to developing the next skill - situated at a higher level of difficulty - once the preceding skill is mastered (Pinkney & Shaughnessy 2013:346). The mastering of higher order skills such as evaluation, synthesis and analysis develop over time, as individuals grow older.

Piaget's theory on stages of cognitive development holds that in Stage 4, adolescents and adult learners will develop the skill of thinking in a systematic abstract manner (Pinkney & Shaughnessy 2013:347). According to Piaget, as summarised by Pinkney and Shaughnessy (2013:347), one develops from early childhood to the threshold of adulthood by moving naturally from stage 1 to stage 4 as follows:

'Stage 1 – Sensorimotor skills (infancy and very early childhood),

Stage 2 – Preoperational skills (up to more or less 7 years)

Stage 3 – Concrete Operational skills (up to 12 years), and

Stage 4 – Formal Operational skills (adolescence to adulthood)'

In the first three stages, children naturally develop thinking skills during their interaction with their natural physical environments. During stage 4 however, young adults are confronted by 'biologically secondary' thinking skills that are not necessary for survival, thus rendering formal operational skills frequently being underdeveloped or if developed, not frequently used. Abstract thinking is not standard in all adults, which means that most adults function in stage 3 of Piaget's theory, relying on concrete operational skills (Pinkney & Shaughnessy 2013:350).

Piaget's theory on stages of development is criticised by Ennis (1985 in Pinkney & Shaughnessy 2013:350) as Ennis argued that critical thinking cannot be equivalent to higher order thinking skills. For Ennis, critical thinking is about thinking reflectively and reasonably deciding what to believe and do. He therefore provided more clarity of his understanding by defining four basic areas of critical thinking namely clarity, basis, inference and action. These basic areas are then further dissected into separate actions as follows:

- Clarity: the ability to focus, analyse arguments, and asking appropriate questions;
- Basis: finding support for one's inferences, judging the credibility of statements, sources and observations;
- Inference: developing frames of reference, inductive reasoning which refers to generalising to create and test hypothesis, deductive reasoning which refers to applying an abstract idea or principle to concrete situations, and inference to give value to judgments by making statements of what people do or should do; and
- Action: interacting with others to assess their understandings of the same issues and to assess one's own understandings from their points of view (Ennis 1985 in Pinkney & Shaughnessy 2013:350).

Pinkney and Shaughnessy (2013:351) conclude that learners can be taught to develop higher level thinking by challenging them during teaching. Learning curricula should therefore be developed to confront learners with disequilibrium to stimulate transition to stage 4 of Piaget's theory on development.

It appears that adult learners can be empowered to develop critical thinking skills by drawing on the intrinsic motivation components of *will* and *thrill* (Griffard 2010:10). Empowering learners requires encouraging them to think in abstract ways by reflecting on past experiences and forming rational decisions, a process that involves knowledge, analysing, judging, inductive and deductive reasoning and interacting with others to evaluate opinion. This constitutes a transition from stage 3 to stage 4 of Piaget's theory on stages of cognitive development.

Being able to function in stage 4 (formal operational) of Piaget's theory of cognitive development is not enough to allow novice researchers to engage in critical dialogue. Henning (2008:10) explains that her researchers found it hard to make meaning and sense of the main concepts in their individual work. They struggled to situate their work theoretically and could not verbalise their understanding. Henning (2008:10) then draws from Vygotsky (1978 1934) to explain that where Vygotsky's researchers identified the problem first and postulated from the problem, her researchers postulated first and then tried to identify the problem. Her researchers also did not read any original texts of Vygotsky or other leading commentaries on Vygotsky's work and could thus not differentiate between Piaget's constructivist view and Vygotsky's social constructivist view. Learners who do not read scholarly work and who do not apply critical thinking skills will thus find it hard to engage in debates on topics of importance. Their dialogue will remain at a general level and be drawn from the surface of theoretical texts. Without critical interaction in the classroom, where fellow learners struggle with similar challenges, learners will not master the skill of speaking out and speaking with confidence about problems they have identified. They will offer postulations without being able to state what the problem is. In other words, they will speculate, which in the workplace could result in losses if the problem is not identified first.

Teaching how to develop critical thinking skills implies that the educator is able to think critically him/herself. This is an important aspect if educators want to establish a healthy and trusting teacher-learner relationship. However, even researchers find it hard to think critically. Henning (2008) for instance found it hard to get her research team members to read critically and to theorise. Henning (2008:14) explains:

“Vygotsky thought otherwise (1986: chapter 6). In fact, his position was that for spontaneous concepts to evolve “bottom up”, they have to be met (more or less

halfway, or sooner or later) by concept sets that have been mediated by systematic instruction. He was, of course, referring to what he termed “scientific concepts” as abstractions and theorised knowledge across all learning areas and not just the conventional hard sciences. He was arguing for mediated learning opportunities that would assist both teacher and student in meeting each other in the act of mediation that happens via tools –semiotic and otherwise...Inherent in this view is the premise that the teacher who mediates must be a discerning knower of the concepts that s/he mediates...”

It is clear that the teaching of critical thinking starts with the educator. If educators do not have a proper understanding of the theories involved - or if they are not comfortable in teaching the skill - learners may find themselves in a position where they will not want to apply critical skills or revert to Huemer’s argument (2005 in Ritola 2012:661) that it should be left in the hands of the experts. Empowerment of educators is thus a precondition for the empowerment of learners.

As far as developing adult researchers is concerned, Schulze (2008:649) summarised the characteristics of successful researchers, of which educators need to take cognisance. These characteristics include:

- In-depth knowledge in a particular research area;
- Mastering of fundamental methodological skills;
- Advanced skills in the area of investigation;
- Socialised to the values and attitudes of research in the academic profession;
- Value autonomy and academic freedom;
- Intrinsically motivated by the challenge, creativity and problem-solving;
- Engaged in more than one research project at a time;
- Both internally and externally oriented;
- Closely involved with management and curriculum decisions;
- Engage in professional interaction with peers outside the organisation;
- Attend meetings at national level;
- Collaborate with colleagues, and
- Build strong research networks with thinking partners.

These characteristics emphasise the need for extended support for learners who engage in research projects in the workplace.

2.3.4.2 Extended educator support

Billett (1996:51) highlighted general workplace problems that are indicative of a need for extended educator support for learners in the workplace. The major concern is that, if learners are placed in a workplace where learning opportunities are not enough, they are not well supervised, or not afforded the time to construct new learning, they run the risk of constructing inappropriate knowledge and skills. Interaction with learners and workplace supervisors will ensure exposure of learners to suitable tasks where they can access authentic problem solving activities that will encourage the construction of new learning (Billett 1996:51). Learners need to work with mentors who will facilitate the critical dialogue needed for learning, but experts are often reluctant to share their expertise due to fear of substitution by the learner. The lack of access to expertise in the workplace has a negative impact on the learner, as he or she will develop skills that are in line with the norm of the rest of the workplace, however poor the practice may be. Even when well supported by educators or other employees, the learner determines who is considered the expert. Educators nevertheless have to ensure that learners do not fall victim to the inadequacies of workplace learning activities that do not secure the depth of understanding needed to master complex work activities (Billett 1996:52).

It is clear that learners who engage in workplace learning need support to develop critical thinking and problem-solving skills. In terms of learning to do research in the workplace, educators have to ensure adequate institutional infrastructure. Not only do researchers in the workplace need modern offices that are equipped with up-to-date information technology that has access to well-resourced libraries, they also need technical skills to assist with data analysis (Schulze 2008:656). A general lack of support for statistical analysis and interpretation of data are among the concerns of researchers as this lack leaves novice researchers feeling powerless. When researchers, who are employed in roles or jobs other than conducting research as their primary responsibility experience difficulty in accessing sources, editing and publishing, they fail to deliver quality research reports. The reason can be that they cannot afford it because they are not receiving from their employer additional funding other than the normal remuneration for the research (Schulze 2008:656). Educators therefore need to make sure that researchers in the workplace have a conducive learning

environment in which they can concentrate on their research projects. This argument finds support in the argument of Howard et al. (2015:134) that the development of critical thinking skills depends on having the opportunity to learn and the motivation for learning.

Motivation for learning in the workplace, especially for research projects, comes in the form of incentives for publications or grants if the researcher is working in an educational environment. However, without relevant academic and editing support, most researchers struggle to reach publication readiness. While policies in the educational settings regulate the research grants systems, other non-academic workplaces appear to be silent on such reward mechanisms, perhaps because the organisation already bears the cost incurred for the employee's development. Unfortunately, according to Schulze (2008:657), many researchers have expressed their concern about the poor standard of research training they receive despite the workplace's recognition of the importance of specialised training for researchers. This might not be strange when one considers the lack of uninterrupted time allowed for research by employers. Employers engage their employees (learners) in meetings and other operational activities, which rob them of the time they need to develop research skills (Schulze 2008:657).

2.4 PRIORITIES FOR EMPIRICAL INVESTIGATION

Several themes that warrant further empirical exploration in this study have emerged from the literature. These are:

- *The need for the introduction of unfamiliar content and to reduce learner fear.*

Appropriate introduction of learning modules that are closely associated with the learners' work reduces both learner fear and the high dropout and failure rates (Koen 2001:21 in Walters & Koetsier 2006:104; Fourie & ten Kroonden 1999; Mullins 1999).

- *Critical thinking skills and reflection are needed for ontological shifts.*

Learners have to make a paradigm shift from being passive 'receivers' of content to active partners in the learning process. Learners have to become critical thinkers if they are to make ontological shifts in the way they approach learning. They have to use reflective skills to reconstruct and shift their way of being and knowing (Sieler 2003). If not, their inability to

reflect and think critically, relationally and conceptually could leave them in a state of 'underpreparedness'. Adult learners can be taught to engage in problem-solving methods during learning. However, solving problems requires the utilisation of cognitive structures to manipulate the problem situation to achieve a solution (Anderson 1993 in Billett 1996:6). Learners who fail to draw from existing knowledge, cannot manipulate it or find it hard to look at problems differently, are thus not able to make different representations of a problem.

- *Active participation is needed for learning research*

A systematic approach to building learner competence must be followed by learner participation and application to make learning effective (Casey 2013:47). Workplaces require employees to be active participants in knowledge creation (Tynjälä 2008). The workplace therefore provides the context in which formal and informal learning occurs. Workplaces offer an abundance of learning opportunities from which individuals can learn, but not all adults make use of such learning opportunities because learning environments are personal and constrained by their history (Govender 2001:18). Tynjälä (2008:141) elaborates on this, arguing that the most important contextual factor related to workplace learning is the way in which work is organised. Where work is organised in narrow scope, there is little opportunity to learn and make autonomous decisions because the work is normally repetitive in nature.

- *Learning through research at work needs organisational support*

Organisations find it hard to balance the employee's time spent on production with that spent on development when considered in terms of monetary value. However, both activities are equally important for learning. When considering time spent on production, learning takes place whilst mastering existing standardised skills and the reduction of variation in performance between employees (learners). In terms of developmental learning, learning takes place by mastering new skills through encouragement of innovation and new thinking (Ellström 2010:106). Workplace learning supports the effective transition of students from educational settings into the workplace and it addresses the worker's lifelong needs of maintaining his or her skilfulness.

- *Educators need to be clear of their role in teaching research*

Hutchins (2013:22) explicates how she moved between roles during her teaching of aspiring researchers. At first, she had to provide technical feedback in terms of the quality and presentation of the class assignments and draft articles intended for publication. As learners

progressed and received more feedback and guidance from her, she noticed that her students became anxious about feedback. Hutchins then changed her role of coach and advisor to that of 'ghost writer' who started correcting some of the students' work for them. This change in role assisted her to regain their confidence. Heaney (1996:12) cites the works of Merizow (1989) and Brookfield (1987) to explicate that the actual task of adult educators is to facilitate learning that will lead to a change in perspective in learners. The aim of such transformation could be on both individual and collective levels that should challenge, and not reinforce, the dominant institutions and social practices.

- *Workplace learning needs comprehension.*

Educators need to take note of the growing importance of workplaces as sites of learning. The mastery of organisational processes, negotiating political aspects and dealing with the atypical areas of informal learning takes place in the workplace, not in the classroom (McCormack et al. 2010:43). Nduna (2012:234) follows through using the argument that adult learners should be adequately prepared for the workplace. Nduna (2012:233) argues that the transfer of academic knowledge is complicated by the fact that courses are usually organised in subjects while the workplace requires an interdisciplinary application of knowledge. There should thus be a logical relationship between learning outcomes of the programme and the outcomes expected in the workplace. For Billett et al. (2008:3), the purpose of workplace learning includes the enhancement of the kinds of learning experiences provided in educational settings.

- *Novice researchers can be empowered to develop research skills.*

Adult learners can be empowered to develop critical thinking skills by drawing the on intrinsic motivation components of will and thrill (Griffard (2010:10) and encouraging learners to think in abstract ways by reflecting on past experiences and forming rational decisions. This process involves knowledge, analysing, judging, inductive and deductive reasoning and interacting with others to evaluate opinion. Teaching how to develop critical thinking skills implies that the educator is able to think critically. This is an important aspect if educators want to establish a healthy and trusting teacher-learner relationship. However, even researchers find it hard to think critically. Henning (2008) for instance, found it hard to get her research team members to read critically and to theorise.

2.5 SUMMARY

This study has two main research questions. The first main question is: how did SAPS learn to teach research methodology to its senior managers?

The question has two sub-questions, namely:

- How has the SAPS Research Methodology *module content* evolved since its inception to become of a notable standard?
- How has the *delivery method* of the Research Methodology Module developed to its current form?

This chapter focused mainly on the first of these two questions. The literature in this chapter can form the basis for proposing a strategy for the development of researchers in the workplace if the data provides substantive evidence to support the strategy. The literature (Fourie & ten Kroonden 1999) describes the importance of introducing adult learners to unfamiliar content in an appropriate manner. This will not only provide clarity of what learners can expect to do in the module, but it will also help reduce learner fear resulting from their past learning experiences (Blanchard & Thacker 2007). However, the design of learning programmes for adults can also address learner fear (Torraco 1999:260). Properly designed learning interventions will indicate that the nature and principles of adult learning are understood and taken into consideration (Richey 1995; Schulze 2009:1000).

Since most novice researchers will not enter the learning intervention being able to apply critical thinking, they need assistance in making the ontological shifts to become critical thinkers. This means that they will have to be taught how to use reflection (Lee-Davies 2007; Schulze 2009) to help develop problem-solving skills (Billett 1996). Educators will have to expose their learners to situations in which they will be able to notice variation and sameness (Marton 2006; Marton & Trigwell 2000). Moreover, researchers will have to be in a position where they can participate in the learning experience even after they have successfully completed the classroom learning exercise (Casey 2013; Corryell 2013).

Vibrant collaboration between academia and workplace is needed in order to ensure the practical application of theory. Educators have to have a thorough understanding of the

workplace as a learning environment (Tynjälä 2008; Yamnill & McLean 2001). Educators also need to be informed of the various theories and perspectives of adult learning (Yamnill and McLean 2001) and the transference of learning into the workplace (CIPD, 2008). They also have to understand that they will deal with a new kind of adult learner who expects a quick return in their learning experience (Walters & Koetsier 2006; Ezeokoli 2014).

Subsequently, educators will have to understand the role of workplace learning in the development of research skills (Torraco 1999; Billett et al. 2008). Researchers in the workplace need to be empowered to conduct critical dialogues. They need to be taught to use their critical skills in the workplace (Henning 2008; Pinkney & Shaughnessy 2013) and they need support in the workplace to do that (Billett 1996; Schulze 2008). Educators therefore should liaise with workplace supervisors to expose learners to meaningful learning activities and to afford them the time to work on their research skills (Schulze 2008).

The theories in the literature discussed could serve as the framework for a strategy for teaching research. Also highlighted are certain themes that warrant further investigation. In the next chapter, the research will explore the workplace learning theories and perspectives that will serve as conceptual framework during the fieldwork of the study. Chapter 3 will provide literature related to the second research question: “what workplace learning has taken place during the teaching of research methodology in SAPS?”

CHAPTER 3: LITERATURE REVIEW - CONCEPTUAL FRAMEWORK

3.1 INTRODUCTION

One of the objectives of this study is to describe the workplace learning that is taking place during the teaching of research methodology in the South African Police Service (SAPS), especially in the settings where the classroom teaching and assessments are done. While the focus of the previous chapter was on teaching research methodology to adult learners dealing with aspects of both formal and informal learning, this chapter will explore the themes and perspectives related to workplace learning as relates to informal learning. However, it is paramount that the way in which knowledge is constructed be discussed first as it helps to understand how the adult learner, more particularly the adult researcher, constructs or gains knowledge. This chapter will therefore represent the conceptual framework within which workplace learning will be explored, but first a brief explanation of the questions that triggered a study on workplace learning in SAPS.

An earlier study by Schwartz and Human (2012) on the low completion rate of learners who attended the SAPS Executive Development Learning Programme (EDLP), revealed several organisational challenges which the SAPS had to address to improve the successful completion of research projects. Most of the concerns or challenges were addressed shortly after the study. However, the results of consecutive programmes only showed an improvement in the number of research reports submitted for assessment, but, in terms of the organisational challenges, they had no impact on the success rate of the learning programme. This sparked the idea of a thorough study that could shed light on reasons for the poor performance of the adult learners attending the EDLP. The study invoked a few serious questions such as: Do we understand the adult learner? How do adult learners learn? Is our approach to teaching adults suitable? Does the teaching of research require a completely different approach? Is experiential learning a good practice? Finally, what have we learned in the teaching experience and how have we gained that knowledge?

The second research question of this study is: what workplace learning has taken place during the teaching of research methodology in SAPS? It is sub-divided into four separate questions. These are:

- What were the experiences of those involved in the shaping of the Research Methodology Module of the SAPS?
- What lessons have been learnt in the process of teaching research methodology to senior police officers?
- What were the experiences of SAPS lecturers in supervising learners in their research?
- What has been learned by the senior police officers who attended the research methodology module of the EDLP during their research projects?

The experiential part of the EDLP relates more to learning in the workplace than to teaching in a classroom setting, but since SAPS learners attend a structured learning phase at the SAPS Academy in Paarl, the classroom teaching phase will be regarded as learning in the workplace.

The following sections will thus focus briefly on the adult learner as a reminder of the complexity of the adult learner as outlined in Chapter 2, followed by a discussion on learning theories. I therefore approach this chapter in two sections, namely Section 1: The adult learner and learning, and Section 2: Workplace Learning Theory.

In Section 1, I provide an overview of the adult learner and some of the traditional and prominent contemporary learning theories such as experiential learning, self-directed learning and workplace learning. In the ensuing second section, I explore the themes and perspectives of theory to conceptualise workplace learning.

SECTION 1: THE ADULT LEARNER AND LEARNING

3.2 THE ADULT LEARNER

It is safe to say that in terms of interpersonal, intrapersonal and environmental characteristics, the adult learner is different to school leaving youth attending tertiary institutions on a full-

time basis (Kiely, Sandman & Truluck 2004 in Laher 2007: 383). Adults also bring with them different and more varied experiences than youth do (Knowles, Swanson & Holton 2005). Silberman and Auerbach (1998) explicate that there are differences between adults and youth as far as their background, learning styles, motivation for learning, interests, needs, and ultimately their goals are concerned. Merriam (2001:5) uses Knowles' andragogy to describe the adult learner as someone who –

- Has an independent self-concept and who can direct his or her own learning;
- Has accumulated a rich source of learning in a reservoir of life experiences;
- Experiences learning needs closely associated with his/her social roles;
- Is interested in the immediate application of knowledge and being problem-centred; and
- Is motivated to learn by internal rather than external factors.

Merriam and Caffarella (1991:85) explicate the intrinsic motivation of adult learners and posit that these learners use learning opportunities to build social relationships in which new associates and friendships are formed. There might also be external expectations, such as having to comply with the authoritarian prescripts of an employer for instance, that adult learners wish to satisfy. Adult learners may also experience a need to fulfil a social welfare role and will therefore develop new skills to serve people in their communities. However, they may also experience a need for personal advancement and higher status or they may simply get involved in learning activities to counter their boredom. Moreover, adults may have cognitive interests that manifest in a wish to satisfy their enquiring minds.

Walters & Koetsier (2006:99) cite Bourgeois, Duke, Guyot and Merrill (1999:3) who define 'mature adults' as having had 'a significant break, with other life-and work-experience, prior to entering higher education'. It is this break and period of gaining adulthood experience that explain adults' motivation for learning.

However, in terms of this study, the most important aspect is found in the argument of Walters and Koetsier (2006:99) that adults are less exclusively students than younger students due to their life roles at home and work and should be taught differently than children (Sipe 2001:88). Teaching adult learners therefore requires different approaches (Merriam & Caffarella 1991:306) and trainers should be careful not to rely on standardised approaches or single learning theories to facilitate learning. Indeed, as indicated in Chapter 2, educators

are now being confronted by a new kind of adult learner, an impatient one that only commits to learning opportunities when the return on their efforts are clear and quickly attainable.

3.3 LEARNING THEORIES

While there are various theories that attempt to explain how learning takes place, there is little consensus about the number of theories about learning and how they should be categorised or grouped. It appears from the literature that theories are broadly clustered into how they provide insights into the adult learning process. I therefore briefly discuss the main learning theories, as a conscious reminder of the various perspectives of learning processes and their influence on the debate on learning in the workplace.

Green (2002:11) explicates that these different approaches or perspectives are categorised into the behaviouristic approach (Watson, Hull, Skinner), cognitive theories (Lewin, Piaget), humanism (Knowles), social learning (Bandura) and constructivism (Vygotsky, Piaget, Dewey). Jenkins (2011:76) referred to earlier stances towards adult education by citing the five philosophical traditions as described by Elias and Merriam (1995) that underpin adult education, referring to liberal, progressive, behaviouristic, humanistic and radical traditions. Merriam and Caffarella (1999:387-404) agree that there is no single adult learning theory and argue that those in existence can be classified into three broad categories, being those based on adult characteristics, on adults' life situations, and those based on changes in adults' consciousness. For Marshall and Case (2010:15), learning theories can be separated into broadly two strands comprising the individual perspective, which built on the works of Piaget, and socio-cultural perspectives that build onto the work of Vygotsky. It has also been argued that learning theories such as behavioural, cognitive, constructivist and social learning theories fall within the territory of psychological theories (Wenger 1998a), but a definite move from psychological theories of learning to focus on activity, socialisation or the organisation, has surfaced.

Other scholars like Hager (2004 in Tynjälä 2008:131) argue that the main theories about learning, with its foundations in school contexts, cannot be transferred to workplace learning (Tynjälä 2008:131). Hager (2004 in Tynjälä 2008:131) advocated for the development of workplace learning research from its own starting points. Hager (2004) differentiates between a standard paradigm and an emerging paradigm of learning. The standard paradigm is based

on three assumptions, namely a focus on the mind (cognitive processes of forming and improving mental structures), interiority (separating the mental life from the outside world and the focus on learning by thinking rather than learning through action) and transparency (measurable outcomes and inferiority of non-transparent learning). The emerging paradigm is described as action in the world (Tynjälä 2008:131). The change in learning is therefore not only in the individual's mind, but also in the individual's environment. Learning has thus become more contextual because of the individual's creation of new sets of relations in the environment and the workplace. (Tynjälä 2008:131). Learning in workplaces occurs on an individual level as well as in groups, communities, organisations, inter-organisational networks and regions. Due to this plurality and multi-levelness of learning in the workplace, research on workplace learning has expanded from pedagogical and psychological studies into other fields such as adult, vocational, educational and labour studies (Tynjälä 2008:132). However, a basic overview of these 'standard' paradigms will be offered, dealing specifically with the nature of individual learning and starting with relationship between psychology and learning perspectives.

Winn and Snyder (1996) remind us that from a psychological approach, learning takes place through representations of symbols. They add that such knowledge acquisition is entirely centred on the person and not the environment. Cognitive learning theories thus focus on internal cognitive structures and view learning as transformations of such cognitive structures (Wenger 1998a).

However, learning also takes place through processes in which learners build their own mental structures when interacting with an environment. This interaction may alter the individuals' behaviour, hence the theory of behaviourism.

3.3.1 Behaviourism

Behaviourism as learning theory rests on three pillars (Green 2002:11). Firstly, it proposes that learning has taken place when there is an observable change in behaviour. The theory is therefore not focused on the internal thought process of adult learners, but rather on the manifestation of learning in the form of a different behaviour. Secondly, the elements present in the environment of the individual, and not the elements internal to the individual, determine what the adult learner internalises. Finally, the theory rests on the assumption that learning

becomes more likely when events happen shortly after one another and is more likely to happen when the event repeats itself. (Green 2002:11). Merriam and Caffarella (1999:264) explicate that the focus of this orientation to learning is to influence the behaviour of the learner in a desired direction. The facilitator will, in this approach, set up or arrange the environment to elicit the desired response. Specific objectives for behavioural changes, attainment of competencies and skills will be set by the trainer.

3.3.2 Constructivist Perspective

Constructivism has its roots in both philosophy and psychology. The essential epistemological tenets of constructivism as argued by von Glaserfeld (1984, 1990 in Doolittle 1999) are –

- Knowledge as the result of active cognition by the individual,
- Cognition as an adaptive process that makes an individual's actions more viable in a particular environment,
- Cognition that organises and makes sense of one's experience (which does not have to correspond to reality), and
- Knowing that originates from biological constructions, and interactions on social, cultural and language level.

The learner's active role in the creation of his/her own knowledge and the importance of experience gained on an individual and social level, is acknowledged by constructivists. This does not mean that such knowledge should be an accurate account of reality (Doolittle 1999). The four tenets mentioned above are emphasised to different degrees and as such are labelled differently as Cognitive Constructivism, Social Constructivism and Radical Constructivism. Schwartz and Human (2012) explored these versions of constructivism in their study into low submission rates of research learners. They draw from Doolittle (1999) to summarise these below.

3.3.2.1 Cognitive Constructivism

Cognitive Constructivism is associated with information processing and its reliance on the component processes of cognition. It maintains that knowledge is external to the individual, situated in a reality that is independent from the individual. Knowledge is therefore only

knowable to the individual (Doolittle 1999 in Schwartz & Human 2012). Learning will thus be constructed by the individual being actively involved (cognising) and adapting him/herself appropriately for the acquisition of new knowledge. In this case, knowledge is based on the accurate internalisation and construction (or even reconstruction) of external reality. Differently put, knowledge is based on cognition processes and structures that accurately correspond to those of the real world (Doolittle 1999 in Schwartz & Human 2012).

Learning can be described as the internalisation and construction of external reality, by building internal models or representations of the structures in the external real world. The cognitive perspective on learning focuses on the processes of learning, the way in which what is learned is symbolised in the mind and how these representations are organised in the mind (Doolittle 1999 in Schwartz & Human 2012).

3.3.2.2 Social Constructivism

Social Constructivism advocates the social nature of knowledge. It lies somewhere between the transmission of knowledge and the construction of personal and coherent reality as seen by radical constructivists (Doolittle 1999 in Schwartz & Human 2012). In this case, the individual constructs knowledge not only through interaction within societies on a social level, but also through language usage. This knowledge is thus based on shared experience due to the social interaction with other individuals and is more specific to a particular socio-cultural context where place and time influence meaning. Social Constructivists argue that such meaning plays a more important role than structures. The truth is also to be found between individuals as a collective due to their shared experiences gained through interaction in socio-cultural activities (Doolittle 1999). All four epistemological tenets of von Glaserfeld mentioned above are emphasized by Social Constructivism (Schwartz & Human 2012).

Social constructivist and socio-cultural perspectives are similar in that the individual constructs learning in a system within which other individuals also function and that learning is fostered through interaction with others. Social constructivism and radical constructivism perspectives share the view that learning is external to the individual, centred on meaning whereas cognitive constructivists argue that learning is internal to the individual, and centred on structures.

3.3.2.3 *Radical Constructivism*

Radical Constructivism is the constructivist theory furthest removed from Cognitive Constructivism. Radical Constructivism regards knowledge construction as internal to the individual and argues that the real world is in fact unknowable to the individual. The individual may experience the real world through senses, but such experiences are so far removed from reality that the knowledge that is constructed in this way cannot be regarded as an accurate account of the reality. The knowledge cannot, as such, be regarded as an objective truth, because the internal knowledge does not match the external reality. However, this knowledge of the knower is influenced by the level of experience of the knower and is intended to improve the experience of the knower and not to please him/her or fit in with the external world (Doolittle 1999 in Schwartz & Human 2012). Radical Constructivists argue that knowledge is an adaptive process resulting from active cognising and the experience of the knower who consequently constructs his/her own meaning (Doolittle 1999 in Schwartz & Human 2012).

Radical constructivists argue that the individual learns through his/her own experience. This is a similar deduction to other perspectives such as social constructivist, variation perspective and socio-cultural perspective. Radical constructivists hold that the individual learns through his/her own interpretation and experience and that learning takes place internal to the individual. It does not necessarily mean that what is learned is the same as that regarded by the real world as the truth or knowledge. This is different to all other perspectives, hence the term radical (Schwartz & Human 2012).

Merriam and Caffarella (1999:264) posit that this theory, influenced by Dewey, Montessori, Piaget, Bruner and Vygotsky, is based on the active construction of knowledge by learners themselves as they learn through interaction with their learning environment. Active participation in the learning intervention is essential and facilitators should develop learning situations that encourage participation and solicit reflections that would help learners' construction of knowledge, skills and attitudes.

3.3.3 Variation/ Phenomenographic Perspective

Repetition does not necessarily lead to learning. Learning takes place when individuals are able to judge or discern, but in order to do that they need to be exposed to a variety of similar situations. It is the argument of Marton and Trigwell (2000 in Schwartz & Human 2012) that there is no learning without discernment and no discernment without variation. Individuals act on how situations appear to them. They experience the situation by simultaneously discovering critical features and attending to them. A different experience will be encountered because the individual is simultaneously discovering and attending to different critical features. However, according to Marton and Trigwell (2000), individuals have limited capability to fully grasp and be aware of a situation. It is this limited ability of an individual that brings about the different meanings given to similar situations. Such different experiences enable the individual to discern. Differently put, the discernment or experience is the discernment of variation or the experience of difference (Marton & Trigwell 2000 in Schwartz & Human 2012)

3.3.4 Socio-Cultural Perspective

Everyone belongs to a community and as such does what is commonly done in that community. Members of a community are informally bound by what they do together. However, from a socio-cultural perspective, much learning takes place in a community of practice, a place of shared practice (Wenger 1998b in Schwartz & Human 2012). Three dimensions form the makeup of a community of practice. These are:

- The purpose, what it is about, and what it stands for as perceived and continually negotiated by its members;
- The establishment of relationships that rely on mutual engagement that bind the members together in the way that they function in the social entity; and
- The capability that it has produced over time, such as routines and vocabulary.

Such communities of practice develop around things that matter to people. In other words, the community's practice indicates what the community members regard as important (Wenger 1998b in Schwartz & Human 2012). Complex social networks are developed in communities of practice through active participation and contribution during which information is complemented. This leads to the construction of a common understanding of the

environment and work. Members of communities of practice learn how to do their jobs and to perform through their active participation in the community rather than depending on company rules and frameworks (Wenger 1998b in Schwartz & Human 2012).

Experience and interaction with others therefore plays a role in learning in a Socio-Cultural perspective. Merriam and Caffarella (1999:264) maintain that social learning orientations are based on the notion that learning takes place through the interaction and observation of others in a social context. Building on the works of Bandura and Rotter, the authors argue that these orientations are appropriate when learning is facilitated through the modelling of new roles and behaviour. Signs that learning has taken place are found in the socialisation of adults in new social settings, when they take on new social roles and get involved in mentoring activities.

3.4 LEARNING THEORIES APPLICABLE TO ADULT LEARNING

Dison (2007:65) expressed her experience of analysing learning theories. She explicated that learning theories seem to entail various approaches, are interpreted differently and developed in unique ways. Dison (2007:65) explained that she viewed the various learning theories as a continuum and subsequently focussed on social constructivist and socially situated or socio-cultural approaches to learning and knowledge. However, Dison (2007:78) also reverted to other learning theories on the construction of knowledge such as experiential learning to investigate the research capacity development of lecturers in university research centres. It appears that other researchers, like me, find it hard to rely on a single theory when they study the concept of learning. Such varied approaches to learning theories have resulted in a plethora of new theories about learning and development.

Laher (2007: 384), for instance, found three learning theories applicable to adult learning when teaching psychology to undergraduate students. These were theories of andragogy, transformative learning and situated cognition. However, Conlan et al. (2003) advocated four learning theories related to adult learning. They argued for action learning, experiential learning, self-directed learning and project-based learning.

3.4.1 Andragogy

Andragogy, which has a humanistic orientation (Merriam & Caffarella 1999:264), was introduced in the early 1970s to describe the differences between children and adult learners (Knowles et al. 2005). The theory focuses on the special needs of adult learners and is based on six assumptions about the characteristics of the adult learner. These are that adult learners need to know why they have to learn something before they actually start the undertaking. It is also not a given that adult learners automatically realise the need for learning as they frequently need to be made aware of the value of the learning in order for them to understand why they need to know. Knowles (1980) and Knowles et al. (2005) posit that the adult learner's self-concept is based on their belief that they are responsible for their own lives. Laher (2007: 384) adds that adult learners are more responsible and independent than young learners. However, Brookfield (1986) argues that instilling this self-directedness would require an environment in which the self-directed learning skills can be developed by treating adult learners as capable and self-directed. A positive learning environment is thus needed.

Another assumption centres on the learner's experience and the role it plays in learning (Knowles et al. 2005). Merriam and Caffarella (1999) support this argument saying that adults do enter into educational activities with very different experiences from younger learners. Brookfield (1986) explained that the experience of adult learners needs to be considered during teaching, as the background of the adult, the motivations for learning and the learning styles play a role in the way that adults learn. Different learning strategies and more individualised ways of teaching would be more appropriate for promoting learning in adults. Since adults themselves are the richest sources for learning, drawing from their experience makes sense (Laher 2007:384). Experiential learning techniques such as problem-solving activities will tap into the experience residing in adult learners, which makes learners' own experiences beneficial to constructing new knowledge (Knowles et al. 2005; McKeachie 2002).

A further assumption of Knowles (1980) is that adult learners derive their need for learning from the real life challenges they face, as such events force them to learn how to cope effectively with such situations. Laher (2007) explains that adult learners' readiness to learn is driven by their own developmental needs and real life responsibilities. They want to learn about things that they can apply in their current situations. Offering learning opportunities to

develop skills that adults may need in future is therefore less effective than providing currently useful skills. Similarly, being life-centred, adults are more prone to problem solving and problem-centred learning approaches (Knowles et al. 2005). They want to learn about things that will help them solve their lived challenges, confront everyday situations or help them to complete tasks in real life (Merriam & Caffarella 1999). Finally, their aspiration to learn is more intrinsically motivated by factors such as the desire to perform better at work and to experience more job satisfaction (Knowles 1980; Knowles et al. 2005; Laher 2007: 284). This does not mean that adult learners do not experience extrinsically motivated needs for learning. Extrinsic needs are present, but the intrinsic motivators seem to play a bigger role in adult learning (Knowles et al. 2005).

While Brookfield (1988:31) offers a summary of eight principles that were posited by Darkenwald and Merriam 1982), the same principles were criticised by Merriam and Caffarella (1991:302) as a tool to characterise the adult learner. Merriam and Caffarella (1991:302) therefore question the usefulness of these principles guiding adult learning or practice. Learners are diverse in nature and a single set of principles cannot be relevant to them all as the context in which they learn differs. However, the principles are still very relevant to the adult learners who attend the SAPS Executive Development Programme. These principles, as Brookfield (1988:31) posits, are that adult learners learn throughout their lives, they exhibit diverse learning styles, learn through problem solving activities, want the learning activity to solve immediate challenges, base learning on past experiences, are self-directing in learning activities and finally, their learning is reliant on a strong self-concept.

Merriam and Caffarella (1999:264) maintain that, based on the groundwork done by Maslow, Rogers and Knowles, adult learners want to fulfil their potential by satisfying their affective and cognitive needs. They become self-actualised and autonomous. Facilitators should therefore help the person develop as a whole. Self-directed learning, to this end, serves as an example of the manifestation of adult learning in the humanism orientation.

3.4.2 Transformative Learning Theory

Transformative learning sets out to change the perception and behaviour of the adult learner within the learner's own frame of reference (Mezirow 1997: 5). In other words, the theory proposes a shift in the way of thinking as outcome; a shift that requires an alternative

approach to teaching. Adult learners need to know that they can learn by critically engaging in the sense-making of their experiences through reflecting on it and formulating original ideas. The transformative learning theory therefore involves a change in the way that adults learn.

Baumgartner (2001:15) confirms that the importance of transformative learning lies in the fact that it helps adults to learn 'how' they know and not 'what' they know. These new experiences are characterised by interpretations and reinterpretations of the individual's discoveries (Mezirow 1991:170). Mezirow (2000:11) uses the term 'perspective transformation', which relies on the individual's rational thought and reflection to re-evaluate his or her changing circumstances to describe transformative learning. Transformative learning takes place when the learner changes or transforms his or her beliefs, values, habits and rules for interpretation of experiences and changes. The transformation process involves self-reflection and validation practices with peers. These are important practices as they precede real transformation and the implementation of new knowledge. Moreover, the interaction with peers stimulates knowledge sharing and continual development.

This theory places the responsibility to learn on the shoulders of both teacher and learner as they need to interrogate their own frame of reference individually in the learning process (Mezirow 1997). A definite move away from the authoritarian teacher is required.

3.4.3 Situated Cognition Theory

Situated cognition theory, also referred to as Practice Theory (Wenger 1998), accommodates the notion that learning takes place in a community setting where the individual is confronted with various activities and resources (Lee & Ross 2003:16). The theory is rooted in social and anthropological approaches to (Lave 1988) and socio-cultural perspectives of education (Lave & Wenger 1991) and proposes the individual as a relational being who derives his/her identity from participation in activities in a social context. Learning takes place through the changes in participation in activities within such social context, but it is only when the interactive dimensions of the context of situations and related problems are understood that learning is shaped (Caffarella & Merriam 1999). Adults therefore do not wait for situations and occurrences to learn from their lived experiences, they learn while being in that situation and acting upon it, while they are experiencing it.

Similar to Lave (1988:6), Bourdieu (1990), and Caffarella and Merriam (1999), Lee and Ross (2003:16) argue that learning is not just limited to ideas, concepts and skills, but that learning is internalised through practice and participation in the context of cultural activity. Participation in communities of practice has an effect on the way individuals behave and thus also affect the internalisation processes of individuals. However, individuals don't function in a confined space where no other organisational or social structures exist. Rather, they live and work in settings where the social context forms part of a large network or institution. It is in this context in which individuals are confronted with changes in the environment that learning takes place. Institutions therefore have a very real influence on what people learn as people learn from what they do, and what they do is mostly influenced by the social structures they work in.

The situated cognition theory does not devalue the andragogy or transformative learning theories (Caffarella & Merriam 1999). It acknowledges its importance for adult learning, but it posits that the context within which adults function should be taken into consideration (Kiely, Sandmann & Truluck 2004 in Laher 2007: 384).

Merriam and Caffarella (1999:264) reiterate the importance of the fact that learning takes place through internal mental processes in which the individual develop the capacity and skills to learn better. They posit that facilitators will therefore have to structure the content of learning activities to stimulate cognitive development by drawing on previous learning and memory.

3.4.4 Action Learning

Action learning provides the conditions for learning by facilitating the solving of real problems by giving projects to adults to work through in small groups. Participants work together to solve the problem through active involvement. The acts of solving problems provide the opportunity for learners to learn how to learn from their actions. The learning process is normally facilitated by a trainer or coach who assists learners create a balance between their work and learning from that work (O'Neil & Lamm 2000:44). However, the following aspects form the basis of action learning:

- Smaller action groups are generally more effective in their contribution to learning;

- Groups with diversified levels of expert knowledge and real life experiences are best equipped to contribute to the learning community;
- Group action is facilitated by a mentor, coach or facilitator;
- Each group must have its own leader who will organise the learning process with the mentor, facilitator or coach; and
- Learning takes place through experience and reflecting on the actions of the group and individuals in the group (O'Neil & Lamm 2000).

Wade and Hammick (1999) argue that, in addition to these critical aspects, the groups need to work together for an extended period in order for group members to settle in and establish themselves within the group. An aspect to keep in mind is that group dynamics could pose a challenge to the learning experience and facilitators need to intervene when the focus leans more towards completing the task than the learning experience.

Marton (2006) also argued that learning is a function of perceived differences and similarities in learning situations and that transfer is a function of perceived differences in two or more situations and between those situations.

The phenomenographic perspective emphasises that the structure and meaning of a phenomenon as experienced by an individual, can be found in both pre-reflective experience and conceptual thought. The focus is on the individual's way of experiencing different phenomena such as ways of seeing them, knowing them and activating skills related to them. The aim is to find both the variation and the architecture of this variation in terms of the different aspects that define the phenomena. The simultaneous awareness of all critical aspects is temporary and transitional (Marton 1996).

Variation theories share the principle of learning taking place through experiences given in different contexts, such as by various examples and exercises in class or exposure to different situations. Perspectives such as Social Constructivist and Socio-Cultural theories also argue the varied interaction of others as stimuli for learning. Knowledge is thus not knowable but constructed. Both the experiences of the individual and others are at work in the learning process of the individual. Cognitive constructivism argues the construction of learning by the individual when real world knowledge is knowable but external to the individual.

3.4.5 Experiential Learning

Experiential learning theory puts the learner in the centre. According to this theory, individuals learn best through experience. It posits the learner as a doer and not just a thinker or talker. The learner gets directly and actively involved with the material being studied (Conlan et al. 2003). The learner therefore has to set goals, think about and plan the task, experiment, make decisions and take appropriate action before observing the end product, then reflect on the process and product and review the entire experience. Learning takes place as a result of the learners' reflection on their own experience rather than by being lectured (Conlan et al. 2003). Experiential learning is the result of generating one's own understanding of what happened by drawing from reflective reasoning and uncovering the real meaning of the event, happening or action that he/she was involved in. It builds on the experience of learners' real lives. It allows for transfer of knowledge and skills, especially when the need for learning is internally situated. Experiential learning draws on the cognitive, emotional and physical aspects of the adult learner, making it a very effective and holistic adult learning approach.

3.4.6 Self-Directed Learning

Self-directed learning also places the individual at the centre of the learning process. Adults learn when they determine their own learning needs and act upon those needs to acquire the required knowledge and skills. Self-directed learning typically occurs incidentally and informally when adults can draw on their life experiences to learn lessons from it (Marsick et al. 2001:25). Motivation for learning plays a big role in self-directed learning and adults therefore tend to set their own learning goals and determine the process by which they will learn. In the adult learning context, facilitators will have to enable this self-directedness by providing the resources for it. The theory finds its strength in the fact that learners utilise inductive processes of reflection and action to learn in their daily routines (Conlan et al. 2003:9) but although self-directed learning is unstructured and independent, it is more effective when combined with other learning methods to fully grasp the learning content.

3.4.7 Project Based Learning

Project based learning can be associated with constructivism as learners engage in groups to solve authentic problems that often stretch across disciplines. The theory works well in that

the adult is confronted with a real problem for which a solution is sought. Learners in the group collaborate to determine an approach and activities to address the problem. Together they will draw information from various sources, synthesise it, analyse it and derive knowledge from it. Group members will demonstrate their new knowledge in the workplace and will be able to explain their actions and new learning. (Conlan et al. 2003: 8).

3.4.8 Workplace learning

Workplace learning, as social construct, is broadly perceived. Brown and Lauder (2006) and Doornbos et al. (2004) place emphasis on the demand for better skills levels in the workplace supports Mathews' (1999) observation that there is a renewed focus on workplace learning. To this end, Vaughan (2008:3) asserts that the world of work is becoming more complex and uncertain, which makes it hard to determine future skills needs. Workplace learning has subsequently emerged as the tool through which organisations can gain competitive advantage.

Jacobs and Park (2009) confirm that workplace learning has received much attention in recent years, but the focus is mainly on two major components namely formal and informal learning. Billett (2002a) approached workplace learning by differentiating between formal and informal learning, while Vaughan (2008:5) argued that workplace learning can be approached from two different directions. Firstly, one can study the articulation between education and work in order to acknowledge all forms of learning – an approach that tends to be individualistic and draws on cognitive theories of learning. Secondly, there can be a focus on the workplace as learning environment where learning is a process that is embedded in production and organisational structures and draws from situated learning theories and communities of practice. In this study, I attempt to combine the two directions suggested by Vaughn (2008). However, I am cautioned by Billett and Choy (2013) that there are more emerging perspectives to take cognisance of. Authors, like Hager (2004 in Tynjälä 2008:131), argue that the current understanding of learning in the workplace is based on the fields of cognitive science and learning and development, whereas learning in the work environment is multimodal and complex when the social-cultural nature and boundaries which influence learning are considered (Billett & Choy 2013:264). Jacobs and Park (2009:134) explain for instance that workplace learning has three interacting variables that centre on the location of the learning, the extent of planning that went into developing and delivering the learning

experience and the role of the trainer in the learning process. They define workplace learning as

“...the process used by individuals when engaged in training programs, education and development courses, or some type of experiential learning activity for the purpose of acquiring the competence necessary to meet current and future work requirements.” (Jacobs & Park 2009:134).

Authors like Barnett (1999) and Sambrook (2005) have described workplace learning in terms of two human processes of working and learning, but the majority of researchers focus on the learning aspect (Billett 2002a, Billett 2002b; Warhurst 2006; Blåka & Filstad 2007; Jawitz 2009).

These learning theories do not represent all theories available to the educator, but they do highlight the dynamics of adult learning. Vaughn (2008:2) for instance, in her literature review of workplace learning, only focuses on andragogy, some management theories, learning theories, such as the experiential learning theory of Dewey, and human resource management theories. She points out that her review does not attempt to be an exhaustive review of all the literature on workplace learning as such literature has been derived from a number of different bodies of literature, which in themselves are extensive, complex and specialised. Positioning these theories in relation to workplace learning is quite daunting. However, I will attempt to present perspectives to workplace learning in the following sections.

SECTION 2: WORKPLACE LEARNING THEORY

3.5 GROWING IMPORTANCE OF WORKPLACE LEARNING

Hager (2011:27) explains that theories about workplace learning emerged relatively recently. Following psychological and socio-cultural perspectives of learning come postmodern theories about workplace learning. The authors draw from Fenwick (2009) to argue that in

the earlier perspectives, learning was focused on the individual and on the socio-cultural context in which the learner was located, while workplace learning theory ascribes a large part of learning to 'socio-material'. Theories closer to workplace learning will include ones that are influenced by complexity theories and actor network theory (Hager 2011:28). However, in stating the postmodern perspective on workplace learning, Hager (2011:28) draws from Edwards (2007:2) who asserts that learning is a socio-culturally embedded set of practices in which learning is neither invariant nor unchanging.

As with most theories about learning, workplace learning cannot be pinned to one single definition. Scholars continued to add and refine their definitions as the concept of learning at work developed. In the end, it seems that workplace learning will have different interpretations depending on the angle of study.

Armson and Whiteley (2010:410) provide an overview of how the theory of workplace learning has gained momentum. While the concept of workplace learning had been introduced by Knowles in 1950 (Cofer 2000) the literature is silent about development until the late 1980s when de Geus (1988 in Armson & Whiteley 2010:410) developed the scenario planning method of organisational learning that is known for its 'what-if' thinking simulations for senior managers. Thereafter, as cited by Armson and Whiteley (2010:410), several studies surfaced. For example, information technology introduced computer-assisted learning methods (Eden 1993), group methods (Lewis 1995), and interactive problem solving (Klass & Whiteley 2003).

In terms of vocational education, Marsick and Watkins (1990) and Marsick and Volpe (1999) took the lead by focusing on the nature of learning activities in organisations. Marsick (2009) continued to explore informal learning and identify a unifying framework within which it could be discussed. This work was followed in the years 2001 to 2004 by that of Billett who focused on co-participatory learning before positing a pedagogy for workplace learning that focused on affordances in the workplace (Armson & Whiteley 2010:411).

Since then, various scholars have studied the developing theory of workplace learning. Hodkinson et al. (2004) studied the complexities of workplace learning; Clarke (2005) studied the workplace environment and its relationship with learning outcomes; Sambrook (2005) studied the context and process of work-related learning; Elkjaer and Wahlgren (2006) have

since picked up the exploration of workplace learning; Warhurst (2006) studied participatory learning among peers in the workplace; Blåka and Filstad (2007) studied the construction of identities of newcomers in the workplace; Stokes and Wyn (2007) focussed on young peoples' perspectives on work and learning; and Jawitz (2009) explored learning in the academic workplace. The themes advanced in the authors' work are discussed later in this chapter.

3.6 LOCATING THE STUDY WITHIN THEORETICAL PERSPECTIVES

Having briefly discussed some of the learning theories earlier in this chapter, I realise that any one theory (or more) can be relevant to either formal or informal learning. However, as far as workplace learning is concerned, I am guided by the examples set by scholars such as Warhurst (2006), Torraco (1999) and McCormack et al. (2010) who approached workplace learning from a situated learning approach. Billett (1996), Blåka and Filstad (2007), and Zhao and Kemp (2012) framed their studies within the socio-cultural approach of communities of practice. Henning (2008) relied on Vygotsky's cultural historical and activity theory (CHAT) to study developing researchers in the workplace. Yet, authors, such as Solomon et al. (2001) simply focused on the informal learning aspect of workplace learning, while others such as Billett (1996) focussed on developing models of workplace learning by studying the activities in workplaces that enable learning. Dison (2007) focussed on social constructivist and socially situated or socio-cultural approaches to learning and knowledge. To this end, it appears that both constructivism where the individual is an agent of his own learning, and social constructivism where learning is a process and product of social interaction, are the predominant theories for studying workplace learning (Vaughn 2008; Armson & Whiteley 2010).

As far as constructivism is concerned, the three types of constructivism maintain different views of reality. Cognitive constructivists support the idea of an accurate mental construction of reality. Radical constructivists emphasise the construction of reality through coherent experiences, and social constructivists argue for the construction of an agreed-upon and socially constructed reality (Doolittle 1999). Regardless of the stance towards the construction of reality, all three types of constructivism contain eight shared factors that are essential in constructivist pedagogy. Doolittle (1999) explicates these factors.

Learning should take place in authentic and real world environments where individuals can learn through experience. Cognitive constructivists support the idea that the individual can construct accurate representations of the 'real' world and not an artificial or false world through experience. Social constructivists regard experience as important because it enables the construction of mental structures that are practical in meaningful situations (Doolittle 1999).

Learning should involve social negotiation and mediation. Doolittle (1999) argues that individuals learn through social interaction, either by using it as a basis for knowledge construction, or by assigning some or other social interaction role to it. Socially relevant skills and knowledge that are needed for adaptation to new environments, or changes in the environment, are constructed through social interaction.

Content and skills should be made relevant to the learner. All three types of constructivism argue that knowledge serves an adaptive function, which, if it is relevant to the individual's current situation, understanding and goal, enhances the individual's functioning. When individuals gain experience in performing relevant tasks, they also formulate mental processes, gain social information and personal experiences that are used to enhance their functioning in practical environments (Doolittle 1999).

Content and skills should be understood within the framework of the learner's knowledge. Regardless of the type, constructivists agree that all learning starts with an individual's prior knowledge (Doolittle 1999). An educator needs to understand the mental structures (the student's understanding) of the student if the student's behaviour is to be understood. Appropriate and meaningful experiences for learning can be created if the learner's way of understanding is clear.

Formative assessments should inform future learning experiences. All three forms of constructivism hold that the acquisition of knowledge and understanding is a continuous process. However, since knowledge and understanding can only be inferred from action, its current levels should be determined through continual assessments. This is done to identify any further learning experiences accurately (Doolittle 1999).

Individuals should become self-regulatory, self-mediated and self-aware. Constructivists argue that individuals are actively constructing knowledge and meaning through mental manipulation and self-organisation of experience, which requires that individuals regulate their own cognitive functioning, mediate new meanings from their existing knowledge and establish an awareness of current knowledge structures. Cognitive constructivism emphasises self-regulation while social and radical constructivism emphasise self-mediation (Doolittle 1999).

Teachers only serve as guides and facilitators, but not instructors of learning. Contrary to the argument that learners can learn from their teacher instruction, cognitive constructivism holds that teachers merely create the experiences for learners to learn (Doolittle 1999). In social and radical constructivism, the teacher guides the learners to an awareness of their experiences and socially agreed-upon meanings, because there is no factual knowledge to transmit.

Teachers should provide for and encourage multiple perspectives and representations of content. Experiencing multiple perspectives of a particular event provides the individual with the necessary raw materials to develop the multiple representations that are needed for cognitive knowledge construction. In this way, the individual can assess various options or representations from which he/she may retrieve knowledge. Social constructivists, in contrast, formulate perceptual understandings that are more or less viable without having access to a privileged truth (Doolittle 1999).

In agreement with Doolittle (1999), Harris (2000:20) explains that in order for learning to take place there has to be ‘... a connection between new learning and mental structures” because individuals actively construct their own meanings and understandings of their worlds through reflection on their experience. This provides a new dimension to Doolittle’s (1999) proposed eight factors prevalent to constructivist pedagogy. The key is that individuals construct their own meanings and understandings from their own experiences as they reflect on it. Von Glaserveld (1989: 11) argues that according to Piaget’s (1937:311) constructivist perspective, learning is the product of self-organisation. Von Glaserveld (1989:11) remarks the following:

“Knowledge is never acquired passively, because novelty cannot be handled except through assimilation to a cognitive structure the experiencing subject

already has. Indeed, the subject does not perceive an experience as novel until it generates a perturbation relative to some expected result. Only at that point the experience may lead to an accommodation and thus to a novel conceptual structure that re-establishes a relative equilibrium. In this context, it is necessary to emphasise that the most frequent source of perturbations for the developing cognitive subject is the interaction with others.”

These contributions echo Billett's (2004:119) argument that while individuals' thinking and acting at work is influenced by practices in the workplace, most learning that happens consists of informal learning experiences. These experiences generally occur during learners' interaction with others in the workplace, a social setting that normally has its own culture and language. Thus, because learning is situated in the workplace, I am convinced that my study falls within the constructivist and socio-cultural perspectives to learning as

3.7 PERSPECTIVES ON WORKPLACE LEARNING

Illeris (2011:37) argues that “most of the recent studies still centre on the individual acquisition process, such as the industrial sociological approach”. This approach has interest in the qualification requirements that the work has placed on employees and how such generic qualifications can be developed. Another example is the management approach, namely organisational learning, which views the individuals' learning as crucial for the development of the enterprise (Illeris 2011:38).

The focus on individual efforts to learn is also found in adult education in which the experience and interest of the individual in learning is acknowledged. However, other perspectives focus on the workplace as learning environment, such as that termed the learning organisation, which shows interest in what the organisation learns over and above, or independent from the sum of the learning of the individuals. Similarly, theories of situated learning of Lave and Wenger (1991) and CoP of Wenger (1998) also focused on the workplace as point of learning. These theories are based on the belief that the individual will automatically move from legitimate peripheral participation, towards a central competent position by means of a learning process in the workplace (Illeris 2011:38).

Another position towards workplace learning focuses on the interaction between the social and the individual level, which is rooted in the critical theory of the Frankfurt school (Illeris 2011:38). Billett and Choy (2013:270) argue that in this position, the relationship between personal and social contributions to learning through and for work warrants further elaboration. These three stances towards workplace learning, involve aspects of work, place and learning.

Billett and Choy (2013:264) studied learning through work to uncover emerging perspectives and challenges related to work, place and learning as ingredients of workplace learning. The authors argue that due to changes in the workplace and in the education system where there is a growing need for practical experience in the workplace to be offered as part of the curriculum, learning is greatly focused on what is needed for a particular job or requirement in the workplace. The workplace requires employees not only to learn how to master particular skills to do a job, but also places an additional expectation on its employees to learn from and engage with others such as supervisors to learn from them certain insights, procedures and dispositions (Billett & Choy 2013:265). They argue further that there are three emerging concepts that explain learning in circumstances of work. These are changes in the requirements for work, conceptual understandings about the processes of learning, and elaborated views of relations between the social and personal contributions to learning and development (Billett & Choy 2013:266). Malloch and Cairns (2010:3) also explored the concepts of work, place and learning. They argued that these terms should be considered more broadly due to the considerable changes of the last number of years and due to the new thinking inspired by the combination of these concepts. I will elaborate on what Malloch and Cairns (2010) refer to in their use of these terms.

3.7.1 Work

Malloch and Cairns (2010:4) argue that work is much more than the completion of tasks, either individually or with another that contributes to productive endeavours to achieve goals in exchange for payment or without payment. The output of such activities may result in recognition from others. However, we also use our workplaces to identify ourselves by referring to what we do or used to do in the workplace. Work also has a negative connotation because of its history of forced labour and slavery. Workplaces where work traditionally was done and homes where work was traditionally not done, were, until recently, seen as two inherently different places. In the workplace, work is the act of carrying out labour. At home,

our normal day-to-day tasks were regarded as something different to the act of carrying out labour. This idea, as argued by Malloch and Cairns (2010:4), is outdated, as several homes have become workplaces for home-based enterprises in recent years. The workplace has therefore become a personal and negotiated location where one often does work without being paid, or where employed time may not be spent working. Malloch and Cairns (2010:6) conclude that work is intentional; it requires effort and purpose. Remuneration is thus for all practical reasons not a necessary element of the concept of work.

In support of Malloch and Cairns (2010:4), Billett and Choy (2013:266) argue that the nature of work is changing and that learning acquired for entry into the workplace is not enough to last a lifetime of employment. In addition, there is a growing reliance on conceptual and symbolic knowledge, often brought about by electronic technologies that are introduced to perform job activities. Ways of learning these new skills in the workplace introduce new challenges. There is an expectation upon employers to ensure that their employees work in safe workplaces where employees need to learn to function according to occupational standards in addition to performing the job that they have been hired to do (Billett & Choy 2013:266).

3.7.2 Place

The term 'place' has several interpretations as it can relate to the place where the job is done as site of work or to a virtual location. I shall, however, only focus on the relationship between place and the other two terms namely work and learning. I focus on places for work and places for learning. Malloch and Cairns (2010:6) explain that the most common connotation of a workplace is in line with a modern view of it being a physical location, but it might also be spiritual when viewed from an anthropological point of view. Billett (2002b:56) explains that when it comes to learning, educational settings and workplaces are seen as places of learning because they represent different instances of social practices in which learning occurs through participation. Billett (2002b:56) asserts that the needs of workplaces and educational institutions have evolved over time due to their particular cultural requirements. The term 'place' therefore does not necessarily refer to an unchanging or stagnant space or location, but in fact to a space that is evolving, and where learning takes place. Billett (2002b:57) draws the attention to the workplace as a site for learning as it represents the only and most viable location for many workers to learn and develop their vocational practice.

Understanding workplaces therefore remains an urgent matter as they forms the centre of lifelong learning practices. The workplace offers opportunities to engage in work, provides the type of tasks that individuals are permitted to participate in, and provides a place where they can get guidance in their work. These aspects are needed in order to evaluate what and how employees learn at work (Billett 2002b:57).

From a psychological perspective, the term place can refer to where we find ourselves in our minds at any given time. The mind is the place where we think, solve problems and consider ourselves. Malloch and Cairns (2010:7) summarise their thoughts about place as follows:

“Place... in relation to learning and cognition... cover a wide range of ideas and situations... refer to physical or spiritual locations and also relate to spaces in which we see ourselves as people and learners...[and] can refer to where it is we think we operate cognitively as we think and learn (Intra-Personal Place)”

The workplace may thus be trapped in our minds when we are not at work, yet still pondering over work-related matters. This raises the issue of belongingness. Warhurst (2006:112) studied participatory learning among peers in a university setting by using the insights of situated theory. In his deliberation, Warhurst (2006:114) explicates that membership of a community is an intrinsic condition for learning and that belonging to a community results in participation in practices at work. He also mentions how some participants in his study expressed feelings of ‘being isolated’. In other words, there was distance between the individual (learner), the social group (colleagues) and work (practice) that resulted in limited learning and development. Perhaps this is indicative of distance between the employee or learner and the workplace or space due to the emotional disconnect between the employee and the place of learning. Other participants in Warhurst’s (2006:115) study stated that they really felt part of something, expressing their belongingness to the group and place. Again, in this positive stance, the employee or learner made a psychological connection with the workplace as explained by Malloch and Cairns (2010:7).

3.7.3 Learning

The concept of learning in the workplace is described on different levels: individual level, group or community level, and organisational level. While workplace learning is mostly

regarded as informal in nature, it is dependent on organisational support, especially in view of the changing role of work in workplace learning.

3.7.3.1 Workplace learning occurs at different levels

With regard to learning, Malloch and Cairns (2010:9) assert that it is a process of change in an individual or group through activity. It is temporal as well as mindful and generally follows some agentic intent by the individual or group. Billett's (2002b:56) critique on workplace learning discourses considered a broader view of learning as the product of participation in social practice through the individuals' engagement in its activities and access to affordances.

In the workplace, employees, to a large extent, learn of their own accord when they observe, imitate and initiate work activities and interactions, but these efforts are not enough to make informed judgements (Billett & Choy 2013:267). Such individual learning methods do not enable learning of that which is hidden from view or sensation. Learning for work requires tacit knowledge, which is gained through repetitive engagement until it becomes implicit, as well as explicit, as procedural and conceptual knowledge (Billett & Choy 2013:267). The concern is that the exact implications of human progress in learning through practice or in the workplace is not known. Older generations have learnt through work and managed to develop conceptual capacities, but it is unclear if younger generations can access emerging forms of knowledge through individual effort alone, or whether or not they need access to experts or instructional resources to access learning (Billett & Choy 2013:267). Learning, therefore, appears to be constructed from alternative interactions rather than from individual effort at work only.

To this end, when one argues that learning results from participation in work practices, such participation must be based on the invitational qualities of a workplace. These invitational qualities are influenced by factors that are associated with the norms and practices of the workplace (Billett 2004:318). Firstly, learning is a product of the affordances resulting from the continuity of activities within the practice. The continued development of skills through mentoring activities in a workplace, for example, could be a method of ensuring continuity of work processes. Secondly, even though participation in work can be regulated by workplaces, learning still resides in the individual's agency and intention to engage with the practice in the workplace. Learning is not just dictated by the situation, but is rather a product of learner

agency and intent to negotiate participation in learning activities. Learners are thus not passive parties in learning in the workplace (Billett 2004:319).

Arguments such as these of Billett and Choy (2013:267; Billett 2001b) have become part of a dualistic debate about learning models of individual acquisition versus participation on the one hand, and related concepts of cognition versus socio-cultural situativity on the other. The tendency to provide vocational education in the workplace puts the workplace in the centre as demonstrable site of learning (Malloch & Cairns 2010:9). The workplace and not learning is therefore reiterated as the site for learning at the cost of the learning process. Billett (2002b:56) argues that the structuring of learning experiences in workplaces are often directed to sustain practice, including that of groups. This has the effect that workplaces are developing their employees in narrow scopes of competences or skills for which the workplace (organisation) is given funding specifically to develop employees in terms of the skills needs of the country.

On the other hand, while employees learn socially in communities of practice in the workplace, they tend to have control over what they learn and when they learn due to personal agency and the discretionary utilisation of development affordances in the workplace. In order to learn, learners exercise agentic intent in their interactions with the social environment and with others. (Bandura 2001 in Malloch & Cairns 2010:10).

However, the current comprehension of workplace learning centres on accounts of social practices and settings which fail to explain the process of learning. Billett and Choy (2013:267) argue that theories such as social constructivism have done much to explain social practices and what is needed to effectively practice an occupation. Associated theories, like Vygotsky's Zone of Proximal Development, explain how employees extend their knowledge much further than independently possible by learning from more experienced colleagues or co-workers in the social setting where the work is done. But, as argued by Billett and Choy (2013:268), these theories provide models and support in workplace performance but not on how collaborative processes can best occur and what makes them effective. In the process, the individual effort for learning is emphasised even though other Vygotskian views suggest that learning is largely dependent on the learner's agency and not on a reliance on expert partners. To this end, Billett and Choy (2013:268) argue that affordances to learn from experienced workers are but one aspect of learning in the

workplace. The other is the level of interest, motivation and ability to learn intentionally through such engagements. Another aspect that needs clarity is why engagement in authentic work activities is so effective in building the required knowledge needed for work performance. What is certain is that learning through work is a process (Billett & Choy 2013:269).

In addition, and relating to Illeris' (2011) third position to workplace learning, the relationship between personal and social contributions to learning through and for work warrant further elaboration (Billett & Choy 2013:270). The authors explicate that the mediating factors of situation, society and culture are central to understanding, learning and advancing the knowledge and skills needed for work, even though learning is a process in which the individual must be engaged. However, two surfacing concepts that explain the relation between personal and social contributions to learning are the 'practice of communities' and 'bounded agency'. The concept of 'practice in communities' refers to practices of working communities where people's participation and the enactment of these practices are salient. 'Bounded agency' refers to the means by which individuals use discretion to negotiate between what they are able to do and how they exercise agency in engaging with boundaries (Billett & Choy 2013:270). Crossing such set boundaries, both personal and organisational, promotes the inevitability of learning. The concept of boundaries and boundary crossing in learning, therefore, not only refers to institutional facts but also contains personal facts.

The notion of interacting with others as a necessary element for learning, directs me to socially situated learning theories in which culture and history also play a role in learning. Tynjälä (2008:132) posits that it is now widely acknowledged that learning is situated in specific cultural contexts. When considering socially situated approaches to learning, one realises that it is rooted in psychology, sociology, and anthropology. Dewey's pragmatism and Vygotsky's work on developing socio-cultural approaches are among the early works on this (Harris 2000). Socially situated approaches are concerned with understanding the relationship between the internal processes of the mind and social and cultural formative influences. What is important here is to understand that in socially situated learning, social interaction leads to cognitive development and not the other way around (Harris 2000:22).

Warhurst (2006:113) acknowledges that social learning processes are highly significant in a newcomers' development of workplace competence. Warhurst followed a constructivist-

interpretive approach to explore how new university lecturers construct their academic identities. However, Warhurst (2006:112) also explains that he drew from the situated learning theory to study this phenomenon and drew conclusions that emphasised the significance of social learning in lecturers' pedagogic development. He further argues that in recent years, most research based on situated learning involved only one aspect of the theories of Lave and Wenger (1991) and Wenger (1998) namely 'communities of practice' (CoP). Warhurst (2006:114) continues to draw from Wenger (1998) to discuss four components of situated learning theory, being community, meaning, practice and identity.

Wenger (1998) built onto Lave and Wenger's (1991 in Dison 2007:71) theory of legitimate peripheral participation in communities of practice. He posits the makeup of a community of practice (CoP) as:

- a joint enterprise as understood and continually renegotiated by its members;
- relationships of mutual engagement which bind the members together in a social entity; and
- the capability such as routines and vocabulary that it has produced over time.

To this end, Warhurst (2006:114) explicates that membership of a community is an intrinsic condition for learning and that learning will be both incidental and inevitable due to participation in the distinctive practice of a specific community. This proposition is in line with Lave and Wenger's (1991:93) argument that individuals learn in relation to other individuals of a community. He further denotes that belonging to a practice community enables learners to construct the meaning that underpins practice, and that meaning-making through shared language is the second analytical component of the situated learning model (Warhurst 2006:115). Another analytic component of situated learning theory is argued to be that learning is a process of engaging in practice, a process of doing during which the individual experiences a process of 'legitimate peripheral participation' as theorised by Lave and Wenger (1991:29). Warhurst (2006:116-117) explains that this means that individuals will, first of all, be engaged in authentic and legitimate practice, and secondly, such individuals must be accepted as legitimate participants by established colleagues of that community. Lastly, individuals need to begin learning from practice on the periphery of practice and experience a centripetal trajectory over time to the core of their community's practice. In the end, Warhurst (2006:118) argues, since practice is construed socially from the situated

learning perspective, a key outcome of learning is 'a way of being', a type of person in a specific practice context.

However, even though Blåka and Filstad (2007:59) agree that the concept of CoP rests on the notion that individual learning is a product of participation in social practices, the authors argue that this concept is not conceptualised as situated learning only, but also as workplace learning and organisational learning. Nevertheless, the socio-cultural perspective provides helpful insights as far as teaching is concerned. Dison (2007:71) asserts that the strength of Lave and Wenger's (1991) theory of learning as situated activity rests in its grounding in social practice theories. Lave and Wenger (1991 in Dison 2007:71) support socially situated approaches to learning that are in accordance with their view that learning is inherently connected with participation in activities in social practices.

When individuals participate in shared practices, they learn new ways of being in the worlds they live and participate in, and, as a result, contribute to constituting these worlds. Blåka and Filstad (2007) argue that learning in a CoP is more complex than Wenger (1998) described. Newcomers do not automatically become part of a CoP. Newcomers' expectations and abilities to get access, or their desire to get access, to several communities of practice determine their acceptance into such CoP. Access into a CoP rests on the newcomer's initiative and engagement with invitational qualities in the workplace. Newcomers' learning processes need to be considered in relation to their expectations and abilities as these elements determine to what extent they belong and build relationships with established members of the CoP. In addition, newcomers' pre-existing identities influence their construction of new professional identities to such an extent that these newcomers shaped their respective identities in their own unique ways (Blåka & Filstad 2007:72).

Zhao and Kemp (2012:235) provided more insights into the usefulness of the concept of CoP for workplace learning. Their inferences are based on Wenger's (2006:1) online introduction of the theory of CoP, which hold that the theory is only applicable to situations where three crucial elements are present. These are the domain in which learning takes place, the community within which learning takes place and the shared practice of the community. Zhao and Kemp (2012:236) explicate that the theory of (CoP) makes the following contributions to learning:

- It offers important insights into the nature and process of learning in the workplace, where the central issue is to become a doer or practitioner rather than observing and learning about practice;
- CoP is an intentional form of informal learning as community members aspire (through intention and interest) to learn from other community members;
- Learning activities can stretch 'beyond the CoP and within or beyond the workplace boundaries'; and
- CoP may enhance knowledge-sharing in the organisation.

Li, Grimshaw, Nielsen, Judd, Coyte and Graham (2009) explored the concept of Wenger's communities of practice. They argue that health professionals learn in the workplace from interacting and sharing information with peers in what seem to be learning communities, in essence CoPs. However, Li et al. (2009) argue that due to the lack of a uniform definition of CoPs, it was difficult to evaluate the effectiveness of such CoPs in the workplace. They subsequently explain the evolution of the concept of CoP based on Wenger's publications and its implications for workplace learning:

- Lave and Wenger (1991) made a case for situated learning and the concept of legitimate peripheral participation. They studied the interactions between beginners or novices and the experienced or experts, and the process followed by newcomers in their construction of professional identity.
- Wenger (1998) coined the concept of communities of practice and focussed on the individual's learning, meaning and identity construction while participating in a group.
- Wenger, McDermot and Snyder (2002) focussed on developing tools for organisations to cultivate CoPs, manage knowledge workers and improve organisational competitiveness (Li et al. 2009).

Wenger et al. (2002) argue that organisations can optimise the dissemination of knowledge by focussing on three elements of a CoP. Firstly, the domain should create 'common ground' and determine the boundaries for employees to decide what is worth sharing and how to do that. Secondly, the community should create the 'social structure' that will enable learning when community members interact with each other. Lastly, the practice should stipulate the 'shared repertoires of resources that include documents, ideas, experiences, information, and ways of addressing recurring problems' (Li et al. 2009). In addition, the group needs to have

a facilitator or supervisor to manage the day-to-day activities. In this case, the term group refers to a CoP, which Wenger et al. (2002) portray as different to a group of interest.

Wenger (1998c:100) asserts that the approximation of participation must engage individuals, especially newcomers, and provide a sense of how the CoP operates. To this end, both Lave and Wenger's (1991) situated perspective and Wenger's (1998c) CoP perspective have been criticised for being silent on the learning part when they refer to participation. Elkjaer (2004) remarked that the 'how learning takes place' and the 'what is learned' part is not adequately addressed in Lave and Wenger's (1991) and Wenger's (1998c) perspectives. Nevertheless, the contributions of Lave & Wenger (1991) and Wenger (1998c) to learning in the socio-cultural perspective have prompted further research that has resulted in the following arguments that are important aspects of learning in a CoP:

- Learning is collective and social in nature when *newcomers* develop to become *old-timers* (Lave & Wenger 1991; Wenger 1998c);
- Learning is relational (Lave & Wenger 1991; Wenger 1998c);
- A CoP is an informal collective which is defined by its members, the shared ways of working and interpretation of events (Gherardi & Nikolin 2002);
- Individuals' participation in activities, their intentional engagement in available learning opportunities, guidance afforded in the workplace and invitational qualities all influence the way in which individuals learn and what they learn (Billett 2001a);
- Learning in the workplace focuses on 'holism, judgement, action and context' than on 'standard learning' (Beckett & Hager 2000);
- Performance in the workplace involves the 'integration of several forms of knowledge' that does not always allow time for the 'analytical and deliberative approaches' found in higher education. Individuals learn to perform from other people and from personal experience (Eraut 2004:248);
- 'Multi-voicedness' - learning occurs within activity systems and across boundaries where individuals face internal and external contradictions and tensions (Engeström 2001); and
- Individual acquisition of skills and knowledge through reflective thinking and experience (Elkjaer 2004).

Warhurst (2006:113-120) adds to the debate on workplace learning by emphasising a number of important considerations about learning in workplaces. These are:

- *Formal teaching should be supported by contextual learning in the workplace.* The individual should be exposed to practice in a setting that is true to that particular practice.
- *Learning takes place as a facet of belonging to communities of practice in the workplace.* Learning will be 'an inevitable and incidental occurrence arising from the act of participation in the distinctive practice of a specific community'.
- *Learning in the workplace results from the construction of meaning and meaning-making of experience.*
- *Learning is a consequence of doing and experiencing legitimate peripheral participation.* This entail that 'learners must be engaged in authentic, legitimate practice', be accepted as 'legitimate participants by established colleagues' and need to start their learning from the 'periphery of practice and experience a centripetal trajectory over time to the core of the community's practice'.
- *Learning takes place in the process of becoming someone or something in the workplace and the construction of identity.* Learning takes place over time as the individual transforms and gains a new professional identity during which the outcome of learning is a way of being.
- *Learning is both social and individual.* Learning is social in nature when constructed through participation and individual when constructed through self-regulation and reflective practices. (Warhurst 2006:113-120).

Finally, for Jawitz (2009), who focussed on the individual habitus in the workplace, the context of new learning sites needs to be understood before being introduced to learners, especially when creating opportunities for learning within CoPs. The downside of not being sensitive to the learning context is that individual learners may have to learn in isolation. Jawitz (2009:613) subsequently argues for the need to support relationships within CoPs to enable understandings and negotiations around the distributed knowledge of practice.

3.7.3.2 Reflection is prominent in workplace learning

Dewey's reflective thinking conceptualisation (1933) pictured reflection on an individual level as complex and multifaceted. For Dewey (1933), reflection included the triggering stimulus

that challenges existing habits to create an environment of uncertainty. In return, these uncertainties block the usual responses and lead to reflective thought. Dewey (1933) therefore explicated that reflective thinking is an “active, persistent, and careful consideration of any belief or supposed form of knowledge...and the further conclusions ... to establish belief upon a firm basis of evidence and rationality” (Dewey 1933:118). Dewey (1933) regarded reflection as a process that includes framing, anticipatory thinking, testing, and elaboration, but the core of reflection is the conscious ability to apply former experience to new problem-solving situations. For Herrera (2010), reflecting on action is a step backwards in which new and unexpected ways of knowing are uncovered.

Boud, Keogh, and Walker (1985:19) expanded Dewey’s (1933) notion of critical thinking with their concept of learning. They argue that reflection as far as learning is concerned, is a generic term for “intellectual and affective activities in which individuals engage to explore their experiences in order to lead to new understandings and appreciations”. Boud et al. (1985:19) subsequently describe reflection as “the intermediate that allows people to generate meaning from an experience”. The authors identified three major processes of reflective learning that are based on one’s own experience, including one’s thoughts, feelings and actions before and after the experience. These reflective processes are the return to experience, re-attending to feelings and the re-evaluation of experience. Urbas-Llewellyn (2013:iv) on the other hand, found that for supervisors in the nursing environments, critical reflection centres on personal experience as sources of critical reflexion, self-awareness as a primary competence, time as a function of prioritisation, and framework tools for workplace integration.

While Elkjaer (2004) asserts that individual acquisition of skills and knowledge result from these reflective thinking processes and experience, there is also an argument that the integration of learning through reflection in workplace practice rests on the collaboration of co-workers and interaction with peers. Reflection is thus socially practiced when individuals learn through self-regulation and participation in workplace activities (Warhurst 2006:117). Knipfer et al. (2013:30) argue that a learner’s reflection might also be based on relevant peer or colleagues’ experience when the learner makes sense of the experience in terms of his or her own practice at work. There has to be a conscious evaluation of an experience to learn from it and to utilise such enlightenment in future situations (Knipfer. et al. 2013:38). Taking a broader view of reflection, Knipfer et al. (2013:36), posit that reflection could also result

from experience of rules and routines in a workplace. The shared practice in the workplace is then used to reflect on for the construction of new knowledge, often in collaborative practices found in communities of practice, where practice of specific knowledge is generated.

The value of learning that is constructed in shared practices in teams or in communities of practice has been noticed by organisations. Organisations therefore utilise teams to reflect on challenges collaboratively through the sharing of individual experiences and to learn from such reflections to face new challenges. Reflection therefore has a social element to it when dialogue for reflection stimulates alternative ways, which are beyond the individual's perspective, of solving problems. The team learns when it constructs unique contextual knowledge from shared reflectivity (Kayes & Burnett 2006:10 in Knipfer et al. 2013:42). Organisations can therefore benefit from reflection on daily practices, the sharing of individual reflective thoughts, the information gleaned from lessons learned and the evolution of best practices through the accumulation of its workers' reflective learning (Knipfer et al. 2013:42). However, learning from reflection depends on the degree to which individuals share their learning with others. Contextual factors such as the organisational climate, interpersonal relationships and the characteristics of the work itself may influence the individual's willingness and opportunity to share their learning (Eraut 2004; Billett 2001b). In addition, before learning can take place, individuals must have the ability to draw conclusions from their abstractions when they reflect on their experience. There has to be a certain willingness and readiness to reflect on their practice to learn from and to share the learning.

3.7.3.3 Workplace learning as mostly informal

Jacobs and Park (2009:141) argue that informal learning recognises that the acquisition of knowledge and skills in the work setting does not occur from organised programmes only. They assert that informal learning occurs in situations that are usually not intended for learning, especially in the workplace. Individuals learn in the workplace because of their intellectual curiosity, self-directedness, and self-efficacy (Beckett & Hager 2002). Billett (2002a) explains that workplace learning involves both structured and unstructured learning that takes place through on-the-job activities. While formal learning is mostly presented in a structured way, such as in a classroom setting, informal learning can be structured or unstructured, planned or unplanned (Lohman 2005:86) and is usually experiential in nature,

involving dialectical processes of action and reflection (Marsick, Volpe and Watkins 1999 in Lohman 2005:86).

Lohman (2005:86) draws from Doornbos et al. (2004) when she asserts that workplace learning is activated by activities that require the handling of novel, ambiguous problems. These activities may also form part of some structured or sanctioned effort to enable learning, such as mentoring, coaching, job rotation, job shadowing and projects (Marsick & Watkins 1997; Billett 2003) or may form part of some self-initiated study (Jacobs & Park 2009:141). Activities such as reflection on oneself in relation to the job, learning from mistakes, vision sharing, challenging group think, asking for feedback, experimentation, sharing knowledge and awareness of employability promote informal workplace learning (van Woerkom, Nijhof & Nieuwenhuis 2002 in Lohman 2005:86).

To this end, Cross (2007) argues that workplace learning should not be underestimated as approximately 87% of learning that impacts on jobs is informal in nature and takes place over time and in the social context of the workplace. Watkins and Marsick (1992:292) had a similar view of Cross' findings. They explicated that individuals learn through collaboration, mutual problem-solving and the sharing of experience in the workplace. The authors had characterised informal learning as:

- Learning from experience;
- Having an organisational context;
- A focus on action;
- Non-routine conditions;
- The tacit (unintentional) dimension of knowledge;
- Delimiters to learning that influence the framing of a problem; and
- Enhancers of learning (Watkins & Marsick 1992:234).

Tynjälä (2008:133) drew from the work of Hager (1998) and Resnick (1987) to provide more characteristics of informal learning in the workplace. These characteristics include:

“Unintentional learning supported by intentional learning;
Absence of formal curricula and prescribed outcomes;
Learning is contextual, relying on contextual reasoning;

Focussed on tool use and mental activities;
Produces implicit and tacit knowledge and situation specific competencies;
Learning outcomes are not always predictable;
Emphasis is on work and experiences based on the learner as worker;
Learning is collaborative;
Built on practical wisdom, thus seamless know-how; and
Competences are treated holistically with no distinction between knowledge and skills.”

While the concept of informal learning, which forms an integral part of workplace learning, had already been introduced by Knowles in 1950, it has not replaced the importance of formal learning. It merely supports it (Cofer 2000). Armson and Whiteley (2010:410) came to the same realisation when they mistakenly assumed that they would find clearly identifiable formal or informal learning practices in the workplace. In fact, they subsequently have agreed with Marsick (2009) that in practice, informal and formal learning are often inextricably intertwined. Zhao and Kemp (2012) claimed that the integration of Web 2.0-based informal learning with workplace learning serves as such an example.

Zhao and Kemp (2012) argue that social network platforms such as *LinkedIn* and *MySpace* have entered into informal learning environments. Zhao and Kemp (2012:241) posit that organisations will have to provide technical support for implementation of such web 2.0-based informal learning. This in itself seems contradictory to the term informal learning as such learning might have to be organized and controlled, which leans more towards it being structured workplace learning. Nevertheless, the authors argue that they have made contributions to the theoretical development of informal learning and workplace training by developing a model to integrate Web 2.0-based informal learning with workplace learning. They claim they have done this by factoring in all the key variables (like organisation, culture and employees) and the relationships between them in the learning process, from self-directed and individual learning to network-directed and collective learning, and to organisational learning (Zhao & Kemp 2012:241).

For Armson and Whiteley (2010:410), this realisation acknowledges the fact that more than one learning theory could be at play during formal learning, informal learning or in the ‘intertwined’ existence of both formal and informal learning. While debate is constructive when it negotiates new thinking about work, place and learning, Billett (2002b) argues that

not everything in the workplace learning debate is helpful. To this end, Billett (2002b:57) argues that describing workplaces as informal or unstructured learning environments is negative, inaccurate and ill-focussed as it does little to advance the understanding of workplace learning. He highlights the following arguments:

Billett (2002b:58) posits that it is unhelpful to describe a phenomenon by what it is not. By arguing that learning in the workplace occurs in the absence of supervision or guidance, one may imply that the learning is unstructured and informal, and therefore weak. Instead, such argument could be stated positively by stating what it is or represents; or instance, one could reflect from the point of view of the individual's learning from experience and his/her subsequent reflection on this experience.

It is inaccurate to describe workplace learning as unstructured or informal. Billett (2002b:59) explicates that activities and interactions in the workplace are sustained by norms, values and practices. These practices and experiences are structured and inherently pedagogical in the way that they direct participation towards continuity within and of the practice. Workplace practices and norms constitute performance and form the bases for evaluation of performance. Learning is, thus structured in nature, although obscured by the norms, cultures and practices in the workplace.

The use of the term 'informal learning' is unqualified as it limits the understanding of learning through work and learning generally. By describing the learning process as 'formal' or 'informal', one advocates *for* the social or situational circumstances or determinants for learning and *against* the role of personal agency in the construction of knowledge (Billett 2002b:64). It is incorrect to refer to the circumstances in which the individual works and learns in order to categorise learning as informal or formal. At most, formal or structured learning experiences can only guide individuals' learning. On the other hand, workplace learning is often incidental in nature. In both instances, the individual's personal agency will determine whether or not learning takes place and what is learned. The individual may thus learn something that is not intended in a structured formal intervention. Using the terms 'informal' and 'formal' learning may suggest that learners engage differently in different kinds of social practice. To this end, Billett (2002b:64) argues that it is not helpful to describe learning outcomes on the basis of the structure of learning experiences.

Billett's (2002b) critique reflects a few of several binary positions that have developed on learning in the workplace. Malloch & Cairns (2010:10) posit that these binaries are not helpful for the development of workplace learning theory and should be discounted to allow the field to develop in a less bounded manner. These binaries include:

“Informal versus formal
Experiential versus theoretical
Educational versus training
Physical versus intellectual
Explicit versus implicit
Tacit versus explicit
Pure versus applied
Action versus theory
The academy versus the factory
Lived versus studied
Classroom versus workplace” (Malloch & Cairns 2011:10).

Regardless of these binary positions, workplace learning theory continues to develop in work, place and learning contexts. Armson and Whiteley (2010:410), for instance, highlight some perspectives that on face value appear to be formal and/or structured. The authors approached workplace learning from an organisational learning perspective to list the following moments:

- Various perspectives on workplace learning exist (Thomas & Allen 2006).
- Scenario planning method of organisational learning (de Geus 1988).
- Computer-assisted learning methods (Eden 1993).
- Groups methods (Lewis & Whiteley 1992).
- Interactive problem solving (Klass & Whiteley 2003).
- Learning organisation (Senge 1992, 2006).

Armson and Whiteley (2010:410) also explored workplace learning from a vocational education perspective and drew specifically from the work of Marsick and others, as well as Billett to highlight the following themes, which appear to be informal and/or unstructured:

- Learning activities inside organisations, focussing on informal learning and a unifying framework in which to discuss them (Marsick & Watkins 1990; Marsick & Volpe 1999, Marsick 2009).
- Continuing work on reciprocal and co-participatory learning (Billett 2001b 2002a, 2004; Billett, Barker & Hernon-Tinning 2004).
- Affordances and participatory learning in workplaces (Billett 2004).
- Outcomes-based learning (Tsang & Zahra 2008).

While these perspectives on workplace learning provide helpful insights into the debate about informal learning, they do not capture the organisational support needed to enable such workplace learning.

3.7.3.4 Organisational support is crucial for workplace learning

Reflecting on the themes and perspectives of workplace learning reiterates the complexity of the concept of workplace learning. One finds oneself pondering over the contributions of both the individual and the organisation to learning in the workplace. Hodkinson et al. (2004:21) came to the same realisation to assert that the relationship between individual workers (learners), workplace and organisational practices and cultures are complex and significant. Hodkinson et al. (2004:21) argue that the learner is simultaneously part of their workplace and separate from it. It is not entirely correct to argue that learning is in the hands of the individual by ascribing agency to the learners while the workplace provides the structure for working and learning. The authors subsequently identified overlapping types of interaction between the individual learner and the workplace context. Hodkinson et al. (2004:21) list these overlaps as follows:

- “Bringing prior abilities and experience to the workplace
- The ways in which individual dispositions influence the nature and use of workplace learning affordances
- The ways in which individuals contribute to the construction or reconstruction of workplace cultures and practices which influence learning
- The ways in which learning and participation in work contributes to the construction and development of learner/worker identity” (Hodkinson et al. 2004:21).

Two pitfalls emerged from the study. These are that one might over-emphasise the individual agency or only approach workplace learning from an organisational and cultural determination. When emphasising personal agency, one ascribes all the responsibility for learning to the learner, or the learner and his or her supervisor. When emphasising the social and organisational approach to workplace learning, all employees will be discounted to uniform groups of employees whose development will be similar across all members of such group. Individual differences will be marginalised.

Hodkinson et al. (2004:21) propose enhancing learning opportunities to improve workplace learning by creating more expansive learning environments that are in line with what learners' want, their needs and what they respond to. The learning opportunities that learners want should then be prioritised over those that management think they need and should also take into account power differentials and workplace inequalities.

To this end, Vaughan (2008:4) proposes several different approaches to workplace learning that may assist employers in the development of their workers. These include:

- Off-the-job training that entails learning assignments that are linked to one's task, requires one to solve problems and is related to the organisation's business strategy;
- Structured learning in the workplace that is managed and validated by external providers of training in partnership with the employer or co-workers. In this case, there should be strong links between the classroom learning and the workplace activities to serve as motivation to learn;
- Informal, pervasive learning that sets the context of the practices and behaviours of the workplace, which stimulates the formation of communities and the reconstruction of professional identities. Learning involves the employee becoming an insider of such communities and aligning individual behaviour to that of the community; and
- Intentional on-the-job learning that is structured and organised according to specific pedagogy. On-the-job learning is intended to develop specific employee competencies. This is done through the support, structure and monitoring of progress by structuring workplace learning through processes such as job rotation and exposure to more

challenging tasks. This can also be done through participative action-reflection sessions where employees work together to brainstorm to solve problems and also hold debriefing sessions during which feedback is given on experiences. New learning is used to effect change in the workplace. Similarly, social learning, mutual construction of knowledge and critical awareness of worker roles are further options for intentional on the job learning. In this approach, workers experiment with different ways of doing things, and frame and reframe experiences in an attempt to integrate different perspectives (Simons 1995; Cullen, Hadjivassiliou, Hamilton, Kelleher, Sommerlad & Stern 2002 in Vaughan 2008:5).

However, application of Vaughan's (2008:5) suggested approaches is dependent on the workplace culture and production processes that influence the way in which workers learn, and what they learn according to Billett's argument about learning affordances in the workplace. Workplaces differ, which means that there is no single way to do things as far as workplace learning pedagogy is concerned. Vaughan (2008:14) draws from Cullen, Hadjivassiliou, Hamilton, Kelleher, Sommerlad and Stern (2002) to assert that the structure of the workplace, its goals, immediate workplace conditions and workers should be considered before embarking on a specific workplace learning pedagogy. She lists these as:

- The socio-cognitive demands that include task complexity and the skills needed to perform such tasks;
- The socio-interactional requirements that focuses on whether or not there is a need to work in teams and interact with teams;
- The importance of the job which centres on the impact of a task on the larger work processes, the organisation, and the prestige it bestows on the worker; and
- The access characteristics of knowledge, referring to where the knowledge is located, what the individual needs to understand, and whether or not that individual is permitted to have access to it (Cullen et al. 2002 in Vaughan 2008:14).

However, to provide organisational support for learning initiatives, one needs to understand the needs of the workers. Pillay et al. (2003:437) found that older and younger workers have different conceptions of the workplace, which result in different needs. Pillay et al. (2003:8) uncovered various conceptions that hold important implications for the development of

workplace learning pedagogy. The authors highlight the following as being the most important for work and learning at work:

- Older workers regarded work as a job, whereas younger workers regarded work as a challenging experience or an important part of life;
- Older workers referred to work as a means to survive and focussed on routine aspects of work;
- Younger workers viewed work as personally empowering, perhaps due to a longer working life or due to their expectation of becoming an expert in the field;
- Younger workers showed signs of understanding and accepting the challenges at work to build self-esteem, but did not accept interference with personal life. They do not integrate life experiences and work practices; a separation that reflects their sense of control over work and life; and
- Workers tend to acquire technical skills by following a set of procedures and not learning for the sake of improving knowledge, but rather as a means to an end. This notion is in contrast with emergent new work practices;
- Observation and experiencing are used to gain specific details of performance requirements, but are only used for recall purposes and not to develop a new mind-set about work;
- Formal courses are viewed as being structured interventions that award learners certificates upon completion. This is the view of older workers in particular, yet none of the older participants in the study embarked on formal courses. Similarly, as expected, the younger workers have also not considered enrolling for formal courses. This is consistent with their view of the workplace being empowering; and
- The conception of lifelong learning did not feature among the workers who held lower level conceptions of learning. However, they did refer to constant searching for information as everything in the workplace keep changing (Pillay et al. 2003:437).

Pillay et al. (2003:437) subsequently argue that workplaces should refrain from skills development approaches where one size fits all. Instead the needs of older workers who regard development as taking formal courses and the needs of younger workers who learn through observation and experiencing should be taken into account. Involving learners in the planning process for their learning is good practice as it will encourage their implementation,

reflection and evaluation of activities. It also helps to make judgements on future action regarding the learner's development (CHE 2011:19).

Gosling and Moon (2001 in CHE 2011:19) provide a model for effective workplace learning implementation. It holds that workplace learning opportunities must provide for concrete experience in which learners actively take part in the activities. This aspect requires more engagement than just observing the activity at work. Learners must be exposed to reflective observation, which requires learners to experience and observe particular elements of the activity, and to reflect on that activity later to consider what has happened there. Learners must go through a process of abstract conceptualisation in which they use inductive reasoning to analyse observations, explain these and formulate theories about their conclusions. In the final step, learners should be allowed to actively experiment with what they have learned by testing their theories or conceptions of new learning in the workplace.

The challenges facing workplace learning are mostly found in workplaces where there are inadequate structures and systems to support workplace learning. However, workplace learning also suffers from the changing nature of workplaces, which tends to attract entry-level employees with high-level technical skills (CHE 2011:20). Once such learners are in the workplace, they are offered very little learning opportunities or experiences. The differences between workplace and university knowledge and structures make it difficult for learners to understand and derive meaning from what they encounter. Universities' theoretical knowledge and workplaces' contextualised knowledge pose a challenge for meaningful articulation between them (CHE 2011:21).

Torraco (1999) was more concerned about the inadequate amount of attention given to the role of qualified co-workers in the process of workplace learning. For Torraco (1999) the qualified co-worker holds the expert knowledge that is distributed in the workplace, and newcomers need to find, access and learn from this knowledge, in order to become old-timers that are part of the community of practice. Billett (2011:12) agrees with this, but adds that affordances in social settings, such as the support offered by more experienced workers, may be welcomed by some learners, while others may find such support unhelpful. There seems to be a need for inclusionary processes where newcomer and old-timer as mentor enjoy equal affordances to learn and develop (Billett & Choy 2013:273). Billett and Choy (2013:272) posit that learning through everyday practice might not be enough to maintain currency of

knowledge or to sustain employability. This could be ascribed to employees generating tacit knowledge and learning undesirable attributes and practices. It could also be due to the fast changing nature of knowledge or rapid generation of new knowledge, which cannot be learned through everyday practice. It is only through formal education and planned learning activities that workers can integrate conceptual knowledge and practical experience to develop their expertise (Billett & Choy 2013:272).

Billett and Choy (2013:271) therefore argue that the key procedural challenges to workplace learning needs to be understood. They categorise these challenges as 'improving learning for occupations' and 'sustaining learning for employability and working life'. Billett and Choy (2013:271) posit that workplaces are often confronting and challenging or unsupportive of workplace learners, resulting in many learners in apprenticeships not completing their programmes. Providing learning experience is not enough. Learners should be able to gain adequate experience and support in the workplace and access opportunities to integrate them with educational programmes. The authors assert that curriculum and pedagogic interventions are necessary for workers who are new entrants to occupations as well as for existing workers who seek to sustain their employability. New entrants should follow a structured workplace learning approach while existing workers' experiences should be enriched (Billett & Choy 2013:271). Unfortunately, there is no guarantee that either workers will learn what they have to, because learners construct knowledge based on what they know (cognitive experience) and what they have experienced (pre-mediate experience). Their learning is thus unpredictable (Billett 2011:13).

To this end, Billett (1995:25) posits that there are several challenges in the workplace that impede on learning. Billett (1995:25) explicates that not all knowledge that workers construct in the workplace is desirable. Employees may develop inappropriate skills if such skills are present in the culture and practice of the workplace. The effectiveness of learning that is embedded in communities of practice, is dependent on guided access to the authentic activities of the community of practice. Without access to authentic activities, there might not be appropriate or desired learning. In addition, the reluctance of experts to provide advice, mentoring or support may inhibit the outcomes of learning. Situations where there is a lack of expertise or no access to such expertise may cause employees to seek expertise outside the workplace. Lastly, learners may not be capable of developing conceptual knowledge through workplace learning (Billett 1995:25).

Learners should thus be supported before, during and after their learning experiences to enhance their quality of learning (Billett 2011:15). There are at least five pedagogical practices that can improve the quality of workplace learning (Billett & Choy 2013:271). First, before entering the workplace, learners need to be orientated to the requirement to effectively engage in the workplace, to be aware of expectations, to know what they have to learn and to understand the means of undertaking that learning. Second, learners need to possess certain capacities to undertake the activities that they could reasonably be expected to master. Third, the expectations about the purpose of support during the learning process and the roles and responsibilities of other parties should be clarified. Fourth, learners, being dependent and interdependent in the workplace, should understand their own roles and responsibilities as their learning is self-directed. Their observations, engagement and interaction should contribute to their learning. Fifth, learners need to be prepared for circumstances where their encounters are unpleasant or confronting in order for them to manage these situations for their own well-being and sense of self (Billett & Choy 2013:272).

3.7.3.5 The role of work is changing in workplace learning

Torraco (1999:256), who studied the changing role of work in workplace learning, draws from several accounts in the workplace to highlight the following themes, which are not yet clarified by existing research:

- *Contingent versus deterministic work strategies.* Do employees learn by only solving poorly defined problems?
- *Distributed nature of expertise in the workplace.* Does the distributed nature of expertise in the workplace also position the individual employee as a member of a group whose expertise collectively solve problems in the workplace?
- *The integration of learning and work.* Are there still clear boundaries between work and learning?

Järvensivu and Koski (2012) addressed the last point. They explicated that employees and employers are contractually tied together and that the employer has the right to determine how the contracted working hours are spent, whether on work or learning. The authors found that it is still true that in modern organisations the employer defines the content and times of

learning. The employer determines what should be learned, a notion that presents a challenge to the concepts of adult education and learning. Antila (2005, in Järvensivu & Koski 2012) argues that the borders of work are blurring and that working life is being extended to voluntary overtime at home. Working hours are no longer clearly separated from free time. Learning that is commissioned by the employer will thus extend into free time as employees take their work home. Workplace learning is consequently not necessarily done during office or working hours (Järvensivu & Koski 2012).

Chappell, Farrell, Scheeres and Solomon (2000:1) studied the organisation of identity by analysing four case studies where learning took place in the workplace. Chappell et al. (2000:3) argue that some knowledge cannot be transferred in a workplace, but has to be generated at the site of work. Knowledge is also becoming increasingly short-term due to constant change in the workplace. The authors explain that learning in the workplace is an ongoing process that signals the transitory nature of knowledge and emphasizes the importance of situated formal and informal learning. The importance of the situated learning is demonstrated in one of the four cases. There was evidence that the actors (new teachers) relied on previous experience to perform better in their new environments. The teachers emphasized the practical over the theoretical, applied knowledge over academic knowledge, experiential knowledge over disciplinary knowledge and contextualized knowledge over generalisable knowledge (Chappell et al. 2000:6). These points fit in with Jacobs and Park's (2009) proposed conceptual framework for workplace learning in the sense that it emphasizes the importance of the location of learning, in particular the on-the-job learning dimension.

Sambrook (2005) looked at workplace learning by differentiating between learning at work and learning in work. In Sambrook's (2005) argument, the idea of attending some sort of planned training intervention represents the act of learning at work. Learning in work refers to learning while working, or learning as a result of working. Activities such as observing others when they work, asking questions, solving problems, participating in discussions and mentoring others form part of the informal learning taking place. Sambrook (2005) expands this idea by arguing that opportunities for workplace learning exist outside the boundaries of the workplace, such as when different departments of the same organisation work together on a project, or when two or more separate organisational teams work together on an initiative.

Finlay (2008:73) provided insights in this regard. Finlay (2008:73) explored the learning and development of further education lecturers in both university and workplaces. He conducted his study in the framework of Engeström's (1987, 2001) contemporary activity theory which holds that learning takes place across boundaries. In this view, learning takes place across different activity systems that interact with one another, such as the workplace and a university. Employees who work together on a joint project of the workplace and the university, for instance, will learn from each other during project meetings (or boundary clinics as Finlay refers to it) where they 'pick up' the language, culture and technical knowledge of the other workplace for use in their own workplace or activity system (Finlay 2008:86). According to Finlay (2008:86), his participants utilised various resources such as a reflective journal, ideas, teaching strategies, fellow students and a community of teachers to shape their identity and to make sense of their practice and workplace.

Jacobs and Park (2009:143) proposed a conceptual framework of workplace learning, which may assist in developing a workplace learning theory during changes that affect the workplace. They list three variables and describe the way in which they differ:

- *Location of the learning.* Learning takes place in the actual work setting when 'on-the-job,' while learning occurs away from work when the employee is 'off-the-job'. Jacobs and Park (2009:145) argue that when learning takes place on-the-job, the learning takes place near or at the actual work setting, but off-the-job learning takes place off-site in another facility away from the actual work site;
- *Degree of planning involved.* When learning is unstructured, there is little evidence that a systems approach was followed as the outcome was not planned for. When there is evidence that a systems approach was followed in the learning process, such learning is regarded as structured, as the outcomes of the learning are defined; and
- *The role of the trainer/facilitator.* The trainer is passive when he or she plays a limited role in the facilitation of learning. In this case the trainee engages the trainer as and when needed during the learning process. The trainer is regarded as active when playing a direct role throughout the learning process.

Jacobs and Park's (2009) proposed framework points out some themes that might be relevant to andragogy. This framework takes a very general view of the workplace and

positions learning either in or outside the actual site of work. It does not take into account the changing nature of the workplace such as working from home or psychological perspectives of the place of work where the boundary between being at work and away from work often only lies in the mind of the individual.

To this end, one can assert that the role of work has changed from its conservative role of providing a means to generate an income for workers. Work has also become the instrument of learning where individuals engage in legitimate and authentic work opportunities, either individually, in groups or in communities at work. However, when workers learn at work and through work, it is often the result of the guidance given by supervisors or mentors. Such guidance, as posited by Billett (1995:21), could be either proximal as a result of direct interpersonal guidance given by an expert or supervisor, or indirect as a result of social norms and practices in the workplace. Work has thus also become the medium that introduces the learner to the expert knowledge of supervisors or mentors in the workplace. When supervisors or mentors drive the learning process, it could easily reduce the learner to a passive receiver of knowledge. Therefore, even if learning is more structured in the workplace, such as in mentorship programmes, the learner has to be actively involved to construct knowledge, in which case the concept of work transforms into learning.

3.8 PRIORITIES FOR EMPIRICAL INVESTIGATION

By drawing from this conceptual framework and taking the context of the study into consideration, several arguments that are relevant to teaching research in the SAPS, need further empirical investigation. These are:

- *Constructivist pedagogy is appropriate for design research learning programmes.*

Eight essential factors in constructivist pedagogy (Doolittle 1999) could be used as the benchmark for the SAPS research module design. The factors include:

- Learning offered in authentic and real world spaces where employees can learn through their experience;
- Learning that incorporates social negotiation and mediation;
- Content and skills that are applicable to the employee;
- Content and skills that are comprehensible for the learner's knowledge framework;

- Formative assessments that inform the design of future learning experiences;
- Opportunity for employees to become self-regulating, self-mediated and self-aware;
- Trainers act as guides and facilitators, but not instructors of learning; and
- Exposure to multiple perspectives and representations of content.

- *The site of work and the role of work are changing.*

It is commonly agreed that learning takes place at the site of one's work (Chappell et al. 2000:3). The concepts of working and learning are moving ever closer as we learn to work and work to learn. Workplaces are changing and with change comes it new ways of working (Malloch & Cairns 2010:4; Billett & Choy 2013:266). However, working is not just located at a physical or virtual place alone, but also rests in our minds when we are not at the geographical work location (Malloch & Cairns 2010:7). The boundaries of work and home, and working at the office and resolving work-related problems in the mind when at home, have become blurry. What do SAPS learners regard as site learning?

- *Informal learning has taken a stronger position in the workplace.*

Employees have come to realise that the situatedness of their learning, which they have gained through activities at work and because of work, is valuable for the performance and production of the organisation. They seek recognition and reward for that at a faster pace than their older colleagues who rely on formal learning (Vaughan 2008:14). Is the value of informal learning appreciated in the workplace?

- *Individuals exercise more control over their learning*

Individuals exercise more control over their learning because of personal agency and the construction of their professional identities (Hodkinson et al. 2004:21). While older employees still show strong reliance on formal education qualifications, their younger counterparts value the learning journey in which they personally can select what and when they learn (Pillay et al. 2003:437). Formal teaching therefore necessitates exposure to a real work environment in which learners can practice their learning (Warhurst 2006).

- *Learning takes place through active engagement*

Learning takes place through active engagement on both an individual level (constructivism) and participation through affordances (Billett 2002b:56) in social settings and the socio-cultural contexts, in which the individual can construct the meaning of the experience

(Warhurst 2006). While the CoP theory may be relevant to the training intervention at the SAPS Academy because it has its supporting structures, it might not be the case in the learners' own work environments (Jawitz 2009:613). In their workplaces, they may be confronted by a stronger police culture that might not be as enabling as believed to be by the course developers (Billett & Choy 2013:271). However, their learning will still be taking place in an authentic, legitimate practice. Is active engagement indeed necessary for learning to take place?

- *Reflective thinking and experience stimulates learning*

Individual acquisition of skills and knowledge occurs through reflective thinking and the gaining of experience (Elkjaer 2004). Involving learners in the planning process for their learning is good practice as it will encourage implementation, reflection and evaluation of activities. It also helps to make judgements on future action regarding the learner's development (CHE 2011:19). Van Woerkom, Nijhof and Nieuwenhuis (2002 in Lohman 2005:86) posited that activities such as reflection on oneself in relation to the job, learning from mistakes, vision sharing, challenging group think, asking for feedback, experimentation and sharing knowledge and awareness of employability promote informal workplace learning.

- *Workplace learning needs organisational support.*

The prevailing practice of an employer determining what should be learned, poses a challenge to concepts of adult education and learning. Antila (2005, in Järvensivu & Koski 2012) argued that the borders of work are blurred and that working life is extended to voluntary overtime at home. Working hours are not clearly separated from free time anymore. However, employees need support from supervisors and to have access to mentors and expertise in the workplace in order to learn (Billett 2011:12). For SAPS this means that its senior managers will have to understand the situatedness of learning and the value of the social aspect of the workplace (Warhurst 2006) and will have to move away from a reliance on formal learning based on a general 'one size fits all' skills development approach. However, even when formal learning is structured along the lines of andragogy, the contents and skills should still be made relevant to the learner's needs (Doolittle 1999).

3.9 SUMMARY

In this chapter, I have divided my review into two sections. In Section 1, I provided an overview of the traditional and more contemporary learning theories. I have elaborated on behaviourist, psychological and socio-cultural approaches to learning as backdrop to show where the later theories that are more related to adult learning are derived from. To this end, I provided a brief overview of theories of situated cognition, experiential learning, andragogy, problem-based learning, project-based learning and workplace learning. However, in moving into workplace learning as a developing theory, I have also indicated that workplace learning is closer to constructivist and socio-cultural perspectives. The reason why I provided a brief overview of these theories is that most of the literature that I consulted plunged straight into the workplace learning theory and I found it challenging to make connections with traditional learning theories. I suspect this is also the case with other novice researchers.

In section 2, I have drawn from various authors to explore the relation between workplace learning and concepts of situated cognition or situated learning, constructivism and CoPs. Various perspectives and themes regarding workplace learning were offered by firstly looking at informal learning and secondly, considering the views of several authors such as Torraco (1999), Chappell et al. (2000), Billett (2001a, 2001b, 2002, 2011), Pillay et al. (2003), Vaughan (2008), Jacobs & Park (2009), Billett and Choy (2013) and others.

The literature suggests that learning in the workplace is both individual and social and although much is already known about learning processes in workplaces, there still seem to be various factors to explore. The contributions of experts (and their learning), who share their knowledge through mentoring, needs further exploration. Workplace learning appears to be studied either by focussing on informal learning, or by focussing on how the individual learns through participation in social work environments.

Having done the literature review, I concluded the chapter by offering some implications for the workplace that warrants further empirical investigation. I offer an account of how I executed this study in the following chapter, Chapter 4.

CHAPTER 4: RESEARCH DESIGN AND METHODS

4.1 INTRODUCTION

In Chapter 1, the research questions and design considerations of the study were offered. The two main research questions were:

- How did SAPS learn to teach research methodology to its senior managers?
- What workplace learning has taken place during the teaching of research methodology in SAPS?

In Chapter 2, a theoretical framework for the study was offered, which emphasised the need for further empirical exploration of a few themes. These were:

- *The need for introduction of unfamiliar content and reduction of learner fear;*
- *Critical thinking skills and reflection are needed for ontological shifts;*
- *Active participation is needed for learning research;*
- *Learning through research at work needs organisational support;*
- *Educators need to be clear of their role in teaching research;*
- *Workplace learning needs comprehension; and*
- *Novice researchers can be empowered to develop research skills.*

In Chapter 3, a conceptual framework for the study was offered, which emphasised the need for further empirical investigation of a few themes. These were:

- *Constructivist pedagogy is appropriate for the design of research learning programmes;*
- *The site of work is changing;*
- *Informal learning has taken a stronger position in the workplace;*
- *Individuals therefore exercise more control over their learning;*
- *Learning takes place through active engagement;*
- *Reflective thinking and experience stimulates learning; and*
- *Workplace learning needs organisational support.*

In this chapter, the life history of the study was presented. It included an account of how the study was conducted and the decisions made during the study. The moments of enlightenment of both method and theory during this journey were reflected on. In the process, guidance was found in Castaldi (1991:2) who asserts that ethnographers:

“... try to describe all aspects of the community they are studying in the greatest detail possible, they structure and refine their research as they proceed. Thus the collection and analysis of data affect the design of the research.”

Chapter 4 will therefore build on the discussion in Chapter 1, which laid out the methodology of the study by elaborating on the setting, the researcher’s discovery of ethnography and followed by some key decisive moments in the study.

4.2 RATIONALE FOR ETHNOGRAPHIC RESEARCH

In this section, the rationale for the study is offered, followed by the delimitations of the study.

4.2.1 Rationale

Police officers are appointed to play a specific role in society. Their recruitment and selection involves a set of tests that includes physical fitness and the mental ability to conduct police work. New police officers are also subjected to psychometric testing to establish their suitability for appointment to the SAPS. Such testing is also required to confirm that police officers can be developed to the necessary competence levels and that they are emotionally strong enough to deal with horrific scenes at one moment and shortly thereafter, show assertiveness and empathy at the next. Police officers must possess emotional intelligence and a willingness to learn how to handle certain types of situations. They learn how to do the job in various ways, of which one is to attend formal police training courses. The SAPS EDLP is one such course, designed to develop executive decision-making competencies.

The police officers that attend the EDLP, have vast police and life experience and have attended numerous training programmes in the SAPS. The EDLP is nothing new to them. However, since the senior police officers are older employees, they find it hard to develop

new ways of thinking and to do the research that forms part of the EDLP. This observable inability to conduct research in the workplace is the reason for this study. It is not something that can be derived from the existing literature alone; hence, an empirical approach is needed to establish what is happening in the organisation. A renewed focus has been placed on workplace learning and this empirical approach is not unusual (Matthews 1999).

The focus of this study however, is not entirely on the senior police officers' learning, but also on the small research trainer team and other role players who are involved in the development and teaching of the research module to these senior police officers. The training team, consisting of two trainers and two training administration clerks, are responsible for the development of research methodology course material, teaching research methodology, leading students in their field research and assuring quality of an acceptable academic standard in research outputs. However, not much is known about the experience and effort of police trainers in their journey towards developing and implementing a research module for the SAPS at the SAPS leadership academy.

Several studies have focused on the client service rendered by the SAPS (Mofomme 2004; Schwartz 2004; Schwartz, Schurink & Stanz 2007) and on organisational change in SAPS (Marks 2003; Kiley 1997; McNeil 1995) but the inception and evolution of research methodology as a problem-solving mechanism for the SAPS, and the workplace learning during such development and delivery, have never been recorded. However, police-related studies may be improved or expanded should research skills be inculcated into the skills sets of the SAPS. Moreover, should the research model applied by the SAPS research trainers be rolled out to other neighbouring countries, it opens up the possibility of better cross-border crime fighting strategies on the African continent.

This will add to the existing literature on the teaching of research methodology in organisations such as SAPS. In particular, it will offer an ethnographic account of teaching research methodology in a police education setting (the culture sharing group), building on the work of Humphreys (2006) who conducted an autoethnographic study as an account of his own parallel experiences of teaching qualitative research methods, but limiting the contribution to utilising autoethnographic data in an ethnographic study.

The study will also expand on the adult learning and workplace-learning knowledge base since the study will be conducted in an adult learning environment. All learners (senior police officers and the research team) are adult learners working in demanding police environments. These workplaces are not necessarily enabling for learning. In particular, the study will contribute to February, Koetsier and Walters (2010:972) who argue that most research places the adult students at the centre, but very little is known about those who teach students and what these lecturers' experiences and insights are in relation to teaching and learning. The study will therefore contribute to the workplace learning knowledge base by adding new knowledge of how police trainers learned to teach research methodology. This may ultimately assist other police agencies or government departments in approaching research in a similar or completely different manner, depending on the findings of this study. Nevertheless, the study will highlight the critical aspects to consider when rolling research out in the organisation as part of a problem solving mechanism.

4.2.2 Delimitations

Delimitations generally describe those aspects not covered in a specific research project. While the study will draw on best practices found in literature, it will not compare the curricula of research offerings of different institutions. The study will however draw on the best practices in the processes employed to teach research to adult learners.

The study does not attempt to measure any form of return on investment for SAPS from any organisational development or management perspective. The study will nevertheless reflect on the success rates of learners in the EDLP and relate that to the teaching processes applied. Whereas the organisation may be interested in the implementation of solutions of workplace problems proposed in research projects, this study only explores the experiences of those involved in the EDLP research projects to capture evidence of workplace learning. The study incorporates the learning of senior police officers who have attended the research methodology module of the EDLP, but limits the number of participants to retain the focus of the shaping of the research module and the teaching of the module. The experiences and learning of the senior police officers are used to reflect the effect of the trainers efforts, the impact of management decisions and the impact of organisational culture on their learning in the workplace.

This report will not reflect the competence of any of the role players in the teaching of research in SAPS. The focus is on learning and, as such, the study will attempt to draw from observations, interviews and reports to identify aspects of learning in the way that actors and participants made sense of what they were doing to assist EDLP learners to complete their projects successfully.

Even though the SAPS is in partnership with UNISA SBL, the study will not involve any of the university personnel.

4.3 RESEARCH DESIGN

The research design serves as a plan for the execution of the study. It entails the research paradigm, research approach and research strategy.

4.3.1 Research paradigm

Every attempt I made to remain neutral and objective in the collection and interpretation of data, and even in the way that I presented the data in this work, is confronted by a realisation that such neutrality and objectivity is impossible because of my experience in the setting and my strong personal beliefs. Ritchie and Lewis' (2003:20) argument that "researchers' ontological stance and subtle realism acknowledge both the importance of personal interpretations of participants' perspectives of reality, and the researcher's understanding and portrayal of participants' views". My personal beliefs, ontology, epistemology and ethical values are therefore quite important (Guba & Lincoln 1994 in Denzin & Lincoln 1994). Taking these considerations in mind, I realised that the study is positioned within the constructivist paradigm.

4.3.1.1 Ontology

My constructivist ontological position is that reality can only be known by those who experience it personally. Bryman (2012:33) asserts that "the actors in a social setting not only continually accomplish phenomena and its meaning, they also constantly revise such meanings". I am further guided by de Vos, Strydom, Fouché & Delport's view (2011:311)

that the truth is a narrative truth. My ontological stance is guided by my belief about the nature of things in the police setting where the study is conducted. It deals to the very being, or coming into existence of a reality. I found myself looking at the setting holistically to consider every possible relationship between actors, how such relationships developed and how they were maintained during the teaching of a research methodology module. In particular, I paid attention to those aspects that could shed light on workplace learning and how different groupings of employees (actors) worked together to make the teaching of research a reality and to improve on the processes and systems they developed. I therefore regarded actors' personal views, beliefs, experiences and discoveries, artefacts, actions and reactions, written texts, rules ethical values and meanings as pivotal in portraying a truthful picture of the setting as the context for workplace learning.

4.3.1.2 Epistemology

In view of my epistemological position, I believe that those who are personally experiencing such reality, or truth, construct knowledge through a process of self-conscious action (de Vos et al. 2011:1-11). Since I followed an ethnographic approach to data collection, I focussed on my interpretation of knowledge and how it could be obtained and produced in the given setting. This enabled me to get clarity on evidence needed for the study. True to the ethnographic tradition, I embarked on the collection of data through observations of the actions, behaviour, interaction and relationships of the actors and other role players in the research setting. I regarded the actors' experiences, reflections on their experiences and new discoveries as important and rich first-hand accounts of their perceptions of their real world and how they acquired knowledge. This world refers to the police training setting where research was taught, supervised and administrated. The observations and interview data were recorded and often corroborated by written reports and other internal communication between actors and role players during the teaching of a research methodology module. This multiple approach to data collection was an important consideration in helping me stay as close as possible to the truth and to validate my findings (Mouton 2002:38). Participants could, as a result, also verify my interpretations of their actions and expressions as correct and true to their reality.

4.3.1.3 Personal experiences and views

In ethnographic studies, researchers have to spend a considerable amount of time in a particular setting to gain a thorough understanding of its culture, climate and everyday life. In my case, I am an integral part of the research setting. I know the culture and climate and understand the workings of all actors. This could easily have influenced my neutrality and objectivity, but I realised that my study focused on the perceptions and understandings of the actors and my participants. It was imperative to record my interpretations of the actors' and participants' views and not my own. In this regard, I began a research diary to record my actions prior to any interviews to reflect on and assess whether or not my own emotions could have played a role in my observations and interpretations. I also recorded my observations and experiences in essay form by using a trainer interview schedule as framework.

At the start of the study I was eager to get into the fieldwork, but my enthusiasm was slightly dampened by the lack of interest shown in the research topic by senior police officers, whom I thought could be participants. This could be because research is the responsibility of a particular component of the SAPS' HRD division or perhaps because of the lack of time. However, my disappointment stems from the non-response when I embarked on the fieldwork after an initial acceptance of my invitation to participate. Nevertheless, I recorded this disappointment as a temporary setback and as motivation to search for alternative participants.

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What a disappointment! If no senior officer wants to participate in the study, i will have to rely on correspondence and reports to get their views of the research module, but it will be difficult to gain their views on how they learned and what they learned in the roll out of the research module. Perhaps I can use more learners as part of the learning process. How did they learn and what did they learn?

My diary entries helped me to both reflect on my past activities and guided me towards my future actions. I consider these as key moments in my research as they enhance the truthfulness of the narrative. However, this study will also become the product of my own construction of reality, because, as researcher, I will present only a specific version of reality rather than one that could be regarded as definitive, as argued by Bryman (2012:33).

4.3.2 Research approach

Based on the research questions of the study and the type of data they will generate, a qualitative approach was more appropriate. I discuss my rediscovery of qualitative research and the nature of qualitative research next.

4.3.2.1 Rediscovering Qualitative Research

I often ask myself the question: “am I there yet”? This, of course refers to my understanding of research. I am not new at this, but I find myself pushing the boundaries very now and then. In the end, when responding to my own seemingly rhetoric question, I must admit. I have a long way to go. Since my first encounter with qualitative research more than ten years ago, I have had the opportunity to develop a better understanding of qualitative methodology through my involvement with the teaching of a research module for the SAPS.

My learners’ exposure to research varies from being completely ignorant to being accomplished researchers. However, most learners are new to research, which prompts me to present the concepts and processes of research at both introductory and advanced levels. Over the years, I have also provided guidance to learners during their research projects. This was done at a slightly higher level than the formal structured classroom intervention.

Qualitative research is therefore not new to me. However, due to my inquisitive nature, and knowing that I struggle with routine-like or repetitive activities, I push myself into new research projects with designs different from those I have used before. In this study on workplace learning for instance, I follow an ethnographic approach as successor to a social constructivist study on the construction of professional identities in a changing work environment. In the process, I am confronted with new discoveries about the nature of qualitative research.

Various studies conducted in education the environment, or in settings where research methodology is presented as learning intervention, have prompted me to follow suit. Recent publications have indicated the usefulness of qualitative research in educational environments, including police training settings. I mention a few: *Andragogy and self-directed learning: Pillars of adult learning theory* (Merriam 2001), *Researchers are learners too:*

collaboration in research on workplace learning (Solomon et al. 2001) *McKeachie's teaching tips: Strategies, research, and theory for college and university teachers* (McKeachie 2002), *Making space for adult learners in higher education* (Osman & Castle 2006), *Research capacity development of individuals at three South African university research centres* (Dison 2007), *How does a newcomer construct identity? A socio-cultural approach to workplace learning* (Blåka & Filstad 2007).

Academic research at a South African higher education institution: Quality issues (Schulze 2008), *Teaching research methods in a distance education context: concerns and challenges* (Schulze 2009), *Academic identities and communities of practice in a professional discipline* (Jawitz 2009), *Discourse in the learning physics: the design of an introductory physics curriculum* (Marshall & Case 2010), *Learningful work: Learning to work and learning to learn* (McCormack et al. 2010), *Adapting to the contemporary learning environment: From instructional design to learning design* (Massyn & Wilkinson 2014), *Teaching critical thinking skills: A modern mandate* (Pinkney & Shaughnessy 2013)

4.3.2.2 The nature of qualitative research

Perhaps the starting point for differentiating between quantitative and qualitative research is to address the matter of what constitutes the 'truth' or truthful knowledge, because many social scientists believe in an objective world in which a body of theory can represent the 'truth'. Not all researchers agree with this. While quantitative researchers endeavour to uncover the 'truth' and develop hypotheses in objective ways, qualitative researchers tend to include subjective interpretations in their efforts to discover 'truth'. Qualitative researchers therefore show interest in the meanings and values attached to real life situations and the lived experiences of people in their natural settings (Swanson & Holton 1997:94).

Realising that qualitative research has changed face over the years, I find myself somewhere between the modernist and postmodern approaches of qualitative research. Denzin and Lincoln (2000) explain that the modernist phase is one of the earlier moments of qualitative research during which researchers emphasised social realism, naturalism and slice-of-life ethnographies. The modernist phase was preceded by the traditional period in which researchers took an objective, positivist stance when recording their accounts of field experiences. The modernist era was followed by a time of blurred genres. Researchers could

apply various paradigms, methods and strategies such as symbolic interactionism, constructivism, naturalistic enquiry, positivism, postpositivism, phenomenology, ethnography, new Marxist theory, structuralism, feminism and several racial paradigms.

The ensuing crisis of representation marked a moment in qualitative research where researchers started making their writings more reflexive while also challenging issues of gender, class and race. Researchers searched for new models of truth, method and representation. During the triple crisis, researchers explored new ways of composing ethnographic studies. Postmodernists distanced themselves from favouring a single design, method or authority as evidence of their new contemporary sensibility. Instead, theories were written as tales from the field. The reading history moment captures the earlier historical moments that are still operating in the present like a legacy of set practices about which researchers argue. However, Bryman (2012:382) adds that since 2005, there has been a “backlash against qualitative research with reassertion in government circles of the value of traditional science”.

Like Patton (1990 in Swanson & Holton 1997), Taylor and Bogdan (1998) argue that qualitative research is much more than just a set of techniques for gathering data. For them, qualitative research is concerned with the meaning that people attach to things in their lives. It is also inductive in nature and views settings holistically in order to see people, groups of people and settings as part of a whole, as opposed to variables. While qualitative research considers all perspectives as worthy of study, it is particularly interested in how people think and act in their everyday lives in their natural settings. Taylor and Bogdan (1998) consider qualitative research to be a craft that is focussed on the meaningfulness of the research. They argue that there is something to learn in all settings.

Patton (1990 in Swanson & Holton 1997) also posits that qualitative research designs are more flexible as the research process is adaptable once begun. Similarly, qualitative research views the object of study as dynamic and changing, which makes each research case unique or special. However, in the process, the researcher cannot be completely objective. Qualitative researchers therefore approach their studies with empathetic neutrality, acknowledging that they should not advance their own agendas whilst arguing that researchers cannot be completely objective. Qualitative research involves the study of phenomena as complex systems that should be studied by collecting data before offering

generalisations of the data. In other words, data analysis leads to generalisation and should contain thick or detailed descriptions of the data.

4.3.3 Research strategy

I followed an ethnographic research strategy because it offered me the opportunity to study learning in my own workplace, while working and interacting with peers on a continuous basis. In this regard, I specifically moved away from an autoethnographic account in an attempt to suppress my own subjectivity. Being one of few actors in the teaching of research at the SAPS Academy provided me the perfect opportunity to conduct fieldwork over a prolonged time, as is expected of ethnographers. It also offered me the opportunity to become acquainted with ethnographic work.

As with qualitative research, ethnography too has different genres that evolved over decades. Nader (2011:211) illustrates this by describing ethnography as:

'... never mere description, rather it is a theory of describing that has always been controversial as to the what and how thus inspiring a dynamic intellectual process. The process has been methodologically eclectic and innovative, governed by both consensual and outdated rules'

Tedlock (in Denzin & Lincoln 2000:459) shed light on the different earlier genres of ethnography and refer to classical, modernist, postmodernist and poststructuralist styles of ethnography. She explains "one of the earliest genres of ethnography is the biography or 'life history', which can be traced back to around 1918". These studies were based on interviews as the product of fieldwork. Another genre was the writing of 'memoirs' in which the author wrote about his or her experiences in the field, or the witnessing of specific events. The third genre, labelled 'narrative ethnography', has its origin in the overlap of the 'biographic' and 'memoir' genres. This genre entailed the portrayal of biographies, detailed descriptions of their subjects, and additions of the author's own interpretations or experiences in their texts (Tedlock in Denzin & Lincoln 2000:460).

Resulting from this genre was a focus on the female perspective of ethnography in which women researchers portrayed their inner feelings using the italic font to display their own contributions. These 'feminist' writings which were also psychologically rich, unsettled the boundaries of '*a self studying an other*' to give rise to a new direction of ethnographic interchange and cultural inscription (Tedlock in Denzin & Lincoln 2000:461). Feminist ethnography therefore became ethnographic critical theory, which became reflexive and political at the same time. Later still, around the 1970s, ethnographic narratives included novels that combined internal textual accuracy with external cultural accuracy.

In this case, it was a requirement for ethnographic novels to comprise accurate information on how the ethnic group that is being portrayed is organised, and how it relates - or refuses to relate - to the wider world (Tedlock in Denzin & Lincoln 2000:461). However, other authors reverted to fictive genres such as short stories, novella or plays, which were often published, to represent ethnographic materials. Tedlock (in Denzin & Lincoln 2000:463) explains that overtly applied tell-all ethnographic diaries also surfaced as acceptable ethnographic work, but with the surfacing of secret diaries, ethnographers became concerned and self-conscious about their political, ethnic and racial backgrounds, their prejudices, as well as the nature of their participation - or lack of participation - in the cultures of which they formed a part.

Although some undercover observations and undercover ethnographic work continued, it was deemed unethical and undesirable by social scientists. This undesirability and concern for unethical work led the way to further exploration of ethical and authorial issues in ethnographic accounts to invoke a more human and politically responsible role for ethnographers. Personal understandings and epistemological texts of ethnographers were advocated. This critical view resulted in a shift from '*participant observation*' to '*observation of participation*'. Tedlock (in Guba & Lincoln 2000:464) explains further what this shift means:

'...ethnographers both experience and observe their own and others' co-participation within the ethnographic scene of encounter...The shift entailed a major representational transformation... the ethnographer can present both self and other together in a single narrative...'

It is clear that recent ethnographic works have moved away from the 'objective' observer who lived in a society for a prolonged period of time, and from being emotionally involved and

objectively detached, to being more open to subjective first person accounts of their own and others' experiences (Tedlock 2000:464).

Tedlock's (2000:470) asserts that ethnographic research is particularly helpful because of its key assumption that by entering into first hand interaction with people in their everyday lives, one can gain a better understanding of the beliefs, motivations, and behaviours of subjects than with any other method. In agreement, I opted for a single narrative ethnographic approach that covers both my own experience and those of other actors in the research setting. This means that my position lies closer to the narrative nature of ethnography in which the world of the self and the actors are described by using observations, interviews and diaries to portray real life, referring to the professional relationships among actors and the workplace learning that occurs during the presentation of a research methodology module. I am supported by Brewer (2006:3) who posits that "ethnographic and qualitative research can contribute systematically to the trichotomy of the connection of theory, research and practice in that it honours both educational contexts and the genuine perspectives of those who live in it".

I therefore had to be very cautious of how I approached theory. My initial challenge was to decide how and when to engage with the theory found in the literature. I needed to make sure that I knew what to look for, but at the same time to allow the actors and the reality of the setting to tell its own story. In other words, I had to look for signs of workplace learning while simultaneously respecting the philosophy of ethnographic research designs.

Secondly, I had to consider the link between research and theory. Bryman and Bell (2003:7; Bryman 2012:20) argue that there are two issues at stake namely the form of theory one is referring to, and whether data is collected to test theory or to build theory. With regard to the form of theory, I pick up four broad approaches. These are:

- There is no generally acceptable definition for theory as it is defined in many ways by philosophers and scholars in an array of academic disciplines (Flinders & Mills 1993).
- Attempts to define theory formally are criticised. Silver (1983 in Anfara & Mertz 2006: xiv) argues that such attempts are robbing the "...true beauty, emotional significance, and its importance to everyday life". Understanding theory and how it relates to the research

process is not easy. Silver (1983 in Anfara & Mertz 2006: xiv) posits that one has "...to travel into someone else's mind and become able to perceive reality as that person does".

- When local scholars such as Mouton (1996) and de Vos (2002) refer to theory, they discuss the components thereof. These components include concepts, definitions, empirical propositions, conceptual frameworks (like typologies and models), statements and research traditions or broad theoretical paradigms.
- The level of abstraction is the criterion used to distinguish between theories like grand theories and middle range theories (Merton 1967). However, theories are also distinguished according to applicability with formal theory and substantive theory being examples (Glaser & Strauss 1967).

Grand theories that are pitched at general or abstract level, offer very little guidance for data collection during research. The middle-range theories are focussed on limited aspects of social life and operate in a limited domain (Bryman & Bell 2003:8). With regards to formal theory, Burden (2006) argues that we refer to formal theory when we refer to areas of inquiry that operate at higher levels of generality such as systems theory, but we generally use theories that are substantive in nature, like decision-making theories, when managing organisations.

To this end, I find myself closer to the middle-range theories as I try to explore and understand the social intricacies of a small group of role players to uncover the nature of workplace learning during the offering of the research module in the SAPS.

Qualitative researchers differ in opinion about the use of theory. Anfara and Mertz (2006: xix) explicate that knowledge of the role of theory leaves the reader with one of three different understandings being:

- *"...that theory has little relationship to qualitative research...;*
- *...that theory in qualitative research relates to the methodology the researcher chooses to use and the epistemologies underlying that methodology...and*

- *...that theory in qualitative research is broader and more pervasive in its role than methodology.”*

These categories are not exclusive which means authors may support more than one position (Anfara & Mertz 2006:xix).

In view of my qualitative orientation, I tend to reason inductively with data, but when referring to the literature, I find that scholars do not agree on this matter. Both inductive and deductive reasoning strategies are present in qualitative research. While inductive reasoning strategies use data to build theory, deductive reasoning strategies test theory (Bryman 2012:4-25). Creswell (2003:182-183) posits that even though the reasoning is largely inductive, both inductive and deductive strategies are at work in qualitative studies. Schurink (2005b) subsequently advises researchers to approach the application of theory in line with their own strengths. Theoretical sensitivity is a personal quality of a researcher, which is a result of the combination of professional and personal experiences and the way in which literature is read and understood (Schurink 2005b).

The debate about inductive and deductive reasoning is also present in the ethnographic method of research. Wilson and Chaddha (2010:1) explicate that ethnographic studies will rely on appreciation of both its applied methodology in the context of discovery and in terms of validity. While the ‘discovery’ refers to the way in which concepts, hypotheses and theories are uncovered, ‘validity’ refers to the evaluation of the products of social science. In the context of validation, ethnographic data can be used to test, advance or explain empirical assumptions, derived from theoretical arguments. However, Wilson and Chaddha (2010:2) argue that when theory is not present, the use of ethnography in the context of validation is problematic.

To this end Wilson and Chaddha (2010) argue that ethnographic studies have space for the use of both quantitative and qualitative approaches to theory. In other words, there are strong arguments for the use of both deductive and inductive reasoning in ethnographic research. While ethnography can be used to generate hypotheses, which could be tested through quantitative methods, it is criticised because the quantitative sampling methods struggle to generate representative samples of the population. Alternatively, by using inductive reasoning, the researcher or ethnographer integrates the new empirical findings with theoretical arguments to make sense of new data gathered in the field (Wilson & Chaddha

2010:3). I found myself leaning towards the inductive use of theory for three reasons that have been mentioned above:

- first, I did not intend to test any theory;
- second, I do not attempt to generalise any findings; and
- finally, I set out to collect data in the field, interpret such in terms of the existing literature and theorise about the workplace learning taking place in the natural setting and worlds of the actors involved in research in the SAPS.

Yet, from a totally different perspective, Nader (2011:211) explicates that ethnography is in fact theory. She posits:

“Ethnography has commonly been summarized as description, albeit description in context, but not exactly theory. Yet, theory is defined as the analysis of a set of facts in their relation to another, or the general or abstract principles of any body of facts, which to my mind makes ethnography most definitely a theoretical endeavour, one that has had and still has worldly significance, as description and explanation. Thus, the ethnography itself as well as its explanatory use is a theoretical endeavour...Ethnography, whatever it is, has never been mere description. It is also theoretical in its mode of description. Indeed, ethnography is a theory of description.”

Taking cognisance of Nader's (2011:211) argument that ethnography is, in fact, a theory of description, I was also reminded by Schurink (2005b) that such descriptions are a product of one's own sensitivity to theory and a combination of professional and personal experiences. Subsequently, and as mentioned earlier and based on the focus of this study, I scan-read the literature to familiarise myself with predominant theories of adult learning, other contemporary learning theories and more particularly, theories related to workplace learning. However, I had to be careful not to study each theory as I could fall into the trap of 'boxing' all data into an existing theory of workplace learning. In my inductive reasoning then, I consciously collected and analysed data with an open mind before attempting to make sense of it by referring to literature or developing any form of theory. I discuss these learning theories in more detail in chapter 3.

4.4 RESEARCH METHODS

In this section, I deliberate on the selection of participants for the study and the methods used to collect data, including interviews, document analysis, observations and the writing of an autoethnographic essay. This is followed by an explanation of how data were analysed and trustworthiness was maintained.

4.4.1 Selection of participants

A closer look at the research setting is needed to provide more context for the EDLP research module. It also explains the role and the location of the actors in teaching research.

4.4.1.1 Research process overview

Until recently the Executive Centre was managed by a colonel, two trainers at middle management level (lieutenant colonels) and three administrative clerks. The housekeeping was managed by a housekeeper and three cleaners. Currently, all personnel report to the training manager of the Academy.

The main responsibility of the personnel is to plan and coordinate the training programmes (EDLP). An average of four programmes is presented per calendar year. On average, 25 learners attend each programme. The coordination includes the travel and accommodation arrangements of a number of visiting trainers. These are trainers that work operationally and who contribute policing or technical knowledge during the six-week first phase of the EDLP. The academy trainers provide the generic skills and ensure that the training intervention is delivered professionally in terms of the SAPS education, training and development policies.

The planning for the EDLP is done by one of the two research trainers who acts as coordinator for the duration of the six weeks. The coordinator receives the learners on arrival and ensures that they are comfortable in their accommodation. The coordinator also ensures that there are enough trainers available to present all modules of the EDLP. Trainers must submit a lesson plan to the coordinator at the start of each module. The coordinator will then ensure that the learners' competence assessments are completed and that their achievements are recorded on the police's training administration system.

The training provisioning or administration clerks are responsible for the drafting of name cards for the lecture room, the registration of learners on the police training administration system, the recording of assessment marks and the safekeeping of the learners' portfolios of evidence after the programme. They also handle enquiries about the EDLP. One of the clerks provides a learner support service which assists learners with their travel arrangements, financial claims, email and faxing of documents and visits to doctors.

The research module has three phases. The research process starts when the learners, long before they report for the training programme, must identify a suitable research topic that is relevant to their workplace. Once their immediate supervisors and provincial or divisional commissioners have given consent for the initial research topic, the approval document is submitted to the course coordinator of the EDLP who keeps the topics on file until the start of the course. Learners can amend the topic but must have it approved again.

Learner progress is monitored during teaching through formative assessments in the form of a skeleton research proposal (4-Pager) and three improved drafts of their complete research proposals. This is filed in the learners' portfolios of evidence. The final proposals are then submitted to the SAPS HRD Research Committee for ethics clearance and approval of the research topics. The proposals and approval letter is then handed to the learner for acknowledgement and signature before filing a copy of the proposal and the approval letter in the learners' portfolios of evidence.

Every submission, whether for guidance or assessment, is filed in a separate learner research file. The research file is a record of the progress of the learner and is evidence of the natural history of the movement of documents and communication between the learner and research supervisor. The complete reports that are submitted for assessment are recorded in a separate file that accounts for the receipt and allocation of reports to assessors. Reports are booked out and back against a signature to ensure that no reports are lost.

Assessors sign for the research reports and use an assessment rubric for assessment. Learners are informed of the outcome of the assessment by means of a letter which contains some feedback about the quality of the report. Learner progress and feedback is also captured on a separate database that forms a back-up system and provides a record for

handling learner enquiries. Thereafter, the assessor feedback and marking rubric is scanned and emailed to the learner before being filed in the learner's research file.

If the learner is declared competent, he/she has the opportunity to address assessor concerns, affect final amendments and compile a slideshow presentation. The assessment rubric and final decision of the research panel reflect the learner's competence. The learner receives a certificate if declared competent, but only after the achievement has been captured on the SAPS training administration system. The presentation, research report, marking rubric and assessment decision feedback is filed in the learner's research file, while a copy of the assessment decision is placed in the learner's portfolio of evidence.

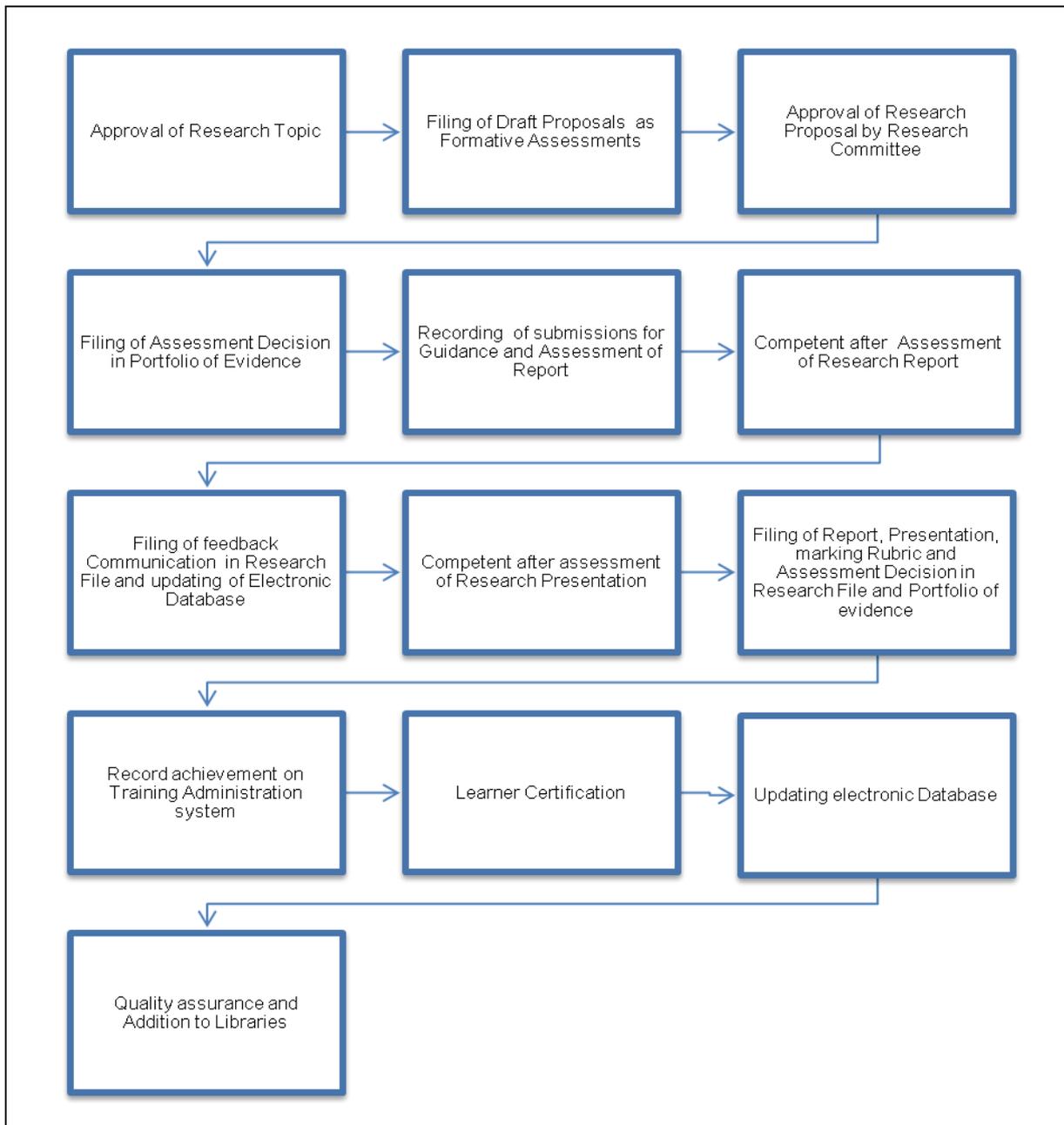
This, however, is not the end of the process as the learner's research report has to be edited and quality checked once more to minimise the risk of plagiarism and the knowledge gained added to the knowledge repository in the SAPS libraries. An entry to this effect is made on the electronic research database of the EDLP. An electronic copy of the final report and presentation is kept at the Executive Centre and another at the office of the Head: General Research and Curriculum Development at the Division: HRD at the Head Office. Schematically, the paper trail and administrative process is as illustrated in figure 4.1.

All personnel are extremely busy during the training intervention, but administrative personnel get to enjoy a more relaxed time when the first phase concludes. Administrative personnel still handle the administrative work of the research when there are no learners at the Executive Centre. The research trainers remain busy with supervision of all learners who are busy with their research projects at their workplaces. The number of researchers in the field varies from 25 to roughly 100 at any given point in time during a calendar year. This is due to the training model used to teach research methodology.

Learners spend four weeks on research at the Executive Centre. Thereafter they have 20 weeks in which to complete their research projects. If the assessors declare them competent, the learners are then called to present their research findings to a panel consisting of very senior police officers. The two trainers are involved in all three these phases, but each time in a different role. They are trainers during phase 1, study leaders and assessors or moderators during phase 2 and administrators during the third phase when panel presentations are done. One of the trainers also represents the learners at the SAPS HRD

Research Committee during phase 1. A review of learning material and teaching methods takes place, but mostly at home due to the demands of the research supervision and assessment.

Figure 4.1: Simplified administrative process of EDLP research project



I have now described the research setting where the foundation for fieldwork is laid in a structured formal learning environment. This is the location for the collection of data from Academy documents such as course reports and research-related communication, and the place where interviews are held. This is where I work and interact with other actors to teach the research module.

Next, I elaborate on my journey of rediscovering qualitative research methodologies.

4.4.1.2 Location of participants

Although some aspects of the research module are dealt with in other parts of South Africa, the bulk of the work is done at the SAPS Academy in Paarl. Paarl is situated in the Winelands District of the Western Province. The environment is not as fast paced as other parts of the country and the laid-back culture of the community provides for a relaxed atmosphere for the SAPS Academy.

The SAPS Academy has three campuses; the Main Campus that accommodates the administrative functions, the library, the learner support component and the management of the Academy. It also provides accommodation for approximately three hundred learners at its student residence. The Operational Centre, which is situated a short distance from the Main Campus, can accommodate approximately sixty learners and is home to all operational police leadership training. The Executive Centre is situated between the Main Campus and the Operational Centre and offers executive level learning programmes for up to thirty learners at a time. This is where the EDLP is presented and administrated. It has its own unique sub-culture within the bigger culture of the SAPS Academy and SAPS as an organisation. The Executive Centre was often referred to as the 'old age home' or 'the island' due to the different sub-culture and climate in the workplace, the way business is done and the make-up of the personnel who work there.

The SAPS Academy Paarl Executive Centre was the research setting, and its personnel and their roles and responsibilities in relation to research formed part of the study. However, it needs mentioning here that the EDLP Panel Presentations have also moved to Paarl since the adoption of the three-phase EDLP model. In the past, these panels were conducted in the provinces or at the Division HRD's offices in Pretoria, but regardless of where the panel

presentations occurred, the administrators were always one of the two EDLP research trainers.

Some of the research assessors that served on the EDLP panels are still working in Pretoria and participated in the study via telephone or e-mail. The divisional commissioner and the head of the division HRD's General Research and Curriculum Development Component are both situated in Pretoria. They also participated in the research from their offices by means of electronic interviews.

The bulk of the data was collected at the SAPS Academy, Paarl and since my office is situated in the Executive Centre the data was analysed and stored there.

4.4.1.3 Selection of participants

The following role players were involved in the delivery of the EDLP Research Methodology module:

- The Divisional Commissioner: HRD who had to approve the learning programme as part of the annual skills development plan;
- The programme developer of the General Research and Curriculum Development Component;
- The Head of the General Research and Curriculum Development Component who had to establish a HRD Research Committee;
- The Head of the Leadership, Management and International Development Component
- The Section Head for Leadership and Management Development;
- Programme coordinators situated at the Division and at the SAPS Academy in Paarl;
- Commander of SAPS Academy, Paarl who hosted the learners;
- Commanders of EDLP learners who had to approve the proposed research topics before they reported for the course;
- Police trainers who facilitated the learning of research methodology;
- HRD Research Committee members who considered and evaluated the research proposals for approval;
- Assessors and moderators of the research reports;

- Research panel assessors of the research projects who evaluated the methodology and outcomes of the research project for recommendation and implementation of proposed solutions;
- Administrative clerks who recorded the progress of each learner, and
- The learners who attended the learning programme.

It requires mentioning that several of the actors listed above were involved in the research module at more than one level. For instance, a line manager who has a particular role in managing the research module might serve as a research panel member too. If that member was interviewed, both of these roles are covered in the interview. Another example is where the trainers act as facilitators, assessors, moderators and administrators at panel presentations. Participants were therefore able to share experiences about different roles in the teaching of the research module. A smaller research sample did not necessarily mean less rich data.

Initially, when I planned my study and during the writing of my research proposal, I anticipated the inclusion of all actors directly involved in the research module teaching and due to the small number of actors, I did not apply any sampling technique. The whole population (those actors directly involved in the research teaching on a regular basis) constituted the research sample. The sample included all actors at all levels of the research module offering, except the commanders of learners who served on the research panels because of their limited exposure and experience. However, in terms of the learners, I have purposefully selected learners who have conducted research in the workplace, and included both learners who have successfully completed their research projects and those who have not been able to do so. Only four learners were selected for the study, as the focus was more on how the actors learned to teach research, rather than how the learners learned to do research, although both aspects have been covered.

I also included the most senior officers (major generals) as possible participants due to their involvement in the research teaching at different levels. I also personally invited and discussed my study with one of these senior managers during his visit to the SAPS Academy in Paarl during November 2015. At that stage, the officer accepted my invitation, but we agreed that I would conduct an electronic interview due to his limited time and hectic diary. This unfortunately never materialised. I have sent the informed consent document and

covering invitational letter via email, but have not received any response to it. I was very disappointed not to receive any response from the two most senior actors in the research teaching. However, I still continued to search for their contributions to the research module in the minutes of meetings and other correspondence, and using informants to identify other possible participants who had exposure to working with these two senior managers.

I managed to get interviews with a member who worked with these key players in the research development, assessment and evaluation of the practical value of the projects. The participant could share his experience as he worked closely with both of the senior officers who opted not to respond to my invitation.

My invitations to participate in my study were, in general, received very positively. I managed to interview the following 11 purposefully selected actors during December 2015, and January, February and March in 2016:

I managed to interview two participants involved with the design and development of the research methodology module. These participants shed were able to shed light on the development considerations of the research module and the role of adult learning principles in the training intervention.

I also interviewed two members of the SAPS HRD Research Committee who were responsible for the assessment and evaluation of the learners' research proposals. Their contributions helped me to understand how the HRD Research Committee learned to assess and evaluate proposals in the organisation.

Further, I managed to hold in-depth one-on-one interviews with a trainer and assessor involved in the teaching of the research module. Two other trainers declined the invitation. I suspect that they felt intimidated by me, who, as head of research in the academy, would have been in a position to 'expose' their level of knowledge of research methodology.

I managed to hold an in-depth one-on-one interview with an assessor of the panel presentations. This assessor was very helpful and shared rich experiences.

Two administrative clerks were interviewed about their experiences and how they learned to record and respond to learners' enquiries. I preferred shorter and more frequent one-on-one interviews than longer interviews that might keep them away from their work.

I have interviewed five EDLP learners about their research experiences in an attempt to uncover what they have learned and how they 'gained' that knowledge when they conducted their research projects in the workplace. These learners were identified through a consideration of their competence levels on the research module. I selected two learners who have passed the research module and two members who failed their research module assessments.

Finally, I have written an ethnographic essay about my own experiences during the teaching of the research module. I tried to apply a free writing style without proper structure or planning in an attempt to avoid over-thinking and the influence of other actors in the setting. I also wrote my essay in December when I was away from the workplace concomitant influences, before engaging in any interviews with other actors. I believe that I stayed more objective by so doing.

4.4.2 Data collection

As mentioned earlier in this chapter, I only obtained permission to conduct fieldwork in December 2015. This created various challenges for me as many actors, participants and administrative personnel who work with filing and archiving were either already on leave, or about to go on leave for the summer holidays. However, I had to make certain decisions regarding data collection. What follows is an elucidation of this process. Data collection included interviews, document analysis, observations and an autoethnographic essay, which not only offered different views and perspectives of actors and participants, but contributed to the accuracy and truthfulness of the narrative. To this end, the findings and recommendations may find its way to various academics and policy makers in institutions in South Africa, the Southern African region and abroad. Applying multiple methods is also an attempt to uncover those aspects that hamper or enable workplace learning in a South African policing context which hosts a variety of cultures, ethnic groupings and languages.

4.4.2.1 Interviews

Ethnographic research requires the researcher to spend extended time on participant observation in the research setting and have frequent, less structured interviews with the actors (Bryman 2012:469). Participants are encouraged to express their points of view in their own way and going off at a tangent is encouraged as it helps the researcher to gain insights into what the actors see as important. To this end, I could rely on the flexibility allowed by qualitative interviews to ask follow-up questions later in the interview or as casual talks while working (Bryman 2012:470). This follows on Punch's (1998:74) assertion that the interview is a good way of assessing people's perceptions, meanings, definition of situations and their construction of reality.

It needs mentioning that the interview schedules were drafted after my initial scan of the literature on workplace learning and ways of constructing research methodology interventions. I kept the questions regarding workplace learning fairly generic or even vague to allow for any possible response that could facilitate understanding of how such learning is constructed. The instrument was subsequently also divided into two sections of two main questions each. An example of the interview schedule is attached as Annexure A

Being an actor in the workplace made it easy to conduct face-to-face interviews in a one-on-one basis without interfering with the participant's actual work at that moment. Doing the interviews while the participants were working allowed me time to observe what they were doing and I could evaluate their body language during the conversation. I could sense for instance when participants P6 and P7 did not feel comfortable talking about another actor's work and their progress in the process. In such instances, I would wait for a while, then return with a quick question when other actors were not in the vicinity. I became very aware of the fact that even if everything looks well on the surface, there are often undercurrents of mistrust among the actors. Nevertheless, I only engaged in interviews once I had obtained the participants' informed consent.

What was surprising to me was the fact that when participants P6 and P7 were together, they would openly state that I can talk to them as if their inclusion in the research created some sort of elevated status or importance, but later when I approached them, they would find the time a little inconvenient for them. I therefore relied on other methods of data collection in the

workplace such as observation and document analysis. My intention to interview the actors had to change form. Instead of sitting and discussing a topic according to an interview schedule, I had to treat every question in the interview schedule as a separate short unstructured face-to-face interview in order to respect the natural business of the setting. Lee (1999:62) supports this approach by arguing that even with semi-structured interviews the researcher is free to pursue matters as circumstances dictate. None of these interviews was voice-recorded. I made notes of my interviews and my interpretations of these interviews as I made progress.

I extended email invitations to participate in my research to several other role players involved in the research teaching. Most of these role players were working in Pretoria at the Division of Human Resource Development. Some of the respondents accepted my invitation, but requested that they do the interviews electronically by email due to the extremely busy time of the year. I agreed to this, but also asked if I could follow up on their interviews should I have questions during data analysis. All participants who chose the electronic interviews agreed to this. As with the administrators, I obtained these participants' informed consent prior to providing them with the interview schedule. All questions were open-ended and I clearly indicated what type of information I was interested in. However, I noticed when I received their responses late in December 2015 and early January 2016 that I would have to engage in further telephone interviews because it was not as rich in information as I hoped for. Follow-up interviews could not be done shortly after receiving the responses, because my participants went on vacation. Another reason for not following up on these interviews immediately was that I intended writing an autoethnographic essay about my experience as research trainer at the SAPS academy and I did not want to be influenced in any way by the responses of other participants. To this end, follow-up telephone interviews only commenced after I wrote my essay during January 2016.

Two other participants (P4 & P5) availed themselves for interviews in January 2016. I conducted these interviews in their offices to allow them the comfort of their own personal space. To this end, I followed a less structured approach when I noticed that they did not feel comfortable with a long structured interview. I had provided these participants with the interview schedule for them to consider their responses before the start of the interviews. I suspect that the number of questions in the instrument made them think that the interviews would be lengthy. Nevertheless, the longest continuous interview lasted 47 minutes. The

interviews were recorded and transcribed early in February 2016. I managed to interview P9 while transcribing these interviews. I made use of the notes made during the interview to prompt other participants' responses. For instance, I referred to the act of reflecting on previous experiences to improve current and future activities with several participants. However, I was also careful not to use my interview notes too rigidly as this may have prevented me from projecting my own thoughts onto the participants. To this end, I interviewed learners in the research module (participants 10 11 12 & 13) in an unstructured manner to allow them to speak freely about the topic and to avoid introducing existing themes in the interviews. These interviews were conducted on 7 April 2016, and since they were the last ones, I specifically wanted to establish whether new themes could be uncovered from the participants' experiences.

I noticed during my interviews, that the participants spoke freely when there was no sign of either a voice recorder or note-taking. Thus, I had to make my interview notes when I returned to my office.

4.4.2.2 Document analysis

I gained useful information about the activities of the actors on the project. I could use various unsolicited documents such as course reports in which the number of successful learners were indicated. I could for instance compare the number of learners in a class with the number of research topics approved by the HRD Research Committee. This gave me an idea of the strength of the class as a whole in terms of research methodology. If the class had a 100% competence rate on the other modules, but struggled with the research module's proposal phase, I could search for references to problems during the course.

I could also compare the overall percentages obtained by competent learners with the submission rates of research reports as these could provide more information on the mental ability of learners who succeed in written examinations when compared to their ability to complete their research. Such instances could be explored by looking to the workplace as a site of learning. Although it was not the purpose of this study, it could use basic ratios of learners to trainers, or phase 1 competence against phase 2 competence, as basis for further exploration.

I could access a research communication file that contained the communication between the trainers and the commander and between the trainers and the HRD Research Committee of HRD Division. I also had access to numerous official correspondences such as call-up instructions, internal memos and other documents that provided insights into the development of the research module over time. Minutes of meetings proved very helpful in this regard too.

Learners' research files provided information on the guidance given to learners. It also contained assessment instruments and feedback to learners at the different stages of their research. Other correspondence was accessed using the official email of the administrators and on my personal laptop.

Finally, and to a limited extent, I referred to personal diaries of participants to see whether any entry had been made concerning particular events during a course, or incidents worth noting in a diary.

I analysed documents according to an analysis sheet that contained elements of workplace learning, adult learning or the teaching of research methodology. The instrument is attached as Annexure B

My document analysis was further guided by Scott's (1990:6 in Bryman 2012:544) four pertinent requirements concerning the use of documents in qualitative data. These are that documents are required to be authentic and the origin thereof not questionable. They have to be credible, contain no margin for error in the evidence and they also have to be representative of typical documents in the workplace. Lastly, their meaning has to be clear.

4.4.2.3 Participant observations

Participant observation started on 5 December 2015 when I had received permission from my commander to conduct the study in the SAPS Academy and lasted until 30 March 2016. I made notes of my observations while I conducted my interviews with participants. I tried not to openly engage in observations, but with so few actors working in the setting, it was close to impossible not to be seen making notes of an observation. I realised that participants

became aware of being observed, which at some stage caused them to remain in their offices for longer periods than they would normally do. Yet another participant wanted to engage with me over the study at every possible moment. I sensed that she wanted to get a message across that she could explain the workplace learning in the workplace. I sat through such deliberations and pondered about the motive for that, but later when the participant was on leave, I realised that she had read about my research topic and was providing practical examples of what she had read. It made me rethink my approach. I decided to thank all participants for their participation in the study and continued to work as I always did. With participants thinking the study was something of the past, activities returned to normal. I could continue with observations, but this time more unobtrusively.

I was particularly interested in how the actors in the study handled their tasks and how they learned to cope with challenges. I wanted to know when and how they approached someone else to assist or guide him or her in addressing issues. I also tried to establish how power relationships, if any, developed and existed. In view of the workplace learning focus of the study, I set out to determine what the nature of the learner-trainer-relationship was and whether or not this relationship had any effect on the research outcome of the learners. Through observations, I needed to see whether or not the actions of the participants supported what they were saying during interviews.

I found support in Bryman's (2012:494) advantages for using participant observation. First, one sees the setting through the eyes of the participant. Second, the researcher learns the language of the actors. Third, things that cannot be seen in an interview can be observed in natural activities. Fourth, the researcher gets to witness the insider culture and hidden activities of the participants in their natural settings. Fifth, the researcher can map out the context within which activities occur due to his or her prolonged exposure to the setting. Sixth, it is possible to uncover unexpected issues in the workplace other than those that were anticipated and lastly, the researcher can portray the accounts of participants in a more natural way because of the close involvement with them.

I found that my observations provided more clarity for my interview data. It either confirmed what the participant had said or contested it. For instance, P6 logged on to her computer to retrieve previous examples of particular documents to prepare for the next research panels. This supported her statement in her interview that she had learned from past experiences

how to do the work. In another example, I observed that participant P7 explained to her supervisor that she had been extremely busy and could not get her assignment done in time. My observation was, however, that the participant had worked on her daughters' school activities. Participant observations also helped me to correctly interpret language usage and terms such as 'call-up' and 'TAS-ed' in the cultural context of the Academy. In this setting 'call-up' refers to the learners called up to attend a course and 'TAS-ed' refers to the capturing of the learners records on a Training Administration System.

4.4.2.4 Personal experience

I intended to use the interview schedule that I had developed for the trainers as guide for my own interview, as if someone else interviewed me, but decided against it. Firstly, I thought it would be an artificial exercise in which I would have to think about my responses, which could have been influenced by what I have heard, experienced or noticed as something that is lacking in the other interviews. In other words, I feared being subjective and driven towards stating what was not emerging from my data collection methods. I therefore decided to write an autoethnographic essay in which I apply a free-writing approach. This required me to write about my experience of the research module in a way that tells the story, the history and my personal experiences during that journey without over-thinking what I wrote. I kept on writing without any planning or structure to my essay. In the end, I managed to write nine pages which covered a period that exceeds the time frame covered by my observations in the setting. In other words, I could cover the history of the research module and my experiences of a longer period than the time spent on observations.

In order to counter any subjectivity, I could triangulate such data with earlier letters and memoranda to the commander, minutes of meetings and information in other official reports. However, Scott (1990 in Bryman 1012:545) asserts that of importance is that the personal document is authentic (written by me) and that it is credible, portraying the factual accuracy (of the occurrence) and the true feelings of the writer (me). I could, as a result, not only tell the story of the research module, but also uncover feelings of hopelessness during assessments, feeling alienated from the rest of the Academy and being accused of segregating the Executive Centre as 'an island and old age home for snobs' during the writing of my essay. These aspects are picked up in the following chapter. However, I tried to bring the actors or participants and myself closer in this essay. The breaking down of distance

between the participants' accounts and that of the researcher is typical of ethnographers (Plummer 2001). In this regard, I regard the essay as an autoethnographic script which contributes to the larger ethnography told by all the actors and its artefacts.

4.4.3 Data analysis

Although my data collection through observations and interviews only stretched from December 2015 the end of April 2016, I managed to collect data that dates back to the start of the research module in 2010. Even my personal experience, which I captured in an autoethnographic essay, covered my experience with research from 2010 until today. In this final stage, I offer an account of my data analysis process, how I handled quality issues during the study, and I conclude with the writing of the thesis and my personal experience during the study.

I normally apply a manual process of data analysis. It helps me to think, consider and reconsider every element of data. I really aim to understand what every piece of evidence tells me. Doing data analysis manually affords me the opportunity to spend time with my data. However, this time I reconsidered my approach since my study is about workplace learning, which requires me to tackle the process of data analysis slightly differently. I solicited the help of ATLAS.ti 7, a software package that can assist with the analysis of qualitative data, but I could not start using it immediately, as I first had to prepare my data and learn how to use it.

The data obtained from documents had to be captured on computer before I could analyse it with software. The volumes of document data had to be recorded on electronic templates of the data analysis sheet. The data could then be read and analysed as individual documents by using ATLAS.ti 7 software. This was a painstakingly slow process. However, coding was much easier than my manual process, which demanded a comprehensive list of codes and references to its origin.

- The ATLAS.ti software required of me to identify and write the codes for specific texts. I had to apply my mind to interpret the data and, in doing so, became aware of the emergence of themes. Bryman (2012:580) asserts that a theme is a category of data that relates to the research focus, builds on the codes identified in the transcriptions or field notes and that provides the basis for a theoretical understanding of the data.

To this end, computer-assisted qualitative data analysis (CAQDAS) is particularly helpful in the analysis as it takes over many of the manual tasks associated with the coding process (Bryman 2012:591). Such software is in effect a code-and-retrieve system. An extraction of the strength of codes in the study is depicted in Table 4.1. These codes have been studied again and grouped into themes or categories of data that relate to the literature, particularly the themes for further empirical research. For instance, the literature pointed out that '*Critical thinking skills and reflection are needed for ontological shifts*' and that '*Reflective thinking and experience stimulates learning*'. In the data I found codes pertaining to '*learning from reflection*' which led to the theme '*Reflection surfaced as being prominent in workplace learning*' which I discussed later in Chapters 6 and 7.

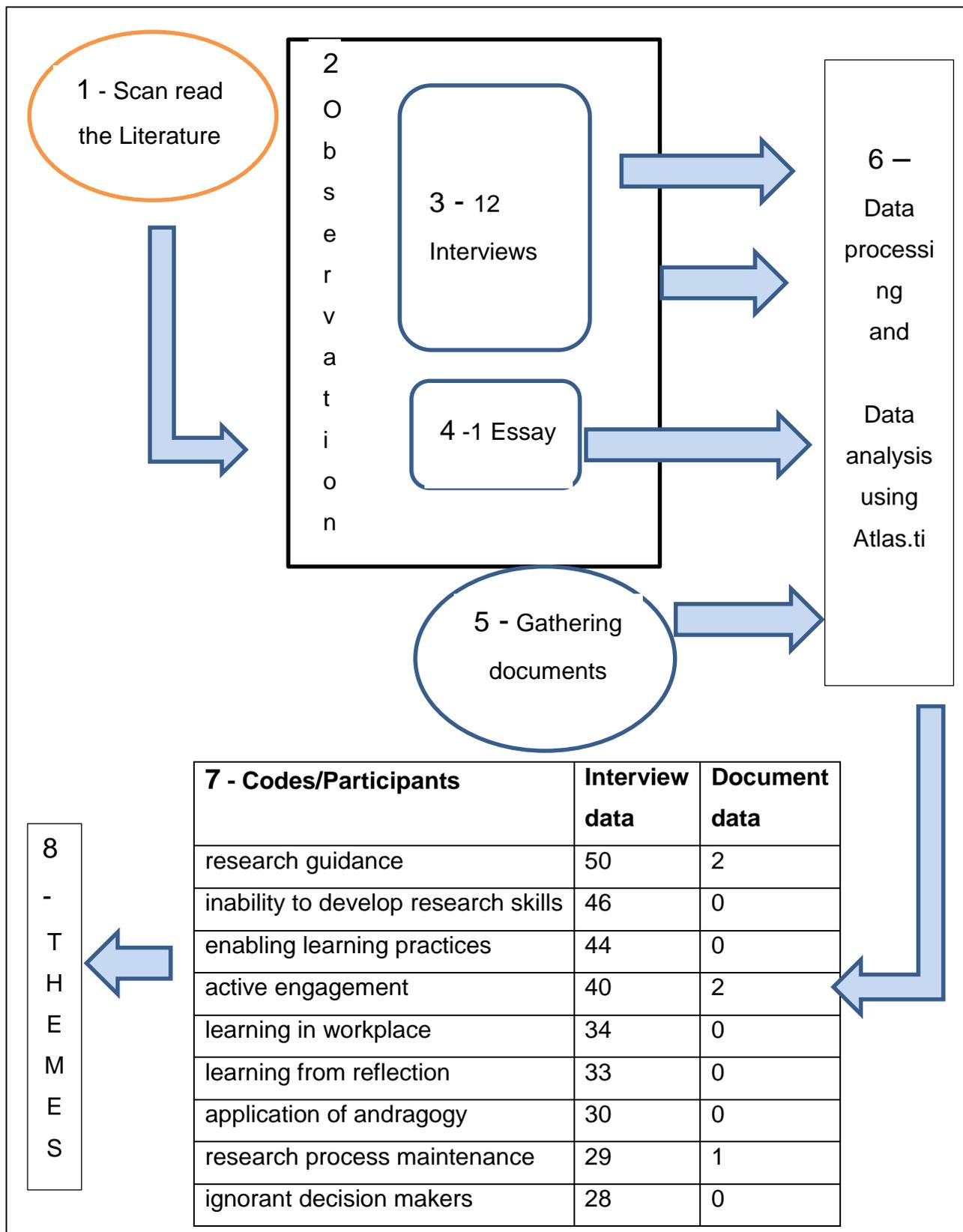
Table 4.1 Extraction of code strengths in interviews

Codes/Participants	P1	P2	P3	P4	P 5	P7	P8	P10	TOTALS
<i>research guidance</i>	2	4	2	8	18	2	12	2	50
<i>inability to develop research skills</i>	6	3	0	10	10	0	17	0	46
<i>enabling learning practices</i>	8	4	1	12	4	1	14	0	44
<i>active engagement</i>	3	3	1	6	11	1	13	2	40
<i>learning in workplace</i>	5	5	2	5	12	2	3	0	34
<i>learning from reflection</i>	1	2	0	10	5	4	11	0	33
<i>application of andragogy</i>	3	2	0	13	4	2	6	0	30
<i>research process maintenance</i>	1	1	1	7	1	4	13	1	29
<i>ignorant decision makers</i>	3	1	2	10	1	2	9	0	28
<i>informal learning</i>	1	0	2	5	7	4	7	2	28
<i>COP at EC</i>	0	0	1	4	1	10	8	2	26
<i>empowerment for learning</i>	0	1	2	12	1	0	7	1	24
<i>building emotional support structures</i>	0	0	0	6	4	0	12	1	23
<i>integration of theory into the workplace</i>	0	0	1	11	8	1	1	0	22
<i>workplace learning versus police culture</i>	5	2	2	5	4	0	3	0	21
<i>protecting status quo</i>	2	2	1	4	3	0	5	0	17
<i>structure of programme</i>	3	1	0	4	0	0	2	0	10
<i>learning to deal with pressure</i>	0	0	0	0	1	0	7	0	8
<i>skills dev approach</i>	2	0	1	1	2	0	1	0	7
<i>changing nature of workplace</i>	0	0	0	0	0	5	0	0	5
TOTALS	45	31	19	133	97	38	151	11	525

Finally, by using tangible handwritten notes and schematic representations of the themes to display the data, I could reconfirm the relationship between themes. It also helped me to determine the most appropriate means of presenting the data so that it portrayed a lifelike, provocative and believable presentation of reality. This would enable readers to put themselves in the world of the trainers and feel empathy with the other research role players.

The data analysis process can be illustrated as in figure 4.2 below.

Figure 4.2: Data collection and analysis process



4.4.4 Measures for trustworthiness

There are different views about the 'measurement' of quality, because the term is normally associated with measurement validity in quantitative research. LeCompte and Goetz (1982 in Bryman 2012:390) argued that "external reliability and external validity is not suitable for use in qualitative studies". They also suggest alternative interpretations for internal reliability and internal validity. Guba and Lincoln (1994) proposed two primary criteria for assessing qualitative studies. They refer to 'trustworthiness' and 'authenticity', each with its own set of sub-criteria.

In terms of trustworthiness, Guba and Lincoln (1994) suggest:

- *Credibility* – researchers are required to show that they applied sound research methods (good practice) and that they correctly understood the social world. This can be achieved through member validation or triangulation;
- *Transferability* – researchers should provide thick descriptions of the data to provide others with a database for making judgements about the possible transferability of such data to other settings;
- *Dependability* – researchers should keep proper record of all their activities and evidence and prove that proper procedures were followed during the study. The documents should be available for scrutinising; and
- *Confirmability* – researchers should indicate their objectivity and show that they have not overtly allowed personal values or theoretical inclinations to influence their findings.

In terms of authenticity, Guba and Lincoln (1994) argue for the following critical aspects:

- *Fairness*- the study has to reflect different viewpoints among members of the setting;
- *Ontological authenticity* – these members have to reach better understandings of their social environment;
- *Educative authenticity* – the members should come to appreciate the perspectives of other members of their social setting;
- *Catalytic authenticity* – the research should act as an impetus to engage in action to change the circumstances and
- *Tactical authenticity* – the research should empower members to take steps to engage in action.

I found that I was comfortable with the criteria for trustworthiness, but I was challenged by the criteria for authenticity as Guba and Lincoln (1994) propose. The reason is that the authenticity criterion seems to place an expectation on the research to make the participants being studied aware of alternative situations to enable them to change their circumstances. This is unlikely to happen in my situation, because the setting operates in a militaristic culture where decisions are made at the top and cascaded down to the lower levels. I have also experienced before that, although I want to learn from the setting, the SAPS Academy does not appreciate the value of individual studies. The organisation also does not consider research like this able to affect changes in the organisation. For these reasons, although selfish, I felt that I would search for another alternative to assess the quality of my study.

Bryman (2012:393) draws from Yardley (2000) to posit alternative quality criteria. Yardley (2000 in Bryman 2012:393) argues for:

- *Sensitivity to context* – context refers to the context of the social setting, theoretical perspectives and ethical issues;
- *Commitment and rigour* – researchers should engage substantially with the subject matter, have the necessary skills and apply thorough data collection and analysis;
- *Transparency and coherence* – research methods should be clearly specified, have clearly articulated arguments and possess a reflective stance; and
- *Impact and importance* – the research should impact on theory, the social setting and researchers.

I subsequently applied Yardley's (2000) criteria for quality in my study. I achieved this by being sensitive to the setting where I conducted the research. I tried not to disrupt or intervene with the everyday operations of the setting. However, I am an actor in the setting and I therefore guarded against bias and influence over the other actors' behaviour. I was also sensitive in the way that I approached theories of learning, particularly workplace learning. I engaged with theory inductively and therefore started with data that were grounded in the experiences and the conduct of the actors.

As actor in the research setting, I could reflect on my own experiences in an auto-ethnographic fashion and at the same time observe the actions and relationships among the other actors over an extended period, but took care not to project my own experiences as

that of the other actors. As this was not an autoethnographic study, I deliberately made use of the other actors' experiences and document analysis to 'balance' my own contribution. To this end, I managed to obtain various indigenous documents in the files and correspondence from the setting. The key moments in the development of the research module could, for instance, be mapped to get an idea of how it evolved to its current status. Although the actual data collection period extended to just over four months, the data collection process involved data that stretched from 2009 to 2016. The document analysis only involved unsolicited artefacts such as letters, internal communications, policy documents and strategies, learner records, archived learner research files, the research module content, presentations and minutes of meetings. My observation notes and interview notes complemented interview and document data. I portray the history of the study in a transparent manner in which I regularly reflect on my key decisions during the execution of my study. An abridged timeline of my interview data collection process is illustrated in Table 4.2.

Table 4.2 Abridged interview data collection history

10 October 2015:	Obtained permission to conduct research in SAPS.
4 December 2015:	Obtained permission to do research at Academy.
4 December 2015:	Approached potential participants for interviews.
5 December 2015 to 30 March 2016	Observations and document data analysis
17 December 2015:	Interviewed P3
18 December 2015:	Interviewed P1
4 January 2016:	Interviewed P4
7 January 2016:	Interviewed P2
8 January 2016:	Interviewed P5
3 February 2016:	Interviewed P6
5-6 February 2016:	Wrote autoethnographic essay
10 February 2016:	Interviewed P7
15 February 2016:	Follow up interview with P6
12-16 February 2016:	Transcribe interview of P5
29 February 2016	Interviewed P9
29 February 2016	Follow up interview with P4
4 April 2016	Interviewed P10, P11, P12, P13

Regarding the criterion of research impact and importance, I realise that the study may have importance for the theory of workplace learning. However, from experience, I know that the SAPS is far from a learning organisation. It does not consider the academic work of its employees unless it was instructed as part of a specific project. While there is a renewed focus on academic qualifications in the SAPS, there is little consideration given to the products of such qualifications. The approval of this study was given without any condition to provide the organisation with a copy of my research report. There is no restriction placed on possible publication, even though my study was funded by the SAPS. Nevertheless, the study may have some impact on other similar organisations that wish to inculcate a culture of research as a problem-solving mechanism. I return to the assessment of the study's quality in the last chapter in par. 7.7 when I reflect on the 'goodness' of the study.

4.4.5 Ethical measures

While explicating how sound research ethics were applied, I offer some practical considerations during the research. I discuss my entrance into the setting and how data were processed and treated,

4.4.5.1 Entrance, practical concerns and ethics

Entrance into the setting was gained by seeking permission from the gatekeeper of data sources at the Academy. In this case I had to obtain permission from the Commander of the SAPS Academy. This was done in writing but only once the SAPS HRD Research Committee had approved my research proposal (see the *annexures* C and D). (Attached application letter and the permission from the Commander of the SAPS Academy as annexures)

I had to deal with a few practical concerns at first before I could start data collection. I had to clarify my own role in the SAPS Academy and determine whether or not my position of authority would influence the outcome of the research. I needed to know that being known to everybody in the setting would not impact negatively on the interviews. The possibility of promotion for my colleagues and myself when competing for the same post had to be considered during the planning for interviews. Scheduling interviews at the wrong time could be devastating for my study. Another aspect that was a concern initially, was that in such a

small environment where participants work so closely, people could easily withdraw from the study if they sense that someone might be discussing their work. These sensitivities were addressed by being open and honest about everything that I did during the study. I also had to display sound research ethics.

4.4.5.2 Data capturing, storing, retrieving and safeguarding

Data were captured by means of digital voice recordings and transcriptions of recordings, electronic interview schedules, field notes of interviews and observations and unsolicited documents. Data management activities coincided with data collection, which demanded a structured approach. I needed to know upfront how I would deal with literature sources and the evidence collected during fieldwork. I found this tedious and slow. My literature review and theoretical perspectives guided the development of my data -collection instruments and the execution of fieldwork.

As explicated in chapter 1, codes were assigned to interviews, such as P1 or P2 in the top right-hand corner of the printed documents to respect the concept of anonymity. I assigned the participant codes as I obtained the data, and tried to stay close to the predetermined participant codes indicated in my research proposal. Electronic interviews and follow up interview notes were filed together, while voice recorded interviews were transcribed before a hard copy was filed. I used the hard copies for the initial data scan and analysis process, but kept the electronic versions of the interview data in a particular folder on my computer for further analysis. Notes on the interviews were attached to the hard copies of the interviews. However, before I engaged in any interview, I first discussed and explained the purpose of the research and the reason for approaching the actor. Once they agreed to participate, I continued to explain that their participation was voluntary and that they could withdraw at any moment and I would honour our agreement. The data would also be presented so as to avoid exposure of identity, but participants were not concerned about that as the study did not contain elements of sensitivity or personal exposure. When participants understood the agreement they signed the informed consent agreement form as provided by the University of South Africa (UNISA). The participant received a copy of this form and the original was filed with the interview notes or transcripts.

Participants participated without any undue influence or persuasion and they understood that I was not in a position to offer any reward for their participation. Most participants were my senior in rank and as such, as research trainer, I did not intimidate them at all. The administration clerks report to other managers and I am also not in a position to influence their careers in any way. All participants were comfortable to share their experiences with me. As an actor in the research module teaching, I maintained objectivity as far as possible by referring uncertainties back to participants during follow-up interviews. I validated my interpretation of the data. I did not let my emotions and prior knowledge of the setting dictate the interviews or interpretations of observations. I often validated such interpretations with the participants. The matter of confidentiality plays no role in the study, as no confidential data was shared during interviews or uncovered in the setting. When it surfaced later that the identity of the participants at the Executive Centre might be exposed, the matter was discussed with them and written confirmation was received that I could continue to use excerpts of the interviews even if it meant possible exposure of identity. The references and the disclosing of the identity of the SAPS Academy therefore has no harming impact on the participants.

Observations were done unobtrusively from 5 December 2015 to 30 March 2016 while I carried out my work as normal. I made my field notes as soon as I got back to my office where the actors could not see that I was making notes about their behaviour or our conversations. These notes were used to provide more clarity during data analysis, and were stored with the interview transcripts.

Documents were studied in the workplace and copies were made for further study when it was more convenient. The documents' details were recorded and the completed document analysis sheets were filed in a separate container in the sequence of their analysis. A reference number was written on the top right-hand corner of each document.

Electronic copies of data are stored on my laptop and access to it is protected by a password. I have made a back-up copy of my study on a memory stick to protect my data from loss. Hard copies of my data are stored in my study at home. Only my wife and I have access to my office. My wife is a chartered accountant who honours her profession's code of ethics and as such also respects my work as researcher. The integrity of my data is safe and protected.

4.4.5.3 The role of literature in data analysis

Further to my discussion in Chapter 1 in which I outlined my initial use of theory during the planning phase, I now explicate the use of theory during the execution of the study to demonstrate that data were collected and treated inductively, in its original form without bias or the influence of detailed literature expositions.

Before I began my research,, I scanned the literature on workplace learning to get a better understanding of what I might encounter. It is of no use to me to enter a setting blindfolded and try to make sense of the experience afterwards. I would not have been able to recognise what I observed in the workplace. It is only when one has an idea of the literature that one can start noticing such occurrences and be able to attach meaning to them. I therefore entered the setting with a basic overview of what the theory of workplace learning entails. I have, however, gained a good idea of the practical application of research teaching and as such could relate to various literatures on the teaching of research modules in workplaces. In this regard, I could observe and identify practices in the setting that point to adult learning pedagogy or similarities with best practices found in the literature.

The setting was, nevertheless approached with the intention to observe and experience first, before consulting the literature for clarity on what I observed or experienced. Using inductive reasoning made the applied research process clearer. For instance, I could observe nervousness in the behaviour of P4 shortly before submitting a report to the HRD Research Committee or when feedback was given to him/her. I could sense anxiety about the reflection of the reports on the expertise of P4 and his/her fear of being disappointed. In both instances, the behaviour relates to a concern over the quality aspect of the report, which in itself reflects the quality of teaching, supervision, plagiarism checks and support provided to the learner.

In terms of the theory of workplace learning, I submerged myself in the setting and the data before referring to the literature. I could describe the relationships and power plays in the setting, but for its interpretation I regularly moved back to the literature to link my observations and data with theories such as Wenger's (1998) theory of Communities of Practice and the debates between individual learning and social learning, informal learning and formal learning, and Billett's (2004) affordances to learning. Even during my data analysis, I still had

to conduct follow-up interviews to check if I had interpreted data correctly in terms of the literature.

In the end, I could consider the themes in the data as it related to elements of existing learning theories and, in particular, determine whether or not new knowledge has been uncovered.

4.5 SUMMARY

This chapter captured the rationale and execution of the study. I explained how my ontological and epistemological positions fall into the constructivist paradigm and how the nature of the research questions steered my research into the qualitative approach. Typical of ethnographic research strategies, I used interviews, observations and document analysis as methods of data collection. Interview schedules contained open-ended questions to allow participants to share and elaborate on their experiences and opinions. The data were supplemented by an autoethnographic essay, in which I shared my own rich data.

Eleven participants were interviewed. While the number of participants represents a small sample, it represents the bulk of the relevant population; the role players in the teaching of research in the SAPS. To this end, I offered an overview of the EDLP research process to provide more contexts about the location of the research participants.

The data analysis involved the use of Atlas.ti 7 software and a manual process of linking themes in networks. Data were processed on computer and stored electronically. Hard copies of transcripts, document analysis sheets were stored in containers in my study at home. Nobody has access to the data but me.

Paying attention to preserving the quality of the study, I committed to the criteria proposed by Yardley (2000 in Bryman 2012:393). These criteria include sensitivity to context, commitment and rigour of data collection and analysis processes, transparency and coherence of presentation, and the impact and importance of the study. Finally, I explained the application of research ethics during data collection, analysis and in dealing with literature.

In the next chapter, I offer the empirical data and a discussion thereof to explicate the meaning of such data in relation to the research questions of the study.

CHAPTER: 5 EMPIRICAL FINDINGS

5.1 INTRODUCTION

This study set out to explore two main questions in order to gain more insight into workplace learning in the South African Police Service (SAPS).

Firstly, how did the SAPS learn to teach research methodology to its senior managers? I intended to find the answer by asking the following sub-questions:

- How has the SAPS Research Methodology **module content** evolved since its inception?
- How has the **delivery method** of the module developed to its current form?

Secondly, what workplace learning has taken place during the teaching of research methodology? I explored these sub-questions:

- What were the experiences of those involved in the **shaping** of the Research Methodology Module of the SAPS?
- Which lessons have been learnt in the process of **teaching** research methodology to senior police officers?
- What were the experiences of SAPS lecturers in **supervising** learners in their research?
- What has been learned by the senior police officers who attended the research methodology module of the EDLP during their research projects?

This chapter therefore builds on the literature of Chapter 2, the theoretical framework of Chapter 3 and the natural history and methodology of the study, which I explicated in Chapter 4. In Chapter 5, I offer the integrated data that I have collected through interviews, observations and document analysis.

I offer the data by firstly focusing on the design part of the module, followed by the delivery part of the module and also by taking the natural history of the module's existence into

account. Finally, I offer an account of the lessons learned by the participants during the delivery of the research module.

5.2 RESEARCH PROCESS

As alluded to in chapter 4, the research did not proceed as planned. Some of the role players that initially accepted a personal invitation to participate did not respond to my written invitation. Others who acknowledged receipt of my invitation to participate replied that they were interested, but never responded to my follow-up invitation again. These role players were my seniors so I could not persuade them to participate in my research.

The time of data collection proved problematic. I obtained permission to access data shortly before the summer school holidays. Most research role players are office workers who normally take leave to go on vacation during December. Thus, quite a number of actors were not available for the study. However, I managed to conduct a few good interviews, which provided rich data. The interview data was supplemented by an array of indigenous, unsolicited documents. Observations commenced on 5 December 2015 and continued to 30 March 2016.

The data that I collected were enough and rich enough to sufficiently answer the research questions of the study. I made use of excerpts of interviews, field notes and unsolicited documents, such as official correspondence, in order to retain the trustworthiness of the study.

5.3 DATA ANALYSIS

5.3.1 Biographical data

Biographically, my participants have been summarised in Table 5.1. I have deliberately avoided using police ranks or designations in the table because of the limited number of actors and role players and did not want to provide more information than needed about their identities. It is possible that some actors could be identified, but this had been explained to them and they accepted that. In any event, I have not discussed or disclosed any personal

matters that could reflect negatively on any of the participants. In my mind, I knew that evidence of several sources and data obtained through interviews would be integrated in the text of the the report. However, I also knew that I would let the participants speak for themselves in the report to enhance the originality and quality of the study. To this end, I have made elaborate use of excerpts from interviews and official correspondence.

Table 5.1: Biographical information of participants

Participant Number	Years in SAPS	Gender	Role	Years involved in Research
P1	32	Male	Training advisor and developer	6
P2	6	Male	Developer of Module	4
P3	15	Female	Assessor at HRD Research Committee	2
P4	28	Female	Trainer, assessor and moderator of research reports	6
P5	25	Female	Assessor at research panel presentations	2
P6	18	Female	Research administrator	6
P7	22	Female	Research administrator	6
P8	27	Male	Trainer, assessor and moderator	6
P9	25	Female	Learner	1
P10	27	Female	Learner	1
P11	31	Male	Learner	1
P12	23	Female	Learner	1
P13	31	Male	Learner	1

5.3.2 Analysis of data

In my presentation, I sequenced the empirical data in terms of the research questions of the study. To capture the history, I provided a narrative of the initial considerations of the development of the research module. Then, I used the data in terms of the broader themes that emerged from them to respond to the development of the research module, the delivery

thereof and the experiences of the role players involved in the teaching of the research module. The empirical data section is concluded by offering the lessons that were learned during the teaching.

The development, delivery and experiences account for the workplace learning that result from teaching research to senior police officers of SAPS. These aspects are picked up again during the discussion of the empirical data in par. 5.4.

5.3.3 Empirical data

Data are used in the initial consideration for developing the research methodology module, the research module evolution, the delivery of the research module, experiencing the shaping of the Research Methodology Module and the lessons learned during the teaching of the research.

5.3.3.1 Initial considerations for developing the research methodology module

The old EDP, presented from 2006 to 2008, was an outsourced programme that was presented to police officers by retired university professors. P8 recalls that the EDP was based on the needs of some of the SAPS' most senior officers. Provincial and divisional commissioners and a few station commanders were interviewed as part of an organisational needs analysis. The product, the EDP, was however very generic. A few selected police officers, who were considered specialists in their respective fields, were mentored on the presentation of the EDP modules. They had to complete the course successfully. The trainers were considered knowledgeable and able to present the modules on their own after two years of presenting the EDP modules under the professors' supervision. However, at the end of the contract with the provider, SAPS had nothing but a portfolio file with just a few bullets or questions in it and the experience of the few SAPS trainers who presented the modules.

This realisation that SAPS had, in fact, not purchased learning material gave birth to the development of a new EDP in 2009. It was called the EDLP. The new EDLP was to be aligned with the police organisation and it had to move away from its very generic approach to management and leadership. It was argued at the time that much of the finance and supply chain modules were too business-focussed. When the organisational alignment of the EDLP

commenced, no new needs analysis was done. Nor was the reliability of the needs on which the EDP was based, tested. P4 explains that learners' needs were not taken into account when the module was designed. P1 argues that the reason for not doing the needs analysis was due to the EDLP being an organisational initiative (P1:56), but P4 does not support this stance. P4 asserts that the SAPS was only concerned with its workplace skills plan, which is implemented because of legislation, not because the organisation believes and supports the development of its employees. The reason for this conclusion is that when one considers the amount of money spent on the development of employees in comparison with the return on investment, there is little to show (P4:225). The organisation also did not commit to a career path for its employees. Training and development in the organisation, thus, are not necessarily focussed on the future needs of employees (P4:130).

P1 remembers that adult learning principles were not considered because the EDLP was meant to be rank-based. The learning programme was designed for the senior management of SAPS (rank level of brigadier or higher). When officers were appointed on these levels, they had to be nominated to attend a specific course (P1:71). In other words only certain levels of senior management were targeted for executive development and learners were nominated purely because they were already in the specific ranks targeted by the EDLP (P1:66). Another participant had a different view. According to P2, adult learning principles were considered but were not followed due to the time constraints and outcomes expected from the module (P2:62). However, the development of the EDLP was not the responsibility of the programme developers alone. In the beginning, when the course material for the new EDLP was put together, and on several occasions thereafter, the trainers assisted by validating the content and the context of the modules. These discussions and consultations led to creation of the initial content of the modules (P1:152).

The EDLP development was based on the knowledge and experience of the old EDP trainers rather than on a consideration of the real needs of the target group. P5 posits that the problem with the EDLP target groups is that many of them tend to be older than other employees and often they do not know how to use technology. Many of the senior police officers, for instance, ask other people to type their 'stuff' for them (P5:85). Yet, the EDLP requires learners to be able to use computers, printers, internet and email. These are all vital information and communication technology resources in a learner's life (P3:146).

The custodians of the EDLP never anticipated that the success of the EDLP would come to rest on the success of the research module. Learners could successfully complete all the other EDLP modules, but if they failed to complete the research module, they failed the whole EDLP. This aspect was known right from the start. They also assumed that most senior police officers who formed part of the target group had never been exposed to research methodology before (P1:50). On hindsight, P2 admits that research is an inherently difficult subject to grasp for first time learners, and the SAPS did not take into consideration that some of the learners that were going to be exposed to the subject did not have prior experience of it. Therefore, there should have been a provision that allowed newer learners to better understand the topic before entering the EDLP (P2:48). P5 reflects on the target group abilities:

I think sometimes we expect more of them than they can give us. It's not everyone that can...in SAPS all Brigadiers and Generals are expected to do the EDLP. It's not everyone who is able to successfully complete it and we must start understanding that people are different. Some people have the skills and the ability to do the EDLP - because it is a very high level programme - and some people just don't have the skills and abilities to successfully complete the research part of the programme (P5:109).

The trainers added another consideration that might have been overlooked, perhaps due to the unavailability of the required statistics of the target group. They refer to the level of qualifications of EDLP delegates, which plays an important role in the successful completion of the learning intervention as it reveals the level of exposure to research methodology in formal studies. They argue that research methodology is generally covered as part of structured university programmes at first undergraduate and honours degree levels. The number of respondents exposed to research methodology prior to attending the EDLP is extremely important and should be taken into account in the research methodology lectures in the institutional phase. When they analysed the percentages in 2012, the results showed that at least 50% of EDLP learners who attended the EDLP in 2010 and 2011 had had prior knowledge of research methodology or had done research before. Only 33% indicated otherwise. The learners' exposure provided a good foundation for the EDLP to present research at a moderate level of difficulty while paying extra attention to those that had not

had exposure to research (Schwartz & Human¹ 2012). However, this consideration was never taken into account when the module was initiated.

P1 supports the trainers' discovery, adding that some members attending the EDLP course did have exposure to higher level competencies and/or tertiary qualifications, but they were unfortunately not exempted (or their experience recognised) from this phase of learning (P1:56). This position, that recognition of prior learning is not applicable to EDLP learners, was officially communicated within the organisation (SAPS 2011c). For P5, research is something new in SAPS. Although there was a research section in SAPS that dealt with a small amount of research, there was not really a lot of attention given to research in SAPS (P5:6). P4's point of view is that the SAPS' position regarding recognition of prior learning was realistic. In P4's experience, some learners indicated that they were on a high level and that the level of the research presentation was too low for their current knowledge and experiences thus they could not demonstrate their knowledge or experience in their research reports. They either did not submit a report, or the submitted reports were not on the expected level (P4:77).

The first version of the EDLP made provision for a two-day research teaching module in which complete novices were expected to develop specific knowledge, skills and attitude. The research module aimed to develop adequate knowledge of research methodology and referencing techniques. Learners had to develop research skills such as proposal writing, report writing, analytical thinking and data collection. This learning was supported by values of ethical data collection, reporting and authenticity (SAPS Academy Paarl 2011b).

EDLP learners thus received a two-day lecture on research methodology, focussing on what comprises research and basic research methodologies (SAPS 2010a). Research as a science, was not covered comprehensively, but the basic literature was offered as an introduction. For some or other reason, the SAPS interpreted the EDLP research module as somewhat different to generic academic research in the sense that the two-day introductory level lecture was a sufficiently police-specific approach that could be applied by learners in their workplaces (SAPS 2011c).

¹ I treated the report as a product of the trainers' learning, an indigenous unsolicited document, and not as literature.

As support, learners were provided with a basic textbook for an introductory level of research, but the level was too low for those learners that had been exposed to research before (SAPS 2011b). The learning guide contained slides of the presentation that had been based on the elementary research textbook (Schwartz & Human 2012). Learners were subsequently assessed on different levels of difficulty regardless of this lack of depth in the module. While the module content was not enough to enable learners to get a full picture of what research proposals entail, their knowledge was tested by a formative measurement instrument, a four-page skeleton research proposal. This was an overnight assignment and learners generally did well (SAPS 2010b). The third assessment was summative and required learners to use their research proposals to conduct their studies on an identified problem or focus area in the workplace. The initial consideration was for learners to be exposed to elementary research projects. This was evident in the very low-level criteria set in the marking rubric of the research report (SAPS 2010c).

The development of the first version of the EDLP left an astonishing amount of practical challenges in the hands of the trainers. P8 recalls how he accidentally got involved with the research module shortly after obtaining his doctorate degree. He felt that the programme depended on his knowledge and experience of research, which he did not have much of at the time. However, his doctorate was more than the qualifications most other trainers had. So, he committed himself to the research module in addition to two other modules he was already involved in. The trainers had only an introductory research textbook available to teach research methodology. To this end, the trainers quickly learned that they had to supplement the textbook with additional handouts of academic writing and examples of research proposals (Schwartz & Human 2012). The research module required extraordinary effort from both trainers and individuals. Trainers had to have contact with learners on a continuous basis to determine progress and give individual advice, but the scope thereof was unknown (P1:126). In fact, the trainers were overloaded with the volumes of research projects at any given moment, and the management responsible for the successful implementation were not interested in addressing the real challenges (P1:173). Initially, perhaps because of the police culture and rank system, trainers were not allowed to communicate directly with the learners when the learners were working on their research projects in the workplace. Such communication had to go via the commander's office, but later when P8 stated at a meeting that the trainers could not guide the learners if they could not communicate with them directly, the decision was changed (P8:25).

The developers of the EDLP did not consider the demands of a research module on the EDLP trainers. As a result, only two trainers were assigned, but the Division: HRD realised later more trainers should be identified. The research process demanded a strong, motivated team to drive and encourage successful completion of research projects (P4:137), but not everyone was eager to get involved in the research module. Several trainers of the Academy were invited to become part of the research team, but they had no intention of getting involved with research. They nevertheless used the research module to negotiate their own research skills development without applying their newly developed skills in the EDLP. Yet, not even a year later, the very same people who did not want to get involved with the research were put on another course so that they could obtain master's degrees in order for them to learn how to do research (P8:23). One trainer grabbed the opportunity. P4 asserts her gratitude for being fortunate enough to work with a very knowledgeable person who could mentor her throughout the research teaching process (P4:131).

After the first class, which the developer thought went very well, P8 set out to improve the research offering on several levels (P8:13). Unfortunately, when new ideas on how to improve the research module were suggested, these improvements were not considered. P1 recalled this. He explains that when dialogues took place at EDLP trainer meetings, they were not necessarily taken seriously enough by the decision-makers (P1:162). Nevertheless, P8 shared his proposed amendments to the research module, which he presented at a trainers meeting on 2011-06-20. Table 5.2 depicts P8's suggestion of a pre-course workshop for learners to help prepare them for the EDLP.

Table 5.2: Proposed pre-course workshop

Pre-Course Workshop		
Topic	Content	Duration
Introduction to Research	Research, Processes, Topics, Questions	2 days
Concepts in Research	Data, Units of Analysis, Populations, etc, Settings	1 day
Research Methods	Qualitative	2 days
	Quantitative	2 days
	Strategies, Instruments	
EDLP Course		
Research Proposals	Content, quality aspects	3 days
Operationalisation	Issues to consider	1 day
Reporting	Academic writing, Referencing	1 day

This proposal was never accepted. It seemed as if those who ordered the inclusion of research methodology in the EDLP had not been exposed to the subject content themselves. Thus, they did not understand the impact of their instruction (P1:61). They did not know how much work is involved in research, and they still do not know (P7:18). This apparent lack of understanding paved the way for an additional third phase in the research. The addition, a third phase, required learners to present implementation plans for their research findings to increase return on investment.

Later when some uncertainty arose about the purpose of the third phase, the research panel presentations, P8 was called to explain the reason for the decision taken at the earlier EDLP trainers meeting. Clarity was also provided by P5. She explicated that the initial idea of the panel presentations was to offer an opportunity to assess individual presentation skills that demonstrate the presentation skills acquired during group presentations in phase 2 (SAPS 2011d). Of greater concern to P4 and P8 was that some of the changes to the programme were made with the input of all trainers of the EDLP, whether they understood research or not. P8 vented his frustration when he asserts:

I suppose the majority vote counted, even though none of those trainers were prepared to teach or capable of teaching research methodology (P8:17).

Nevertheless, the research trainers' recommendation that the second and third phase summative assessments would measure the same thing, was disregarded when the assessment instrument for the third phase panel presentations was developed. Instead, all the course trainers broke into brainstorming groups and came up with the criteria that they thought should be assessed. When the two research presenters looked at the criteria, they included the content of the second phase marking rubric. The other trainers did not know that so they just listed what they thought should be assessed. In the end, the two research trainers were instructed to develop weights for the criteria and develop an assessment instrument (P8:18). Problems with that particular assessment instrument kept surfacing after each presentation to the research panel, because learners complained that they were being assessed on the report content twice. P8 was instructed to develop another instrument suitable for the panel presentations, a more academic instrument to help the panel members protect the organisation against claims of plagiarism. When, however, the new instrument was introduced, neither the panel members nor the panel administrator could understand the terminology. The new academic instrument was never used and the panel fell back onto using the old instrument (P8:18).

The initial considerations also did not include the difficulty the workplace managers had understanding the multi-phase approach of the EDLP. This was evident at the SAPS Academy. P7 posits that she discussed many issues with the previous training manager, but he did not understand her challenges with the training administration system because he did not understand the research module (P7:18). Moreover, due to the lack of understanding by learners' commanders of the intensity of some of the projects, learners were not always afforded the opportunity to take the time they needed to adequately conduct their research (P2:147). This lack of understanding and support seemed to have a demoralising effect on learner attitudes towards research. One particular respondent stated in despair that:

...not all learners' working conditions and work pressure is the same, I do not have any time available. IT IS QUITE NORMAL TO WORK EXTRA HOURS, OVER WEEKENDS AND EVEN HAVE LEAVE CONCELED. The pressure at work is already tremendous and this research report is adding to the stress, and has made the experience of the EDLP course unpleasant and is creating a negative perception and feel towards learning which should be appreciated and enjoyed.

There has been constant threats of disciplinary actions been taken and money been deducted. Learners are being punished for NYC. Since when is it a requirement in any training institution that you must be found competent and if not, there is a price to pay. If that is the case learners should be evaluated first before attending the course and only learners who are found to be high intellectual level should attend the EDLP course and complete the Research report, it is obviously not for all (Respondent 14 in Schwartz & Human 2012).

According to P4, the challenge of learners to manage the demands of the workplace does not support the outcome of the programme and the response from the Division: HRD to learners' requests for extensions were sometimes unrealistic in the sense that the postponements were of too short a period to complete the study. This response from the division de-motivated the learners and harmed the relationship between the academy and the workplace (P4:123). EDLP learners appeared very frustrated when drastic and compelling measures to force them to complete their studies were introduced by the Division: HRD (SAPS 2011e).

The design of the programme did not provide for time to discuss the roll-out of the learners' research proposals, although learners were clear about their research assignment. What was expected of them when they left the SAPS Academy was explained briefly by the trainers and learners were given additional handouts about the operationalisation. The situation was not ideal because there was no time allocated to discuss the operationalisation of research proposals in the workplace (Schwartz & Human 2012). To this end, EDLP learners asked that more quality time should be spent in class, using the necessary textbooks and covering more examples of all kinds of research. (Respondent 14 in Schwartz & Human 2012).

For P8, the most critical aspect was the administrative process of the research module as it was never considered. There was no system or process in place for receiving and recording reports. The management's decision was that hard copies of the reports were to be couriered to the SAPS Academy, but there was nothing said about recording the communication between trainers and learners during the research projects. Everything that exist had to be developed by the trainers and administrators (P8:25).

P7 explains her involvement in the research module:

The research started with the learners who come to the course with a research topic. They work on a proposal while they are here at the Academy and when they leave after six weeks they should have their research proposal approved. If the proposal is approved they can continue to do their research in the workplace. When they have completed their reports they submit it to the Academy for marking. The trainers mark the assessments, and when they have marked the research reports it comes to me and X to give the feedback to the learners. We show them where and what to correct. When the corrections are done (by the learner) it is send back to the trainer for reassessment. If the learner is successful, I send the feedback to the learner and inform them to prepare for the presentation of the report (P7:22).

The initial considerations put the learners at a disadvantage and overloaded the research trainers. The first research model of the EDLP was based on uninformed decisions and a lack of understanding of what research and the administration of research entail. The programme was rolled out and reviewed from time to time, but such EDLP trainer meetings basically just dealt with research methodology (P8). I discuss the EDLP research process next.

5.3.3.2 The research module evolution

(i) Adapting to learner needs

Police officers who attended the EDLP were senior police officials who had gained vast amounts of experience in the organisation and in life in general. While their seniority was acknowledged and respected at the Executive Centre, many of them stated openly that they did not want to be there and some of them even withdrew for trivial reasons. However, the course reports do not reflect this unwillingness to do the course. Instead, it reflected reasons such as work commitment or personal reasons (P8). Some learners started panicking during the opening of the EDLP when the Section Head for Leadership and Management Development addressed them. The Section Head's over-emphasis on research and the financial implications that learners would face if they failed the course weighed heavy on the learners. P8 and P4 were often faced with tension in class after the course opening. They had to do 'damage control' with the learners in class. This normally ranged from affording

learners time to vent their frustration, to explaining the purpose for the research module being included in the EDLP. The trainers often used the first opportunity they were given to reflect on the learners' fears and concerns. These concerns triggered the development of an opening presentation that provided an overview of the EDLP and the outcomes of the EDLP, particularly the research module. The presentation did not form part of the module content, but rather an addition that was used to address some of the learners' initial objections to the research module. Learners generally only started settling in after lunch on the first day of the course. The slideshow was the trainers' own initiative which helped to reduce learner anxiety but at the same time reduce the research lecture time considerably (P8).

Addressing learner needs took priority over teaching on day one. The administrative personnel and the housekeeper played critical roles on the first day. They had to address all accommodation matters, dietary needs and transport arrangements for learners returning to their workplaces. The trainers realised that such concerns, if not addressed immediately, could easily escalate to bigger issues, especially when the learning process was not going too well for the learners. Even though it was not considered during the design of the module, P4 and P8 incorporated adult learning principles into the research model. In their approach, they created research building blocks that could enable understanding of the research principles and process. The trainers reflected on this in their own study in 2012. They argued that EDLP learners tend to behave differently when they find themselves in the academic world, when they do research, or when they learn to do research. Here, they find themselves exposed to adult learning principles that acknowledge prior learning and experience. Building onto existing knowledge is vital according to Bloom's taxonomy of learning (1959) and it demands that educators ensure a proper foundational knowledge from which to progress (Schwartz & Human 2012).

The building blocks included the initial introduction of research as a science, what it is, and what it is not. In the first programme, this was done by going straight into the definitions of research and research methodology, but later on P8 and P4 started using an icebreaker, which covered the research process. This allowed learners to use their logic to assess the validity of the claims made in the presentation. The debate that was sparked by the icebreaker created the opportunity to create learner interest in research and to allay fears of not being able to grasp basic research concepts. The trainers could then explain to the

learners how the different phases in the research process forms the research cycle (SAPS Academy Paarl 2011b).

The second step was to assist learners to learn at their own pace. The trainers' experience of the first two courses made them realise that some learners fell behind and were unable to catch up due to the pace of the EDLP. Learners were asked to work on their own research topic. An earlier lesson plan indicated the approach of the trainers:

Give each learner a copy of the handout (format of the process to be followed when doing a research proposal). This form must be used to complete learners' own shortened research design. The learners are allowed to do the exercise in the library. The facilitator facilitates the manner in which scientific referencing is done (SAPS Academy Paarl 2011b).

The trainers had to keep the learning experience realistic. Based on their experience of the 2010 programmes and of drafting several versions of a workbook in 2011, the trainers introduced the final version in January 2012. The workbook consisted of specific questions that guided learners to answer questions about their topics, research problems and where they originate from. Questions 3 –10 in workbook, for instance, gradually guided learners to the identification of a problem in the workplace by posing specific questions to the learners (SAPS Academy Paarl 2013a). The workbook did not put the responsibility for grasping research solely in the hands of the learners. It rather emphasised the co-responsibility of learner and teacher. Its opening paragraph reads:

Welcome to Research Methodology! In this workbook, we shall explore our ways of thinking about knowledge, scientific knowledge, research ethics and professional conduct. We will utilise our knowledge of research concepts to formulate a research problem and design a study. So, explore your thoughts and carefully construct your own research proposal.

Use the questions and activities below to guide your thoughts... (SAPS Academy Paarl 2012a)

The workbook could also be used in class to record notes on their research topics. P8 explained that the workbook questions were incorporated into the slideshow presentation of

the trainers. Both trainers used exactly the same presentation and lesson plans as a standardised approach, specifically when learners were separated into two classes. However, this only happened when all learners could not be accommodated in one lecture room. Learners were encouraged to complete all the questions in the workbook because they would help them to define their research problems clearly. The inclusion of the newly developed workbook which supplemented the research presentation was presented to the HRD Research Committee to show the progress made in the quality of the presentations and also illustrate the capability of the research trainers (SAPS 2012d).

However, the research methodology chapter of the EDLP required diligence from learners to read and practice self-study on aspects of research that were not covered during lectures. This third building block was the learners' responsibility. Learners received an additional file with reading matter for self-study on relevant literature on research methodology (SAPS 2012d). Participants 8 and 4 made several handouts on research methods for the learners. These included easy-reading articles that explained qualitative and quantitative data collection methodology as well as 'heavy reading' articles for those few learners who have done research before. At one point P4 and P8 provided learners with a whole file of additional research reading matter. Yet, after each course, they realised that learners never referred to the reading matter and also did not read the prescribed textbook. They could not find any reference to such additional reading material in their research proposals (P8:15).

The fact that learners resisted reading was the most problematic aspect of the research module. In the first programmes, the research textbook for the module, although very basic and introductory, was considered to be enough to help learners to understand research. However, the textbook had to be supplemented with extra reading material when the organisational expectations of the research module increased. When the trainers realised that the learners do not use the handouts, they stopped handing out the additional reading material and focused more on the learners' self-exploration of ideas and concepts. Initially, learners only had to draft a 4-page skeleton proposal, which was assessed and filed in the learner's portfolio of evidence. Later, when learners were expected to actually conduct the study in the workplace, they had to be prepared for the practical roll-out of the proposal. More time had to be spent on practical exercises on data collection and analysis, academic writing and referencing. Extra effort was made to assist learners with mastering the Harvard referencing method to avoid plagiarism. Learners were also taken to the SAPS Academy

library where they could learn from a slideshow and through practical exercises. They had the opportunity to learn how the library operates and could search for literature on their topics (SAPS Academy Paarl 2013a).

One of the trainers, P8, recalls his experience of learning research on his own and the effect of just completing assignments for the sake of going through the motions:

I must say that the research methodology course that I have done a year before my first Masters study did not help me at all. I think everyone feels the same way after that course. It was a distance-learning course which prompted one to read the textbook and to complete multiple-choice assignments. I have not read the book and just jumped into searching for answers to the assignment questions. Needless to say that that exercise made me more confused than ever, because I could link individual phrases to a specific term without knowing what it means. So later, when I started teaching research, I started giving an overview of research first before going into the detail of the process and concepts (P8:29).

This realisation of the need for interaction with others as part of learning led to the idea of another building block that could expose learners to debates and small group discussions. P4 explains the trainers' rationale:

...the delivery method encourages critical thinking and learners had the opportunity to analyse previous studies and discuss it. The learners also had the opportunity to discuss each one's topic in a small group discussion. Each learner in the small group had the opportunity to ask the researcher valuable questions on the topic to be considered in the problem formulation and during the compilation of the research proposal. These small group discussions assisted the researcher to understand his or her problem much better as he or she had to answer questions from other learners who did not have the same knowledge of that specific environment. The discussions on the problem statements took actually quite a while and also prevent the learners from working towards their own solutions, as the presenters could eliminate that approach. The problem formulation forms the basis of the research and if the problem could not be

defined, the learner had to consider another topic. It also assisted the learner in the design and methodology, once the problem is clearly defined (P4:89).

In an effort to encourage peer interaction among learners, Participants 8 and 4 considered the benefits of a learning buddy system. P8 became aware of it in the Master's Degree in Adult Education which he enrolled for to become a better research teacher. After some deliberation and reflection about its fit in a militaristic police culture, they implemented the study buddy system to get the learners to share their studies and ideas with a study partner. The study partner idea was introduced in a short information note that read as follows:

Your task will be to read and discuss each other's research proposals and supervisor comments. You also have to advise and guide your learning partner on how best to address the shortcomings in the proposals. Remember that good advice will always be to substantiate your proposed solutions by referring to the textbook of CJ White (An introduction to research methodology). You need to guide and support your partner towards the final product: a research proposal that is ready for submission to the SAPS HRD Research Committee. Any document in your Research File can assist in your preparations (SAPS Academy Paarl 2011c).

Additional articles on study partnerships were handed out to learners to familiarise themselves with the concept. The study partner system could help learners assist and motivate each other, but the concept was not received well and learners threatened to withdraw because they did not want to work with someone else who knew less than themselves (P8:15).

(ii) Responding to changing organisational needs

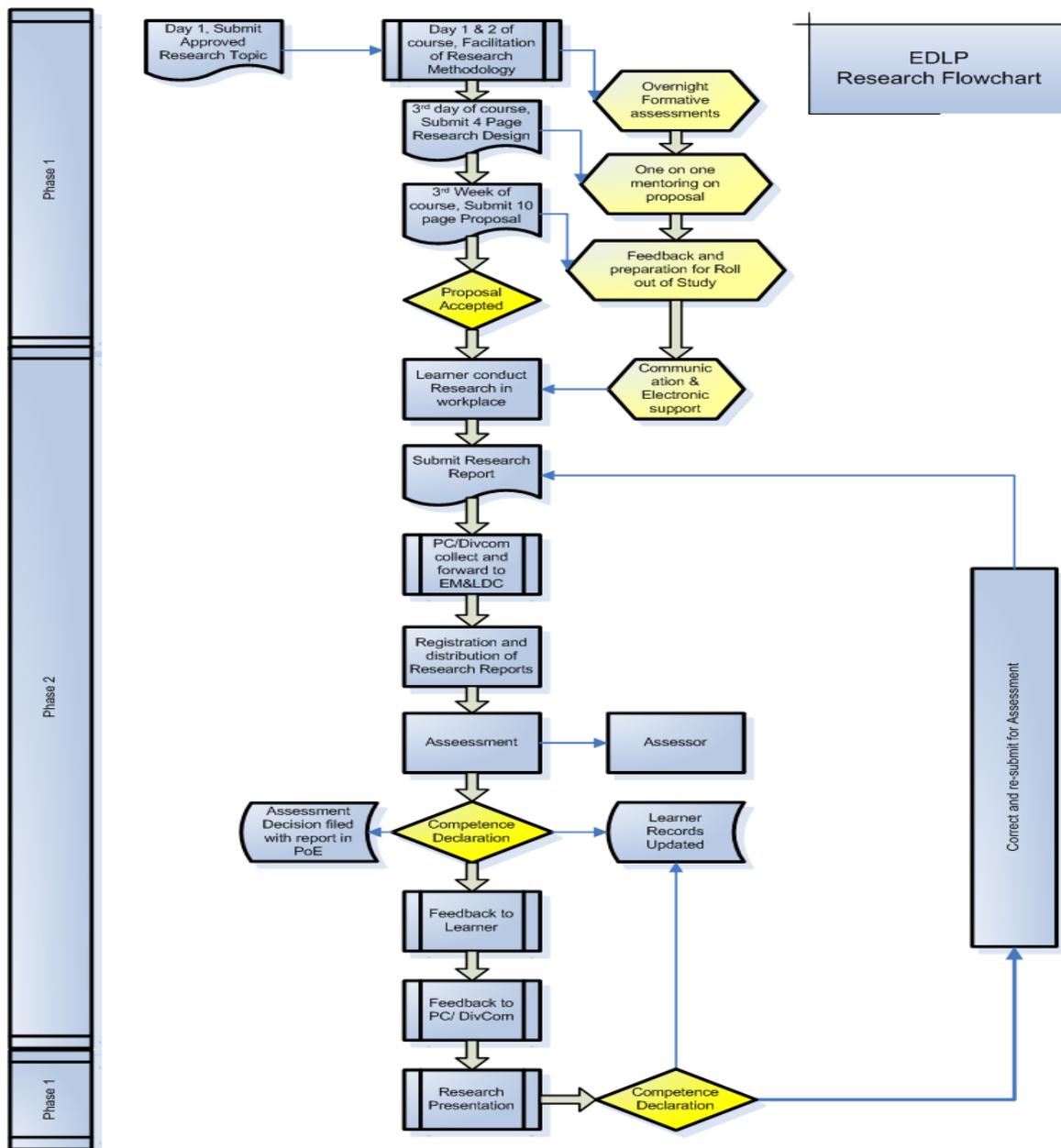
The first model, presented in 2009, only presented research methodology for a day and a half and learners were not expected to conduct any research. The second version of the new EDLP, illustrated in Figure 5.1, was used to teach research methodology and made provision for two phases only. The first phase, an institutional phase, entailed a six-week formal or structured learning programme. The second phase was an experiential learning exercise, which made provision for a five-month research project in the learner's workplace. However, the model also afforded learners the opportunity to gain research experience by participating

in research teams who had to collect data, write a report and present their findings to a panel of assessors. This form of group research was a learning outcome of the service excellence module. The exercise was supposed to help learners to get a better understanding of the research process while they were still in phase 1 and at the SAPS Academy. P8 explains that when he drafted the flowchart of the research model for the EDLP, the teaching of research presentation skills formed part of phase 1.

By 2011, the Division: HRD demanded better returns from the research module. Instead of only introducing research to learners, the organisation suddenly expected the learners to solve real workplace problems by engaging in experiential learning. The trainers used these new expectations to negotiate more time for the teaching of the module. After the first two courses, the trainers managed to get three days for research, and, after a year, they could present the module over five consecutive days in class (SAPS 2011b; SAPS Academy Paarl 2012b). The trainers nevertheless expressed their need for more time to be allocated for one-on-one sessions during the programme as these sessions do not appear on the block programme of the EDLP. The module structure has never made provision for any one-on-one sessions in the workplace.

The extension of teaching days also had the effect that an amended assessment process kicked in (P8:14). The new assessment strategy required learners to compile a well-structured and academically sound research proposal at the end of phase 1. Learners had approximately three weeks to acquire the necessary research knowledge and academic writing skills to develop such a research proposal (Schwartz & Human 2012). As a result of the amendments to the design of the EDLP, learners now had to submit a 4-page skeleton research proposal as formative assessment, a full research proposal as summative assessment for the first phase, a research report for summative assessment after phase two, and, for phase 3, a presentation of their research findings as summative assessment (P8:17).

Figure 5.1: The EDLP research model² as at 2011-01-19



The research trainers were overwhelmed by all the changes. P8 articulated his deliberations with P4 in a briefing to all trainers about the assessment and research guidance demands at the following EDLP trainers’ meeting:

² The original model was developed by the author in 2011 to conceptualise the SAPS research teaching approach.

The module content- not enough to enable learners to get a full picture of what research proposals entail. A 4 – pager is used in class a formative measurement instrument and learners generally do well in this formative assessment. (overnight assignment).

The feedback is used to build a full proposal. The proposal length is ten pages. Basic layout has been developed. The textbook and more reading material were handed out to assist. One-on-one feedback and small group feedback help learners to produce a workable proposal.

Approach differs from normal assessment. Proper and continued guidance is given to learners until final proposal is compiled and submitted - same approach as followed as at tertiary institutions (P8 diary notes 2010-09-06).

P8 and P4 discussed the research process as illustrated in Figure 5.1 and identified several instances where learners' interest could be lost. The trainers subsequently developed a new research model on 2011-03-09, which incorporated the activities of phase 3, not just as a presentation lecture that is offered in phase 1, but as a presentation in which the findings are offered and defended. The trainers developed Figure 5.2 by drawing from their training experience and P8's research experience. P8 reflected on his emotions during his own study:

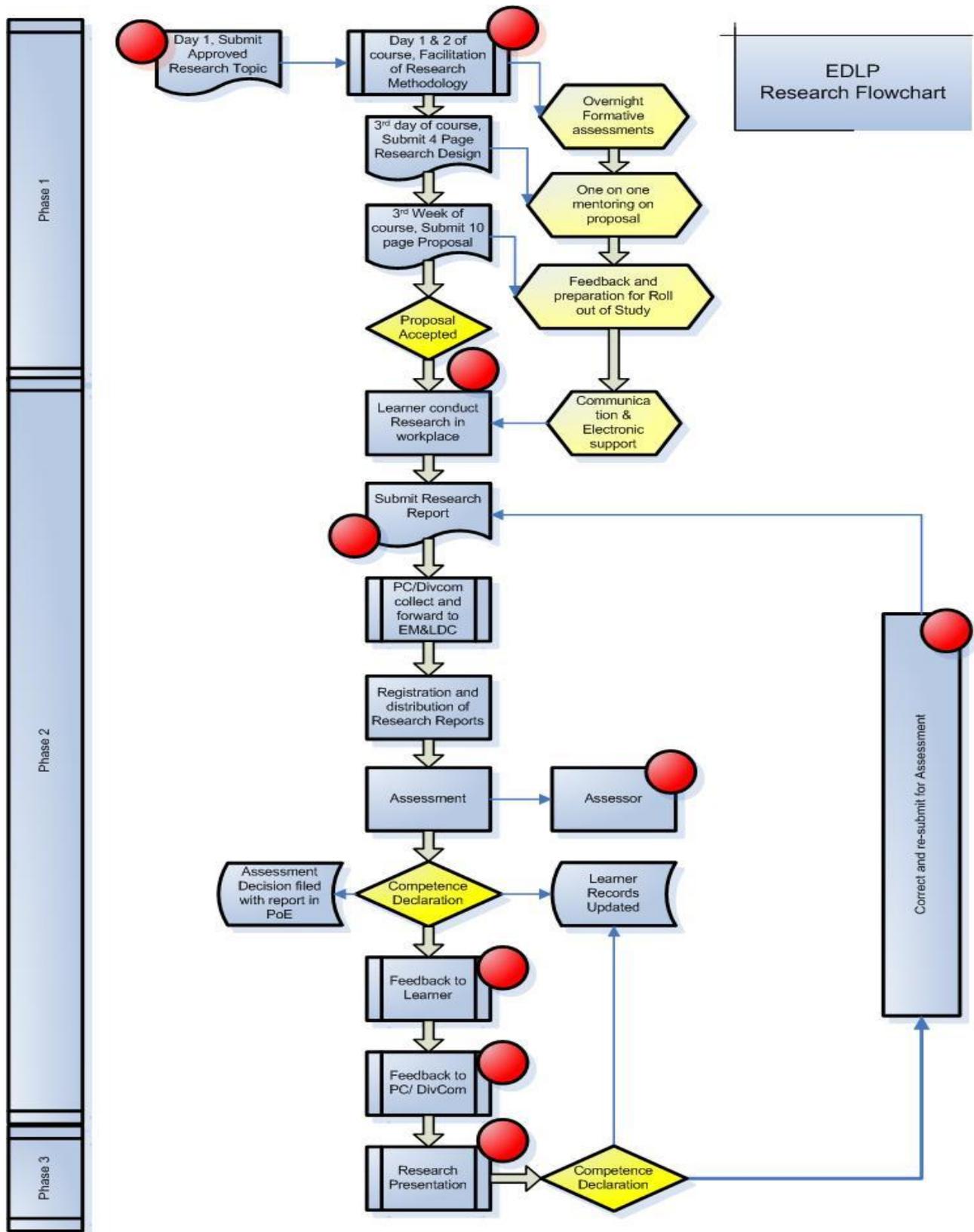
... later when I was asked to affect changes to the layout of the report, my middle daughter came to me and encouraged me to make the corrections. I felt like I could tear up the report. Now thinking back, I realise that that was the consequence of being a lone ranger researcher. As a lone ranger, I did not have that frequent review of my work and also not having to make corrections to chapters. I never developed an emotional strength to cope with research feedback and guidance. I experienced the feedback as criticism of my abilities, knowledge of research and as ignorant learner. Until today, I don't want to read the feedback of my report. My assessment was done by four assessors, who rated my report from average to best practice once I made changes to the structure of my report.

Figure 5.2 illustrates P4 and 8's key moments where learner 'dropout' is likely to occur. Each red circle refers to moments where learners have to draw on their emotional intelligence to deal with 'set-backs' in the research process. These moments include:

- the start of the programme if learners struggle to get a research topic approved by their immediate commanders;
- when their proposals are not approved at their first submissions to the HRD Research Committee;
- the initial rollout of the research project;
- when research reports are due for submission;
- when learners cannot deal with the feedback and comments on their research reports after assessment;
- when the feedback of being declared 'not yet competent' on their research reaches their commanders; and
- before or after the panel presentations of phase 3.

In addition, the trainers feared that learners might lose interest when they have to wait for their research feedback, especially when there is nobody available to respond to their enquiries. It was also anticipated that learners would quit their studies in instances where they could not defend their research findings in the research panel presentations.

Figure 5.2: Location of research problems identified



Adapted from Schwartz (2011)

As alluded to earlier in the chapter, the research module did not take adult learning principles into consideration in the design of the module and the delivery of the module was mainly based on the research trainers' experience of their own way of learning research. P8 drew from his interaction with his study leader at university to try and establish learner support among learners:

Once I made my choice, he provided me with lots of reading material and communicated with me via email. We frequently spoke and met until my proposal was approved, but after that I retired to my old comfortable self, being the lone ranger (P8:8).

I continued to do my research and I think I did quite a good job of it. It was a quantitative study, a mini-thesis of about 80 pages. I felt that I have achieved something at the end of that research because I managed to do simple statistics on my own, did the interpretation on my own and wrote the report on my own (P8:30).

Another matter that P8 needed to address was the effect that the heavy research focus had on the rest of the EDLP modules. The new expectations on learners had repercussions. The new EDLP assessment strategy made provision for integrated assessments in the form of open book written tests (SAPS 2010d). The learners perceived open book assessments to be easier than closed book examinations and appeared to have underestimated them. They subsequently spent more time on drafting research proposals than on preparing for assessments (P8 notes on EDLP 2010-09-06). These assessments were important, because learners did not automatically advance to phase 2 of the EDLP. Learners had to successfully complete phase 1, which meant that several assessments had to be completed and passed during phase 1. In the new assessment strategy, learners also had to develop a research proposal at an acceptable standard before they were permitted to enter into Phase 2(SAPS 2011e).

The feedback of the HRD Research Committee usually reached the learners in the last week of their first phase of the EDLP, in week six. By this time, learners became very anxious about the outcome of their research proposals. The reason for this anxiety was the uncertainty caused by the involvement and role of the HRD Research Committee. All learners knew that research in the SAPS was regulated by the SAPS National Instruction 1/2006: Research in

the Service. However, the responsibility for developmental research such as the research that forms part of a learning programme, has been moved to fall under the auspices of the Division: Human Resource Development. At the first meeting held at HRD Head Office in 2011, it was attempted to clarify the roles and responsibilities of respective role players within Division: HRD (SAPS HRD Research Committee 2011). This did not deal with the administration involved in teaching research methodology. For instance, the use of a research registration form was never discussed. It was just implemented (P8). The administration, which included making cover letters and HRD Research Committee feedback forms, was seen as part of the education, training and development process that is managed by the providing institution in the organisation, in this case the SAPS Academy. However, none of these administrative processes existed before and had to be developed through trial and error by the research trainers.

The involvement of the HRD Research Committee was the result of an earlier decision to move away from the initial assessment strategy. The new strategy, which entailed the implementation of amendments to phases 2 and 3 of the EDLP, was formed at an EDLP Work Session on 2011-04-12. The emphasis then moved away from the initial idea of developing a research proposal, to conducting a six-month research project in the workplace, and even further to include a practical implementation plan to solve the researched workplace problem. In one year, the SAPS managed to escalate the research module from a skinny introduction to research to a full version of research with practical application and return on investment evaluations by a panel of experts (P8:17).

While several changes have been affected in the design, assessment instruments and assessment strategy, the guiding documents have not been kept up to date to reflect the reality (SAPS HRD Research Committee 2012). The module content stayed the same, but some EDLP trainers expressed the need for a learner research manual. The research trainers did not support the idea, simply because the development would fall on them and they were already overloaded with work at the time (P8). The idea was subsequently aborted in view of the availability of excellent research methodology textbooks that could cover various levels of exposure to research (SAPS 2011b). It was only in 2012 that learners were issued the textbook of Babbie and Mouton (2001). Learners could keep the textbooks and use them during their fieldwork. In the past, they had to hand back the textbooks at the end of phase 1.

The research reports escalated in volume from being a 40-page report to an 80-page research report (SAPS Academy Paarl 2013a). The organisation's intentions were clear. The SAPS needed its research output lifted to academic level while keeping the research empirically focussed on the workplace problems. However, during 2012, it surfaced that the Division: HRD was in discussions with tertiary institutions to partner with and to find ways of getting accreditation for its learning programmes (P8). P8 recalls how he had to calculate the notional hour spent on research as this is what the tertiary institutions were interested in. Several 'good examples' of completed studies had to be submitted to the Division for viewing by the tertiary institutions. The change from the older model of research to the five-day research module increased the time spent on research from 35 to 49 notional hours. The workplace experiential learning remained at 154 notional hours, while the presentation phase remained at 30 notional hours.

The Division: HRD was equally concerned about the quality and impact of the EDLP Research module. An impact study was conducted on the EDLP, which involved interviews with learners who attended either the EDP or the EDLP between 2008 and 2010. The results were presented to EDLP trainers as motivation to improve learners' experiences and their learning (SAPS 2012e). The presentation, dated 2013-02-04, indicated that research did not feature as a skill or practice that was transferred into the workplace. Instead, learners indicated that the research time was very limited and that the group research activity did not reflect the individual's ability to do research. Learners also indicated that the programme should not be offered in a staggered manner. They felt the whole programme should be run as one continuous intervention.

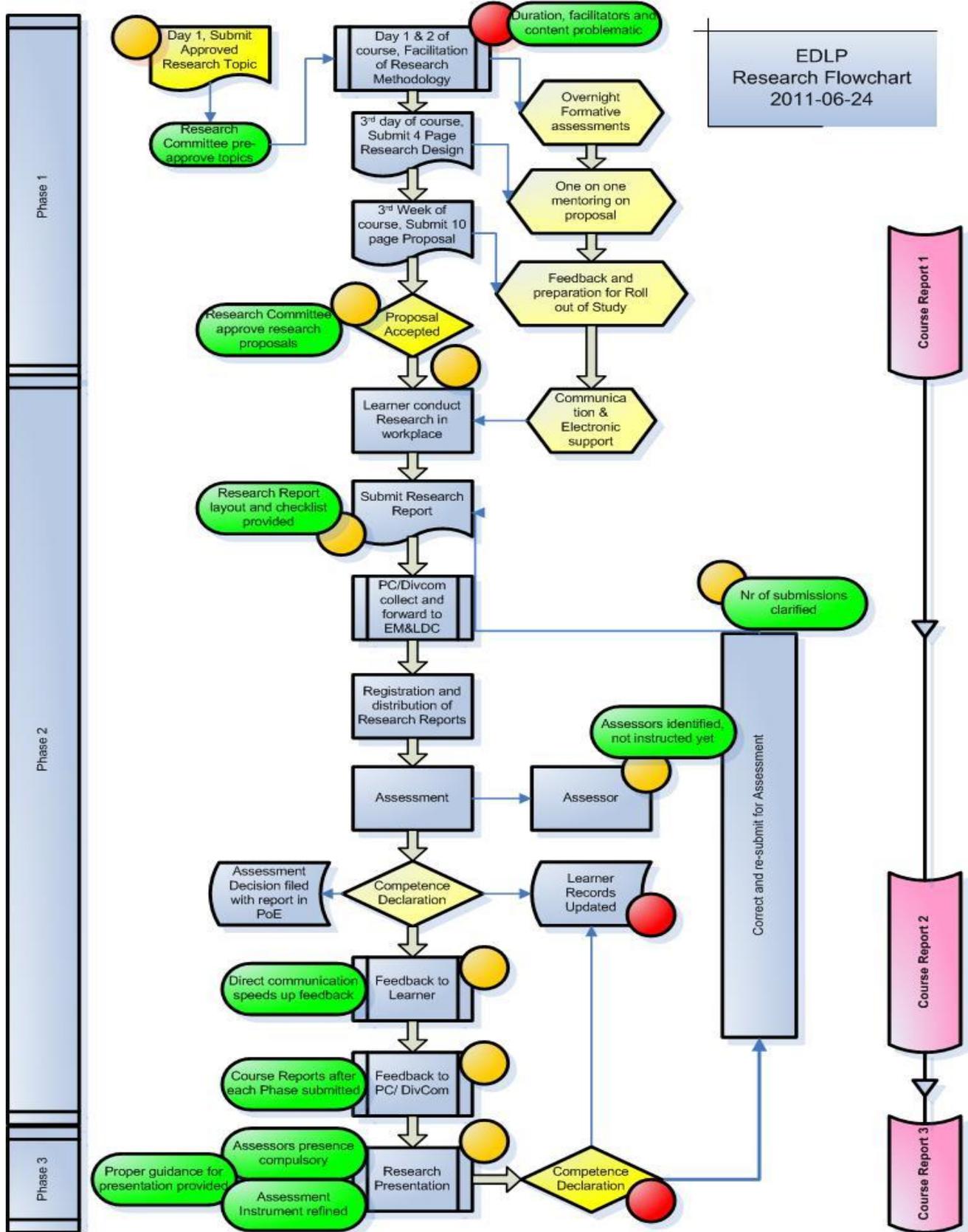
On return from the EDLP trainers meeting, P8 and P4 went back to their whiteboard-reflection meetings to discuss the real issues that they have encountered in the past and which had been addressed already. The impact study of the Division: HRD only included the EDLP learners of 2010 and much of the real issues of the research module after 2010 were not covered. The trainers referred back to their old model (Figure 5.2) in which they indicated the problem areas in the research process. The third version of the research model was then developed. This model indicated the initial challenges, the steps taken to address them and showed the challenges that had become problems they could not address from their office.

This new model also indicated the administrative responsibility of reporting the progress of the research after each phase of the EDLP. The new model is illustrated in Figure 5.3 below.

The challenges that had been address by then, still remained as risky moments for learners to withdraw from the programme. The red circles showed the instances where the trainers have no control over the process. The green ellipses reflect the steps taken to address the challenges and the pink (stored data shape) indicates the administrative reporting function. As in the previous models, the formative and summative assessment activities are shown in yellow heptagons. The red circles indicated that the trainers had no control over the development process of the research module and even though they have added learning material to the module, the content in the learner guide had remained unchanged since the first version. The assessment strategy has changed though. The second red circle reflects the trainers' inability to change or control the panel presentation outcomes. The presentation panellists are appointed by the Divisional Commissioner: HRD and the competence or suitability of the assessors could not be guaranteed by the trainers. Lastly, the training administrators could also not keep the learner records up to date as the development of new codes for the different assessment models of the EDLP proved to be problematic.

The EDLP research module indicates that a learner has completed the programme when he or she has successfully completed the research module, referring to successfully defending the research findings at the phase 3 panel presentation. This was however not the case, because the organisation then took over the research responsibility. The research trainers still had to provide feedback after the research panel assessment, and at the same time had to emphasise the research panel's instruction that the research report had to be corrected, scanned for plagiarism again and quality checked before submitting an electronic version of the report to the Division: HRD. The report was then discussed with the Divisional Commissioner: HRD for consideration of its merits for escalation to top management of the police. The trainers updated their research database and filed the learner's research report in the learner's portfolio of evidence file.

Figure 5.3: Progress made on identified problems in research model



Adapted from Schwartz and Human (2012:102)

(iii) Protecting credibility

The trainers regarded the adoption of a textbook as an achievement on their part, because they had been struggling to get that done since 2010. While P4 developed new lesson plans to incorporate the new textbook, P 8 developed a slide-show presentation, based on both the new and old introductory textbooks. The trainers did this during their vacation leave before the start of the 2012 programmes. By January 2013, the research methodology lesson plans contained slightly revised learning outcomes.

Learners in earlier programmes were only exposed to formative assessments in the form of the preparation of their research proposals (SAPS 2010d), but since the EDLP 2/2011 programme, learners were also subjected to the scrutiny of the newly established SAPS HRD Research Committee that falls under the auspices of the Divisional Commissioner: HRD (SAPS HRD Research Committee 2011).

Participants 4 and 8 we were not allowed to assess the 10-page research proposals. P8 explains:

... we were accused of being too lenient which affected the quality of the research. The HRD Division established a HRD Research Committee consisting of Training personnel with Masters and Doctorate degrees, a total of about 18 people, that would assess and moderate the research proposals ... I did not agree with this assessment by the HRD Research Committee and asked them several times what the committee's role was. I suggested that it consider the proposed topics and methodology for ethical clearance, but the committee insisted on assessing and moderating the research proposals and evaluating the anticipating value of the study for the police. In the process, several research proposals were turned down because the topic was exhausted already (P8:17).

The research trainers could henceforth only guide learners towards the research proposals and recommend only their submission to the HRD Research Committee. As indicated above, the assessment, moderation and approval of the research proposals lay in the hands of the HRD Research Committee. The trainers also had to implement a research registration form that was developed by the HRD Research Committee. This new document required learners

to copy their proposals onto the registration form, but learners struggled with this (SAPS 2013d). Several letters from the SAPS Academy to the HRD Research Committee illustrated the efforts of the trainers and the learners to reach the stage where the proposals could be submitted. Examples include:

An improved and still new approach to learning research methodology was applied. The concept of learning in teams was broken down to partnerships in learning, hence the formation of Learner Partnerships. The process was introduced informally during this course, but formal learner partnerships will be established before the end of this course. This process will continue to facilitate mutual questioning and guidance between learners throughout the research project. The concept of Learner Partnerships was received well so far. Learners will still receive reading matter on Learning Partnerships to enhance comprehension of the concept (SAPS 2012d).

... Learners were formatively assessed on their topics, research design and later on their preliminary literature review on the topics. Learners could work through the workbook which assisted them to develop their research proposals. Feedback and guidance were provided to learners with emphasis on the application of the Harvard Referencing Technique and better literature reviews.

2.1.5 Each learner had the opportunity to be formatively assessed three times during the first 4 weeks of the programme.

2.1.6 These proposals were assessed for acceptability by using a marking rubric. As is practice, no mark allocation was given, but learners received feedback on issues that still had to be amended/ corrected. Learners still had a fourth opportunity to follow facilitator guidance to improve their proposals before being presented to the HRD Research Committee. Learners were encouraged to do so, but the final product that is presented to the HRD Research Committee has not been fully assessed again because of the time constraint... It needs to be mentioned here that several learners' proposals were not yet at an acceptable level. They were given the opportunity to correct mistakes in their proposals as alluded to above (SAPS 2013d).

Realising that the research reports were subjected to strict scrutiny and quality checks, the research trainers made sure that learners got the opportunity to conduct electronic searches on the internet, in SAPS Intranet databases and in the library. This was done to help them find relevant literature for their topics before they compiled their research proposals and to ensure that they would have enough literature to write their literature reviews for their reports by the time they left the Academy (SAPS 2013d). The matter has also led to a decision to protect the image of the SAPS by scrutinising all reports by means of the anti-plagiarism software used by universities, called Turnitin (21/1/2, nd). This software was meant to improve on the quality checks done by research assessors who had to use 'Google Scholar' to determine plagiarism and rely on honesty statements provided by learners (Schwartz & Human 2012).

Reflection on these challenges in the programme made the trainers realise that they needed to file everything they had done as evidence of their effort to make the research module successful. Two files were opened. One file was used for standardising all the presentations, handouts, assessment instruments, marking rubrics, feedback letters, and learners guidance correspondence. Also placed in this file was the model used to monitor trainers' progress in addressing the challenges of the research module. This served as a reminder of what still needed to be handled. The second file was a research communication file, in which communication between the researchers and assessors, the training manager, the Commander of the Academy, the HRD Research Committee and the Divisional Commissioner: HRD, were filed. P8 asserts that these files played an important role in the lives of the trainers as it reflected their achievements and it served as a timeline marking the development of the EDLP research module. When changes were made to the assessment strategy such as penalties for late submissions of research reports, trainers could refer back to the file to find the latest instruction. There were frequent changes in the research module and many decisions were taken without the trainers' input. It was thus important to be informed about changes in the process.

The research communication file proved very helpful to the administrators who had to keep up to date with different models of the research. P7 had to apply for new codes for the Training Administration System (TAS) whenever the research model changed. One such application read:

The current EDLP is captured on three TAS codes to cater for each phase of the EDLP. The EDLP was presented in such a way that learners only had to attend one phase at the institution being SAPS Academy, Paarl. A number of assessments are still outstanding on EDLP courses presented in financial years... which requires the three TAS codes to be maintained for earlier financial years (SAPS Academy Paarl 2011d).

The academy commander also had to apply to the divisional commissioner for a new TAS code in 2013. The application states the need:

... the EDLP has changed its approach to have two phases (Phase 1 and Phase 3) completed at the SAPS Academy, Paarl. The new approach to the EDLP also includes the capturing of all assessments using one TAS Code (a new TAS Code to be generated). In addition, the new TAS code must make provision for research methodology to amount to 10% of the Research Methodology module, Phase 2 will amount to 70 % of the final mark allocation and finally, Phase 3 will amount to 20 % of the final mark allocation. The new EDLP TAS code must be effective as from EDLP 1/2013 (SAPS Academy Paarl 2013b).

The second phase of the EDLP entailed the experiential part of the research module and the trainers did not have much control over this part other than guiding and encouraging the learners. Communication indicated an initial constraint in the trainer-learner relationship with regard to communication. The trainers received permission to speak directly to the learners. They also had to clarify how to deal with the research reports. Initially, hard copies of the report had to be couriered to the trainers, but later they could be submitted electronically to save time while a hard copy of the report had to be forwarded via the relevant Provincial/ Divisional office for control purposes (SAPS 2011f).

Due to the many changes in the assessment strategy, research trainers had to keep a proper record of which specific programme a learner attended before giving guidance or assessing the report. A learner who attended a programme in 2010 was supposed to submit a 40-page report for which the literature review carried more weight than the results and conclusions together. In a later version of the marking rubric (dated 2012-01-10) the literature review carried less weight and more marks were allocated to the results and conclusions of the

study. The significance of the study had to be included in the report as well as an implementation plan for the findings (SAPS 2012f).

Almost every aspect of the second phase of the research was left in the hands of the trainers. They had to draw from their experience to establish a workflow for guidance and assessment purposes. The assessment and moderation processes were governed by the internal SAPS Education, Training and Development policies and guidelines on assessment and moderation. The format of feedback after assessment and moderation differed from the normal face-to-face feedback used in the other EDLP modules in the sense that everything had to be written and a copy thereof filed in the learners' research files.

However, none of the feedback 'templates' formed part of the research module. These were added as the module evolved. Only the instruments used as part of the assessments during phase 2 and phase 3 formed part of the assessment strategy. The other documents, referred to as research tools by P4 and P8, included among others the following:

- Unpacking of the research proposal lecture;
- Informed consent templates for interviews;
- Interview process guidance;
- Application of Moonstats quantitative data analysis software;
- Format of providing guidance and responding to enquiries;
- Logbook for research activities during office hours;
- Research report structure and layout;
- Checklist for completeness of research report;
- Learner guidance and readiness for panel presentations instrument;
- Panel presentation programme and process;
- Panellist files containing instruments;
- Panel presentation assessment instrument;
- Panel presentation assessment calculation spreadsheet (Excel document);
- Panel presentation learner feedback; and
- Panel Presentation minutes.

These 'tools' were developed to be used as standard operating procedure when dealing with research. The reference to a specific document made the communication between the

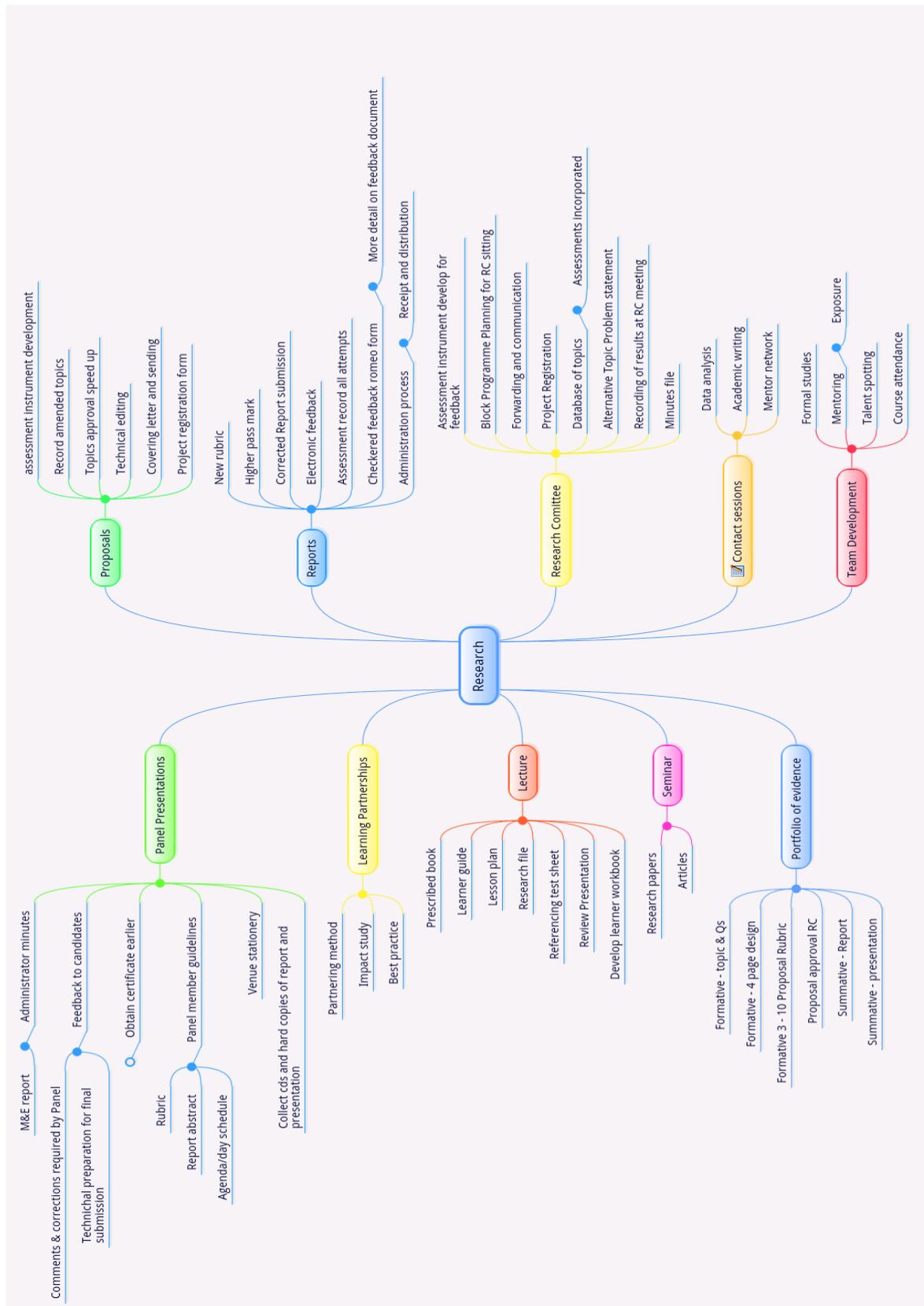
trainers easier. P8 explains that it happened at times that both trainers work on a specific research report, either by guiding the study or by assessing or re-assessing it. In such instances, they could establish the learner's progress just by looking at the documents in the learner's research file. When trainers discussed the progress of different learners, they could refer to specific tools to indicate the learners' readiness to present their research to the research panel.

Just when the research trainers thought that the volatility of the research module has settled, they were surprised by another major change in the design of the EDLP. P8 explained that the third phase that dealt with the learners' presentations of their studies to a panel of research and subject matter experts had been altered. Sparked by the low submission rate of learners' research reports, it was mandated that learners should return to the SAPS Academy for three weeks. Learners were instructed to do their research finalise their reports in the workplace, under the guidance of their study leaders, and to submit their reports when they returned for the third phase of the EDLP. The trainers had two weeks to assess the twenty odd research reports while the learners attended the Service Delivery Improvement Programme (SDIP). The learners were expected to present their research reports in the last week of the third phase. However, only a few learners could affect the corrections pointed out in their reports by the assessors while they were expected to complete the SDIP. The amendment to the EDLP third phase has not improved the competence rate of the learners, but it has improved the submission rate of the research reports. P8 asserts that learners just submitted poorly written reports for the sake of submitting something, and in doing so sidestepped the threat of having to reimburse the organisation for fruitless expenditure incurred on them.

The activities of the research module is summarised in a mind map, Figure 5.4, which P 8 had developed during his many journeys between the Division: HRD office in Pretoria and his workplace in Paarl. This map enabled P8 to guide a joint development team in the redesign of a new Safety and Security Executive Development Programme (SSEDP), which is presented in partnership with a prominent South African University. Sadly, the Division: HRD insisted that research also forms part of this new accredited version of the EDLP. While the other modules could be aligned with the university partner's own EDP, each worth 12 credits, the research module became an add-on programme of 72 credits. Regardless of the university partner's concern over the inclusion of research, especially the level of research

anticipated, SAPS insisted that it must be included as a non-negotiable module. P8 raised his concern about the supervision of the research projects, but the SAPS custodian of the new SSED P indicated that a SAPS EDLP trainer would supervise these studies under the mentorship of the university partners' mentors. However, very few of the SAPS EDLP trainers committed to research supervision when the SSED P was rolled out in 2014. The research supervision was then left to the university partner. In addition, the university partner had no idea how challenging it was to present research to senior police officers (P8). The university research professor quit the programme in the second semester, leaving the learners in the hands of his colleague. P8 had to coordinate the research supervision of the SSED P to ensure that all learners persist in their research, while P4 had to continue with coordinating the EDLP. The lessons learned by P4 and P8 in the police's own research module were not considered at all by the university partner or the Division: HRD. In the end, time ran out for the SSED P learners and they submitted poor quality reports which had not received supervision at all. In the second SSED P that started in 2016, the same approach was followed with equally poor quality research. This time, the learners had more guidance from both SAPS trainers and the university, but some of the SAPS trainers' guidance was so poor that the learners requested new study leaders. Subsequently, the supervision of most SSED P research projects became the responsibility of the two EDLP research trainers and one senior lecturer of the university. Alarmingl y, the SAPS Academy's new training manager moved the coordination of the SSED P from P8 to P4 because it would make the management of trainers and programmes easier for him.

Figure 5.4: EDLP Research module activities



Adapted from Schwartz and Human (2012:101)

5.3.3.3 Delivery of the research module

The evolution of the research module and the adaptation of teaching methods cannot be divorced. The one informed the other. This section will describe how the research trainers adjusted their training methods to a more or less standard approach that could be used to teach both novice and more experienced researchers. Themes such as dealing with fear, adult learning principles, ontological shifts through problem-solving, empowerment for fieldwork, learner support in the workplace and challenges to learner fairness emerged strongly in the data.

(i) Dealing with fear

All senior police officers were expected to attend the EDLP. They were mostly nominated and instructed to attend the programme. Very few police officers chose to attend the programme and those who did often only wanted to do the course for promotion purposes. On paper, police officers had to be brigadiers and generals in rank, have a Matric (Grade 12) qualification and a NQF level 6 or higher tertiary qualification to qualify to attend the programme, but in practice, these requirements were not verified before the instruction to attend the programme was issued. What made matter worse, was that colonels who fell outside the target group, were allowed to attend the EDLP as last minute replacements. Prior exposure to research methodology was not included as a prerequisite to attending the EDLP (SAPS 2011e). It often happened that learners who only had a grade 8 or 10 qualification attended the learning programme alongside well-qualified learners, sometimes with masters or doctorate degrees. These learners with lower grades suffered throughout the EDLP, especially with the research module. P7 shared her observation about a learner who struggled. He phoned her constantly to get her assistance:

... I showed him how. I don't think he understands research either. He only understood the contents of his report, what follows on what. Many learners feel the same way...

It was clear that there was a substantial risk of inflicting embarrassing and demeaning injuries on learners. P4 asserts that the overall feeling of learners was that the research journey was

a positive experience for those who completed it, but, on the other hand, those learners who could not do the research were left with the bad memory of an 'I could not manage to do it' feeling. The group of learners who could not complete the research included both those whose work schedule did not allow time for the research, and those learners who struggled to understand research methodology (P4:23). Unfortunately, the workplace does not care about the reasons why a learner could not complete the study. Its statistics merely reflects that the learner has failed to complete the study and is not yet competent in doing research. Moreover, successful completion of the EDLP was set as a requirement for promotion, but the reasons for not completing the study are not taken into account during applications. Learners were thus confronted by a very serious threat to their career should they not be able to comprehend research methodology (P8). In P4's experience, some learners completed their study because they expected promotion, others feared embarrassment if they do not complete the studies and a larger group succumbed to the pressure of their commanders, head office threats and continuous study leader enquiries.

The trainers took cognisance of the presence of fear in learners and knew that it could have a devastating effect on learning. For them, the possibility of injury due to embarrassment was likely in all three phases of the research. P8 recalls how learners reserved their comments in class until they could see that other learners were also struggling with research. They found safety in the number of learners who could not initially understand research. In their own study on why learners fail to submit their research at the end of phase 2, the trainers concluded that very few learners tried to get external assistance. Their commanders were not regarded as strong support for research, consequently, learners preferred to approach colleagues or fellow learners to help them understand or get assistance with research. A concern was that only 20% of respondents sought assistance from their study leaders (Schwartz & Human 2012). In phase 3, learners had to present their findings to their bosses and other research experts. This was a whole new level of assessment. The first learners cried after these assessments because they felt embarrassed about their presentations (P8:21). Several learners quit their studies when word got out of the tough and sometimes cruel research panels. Learners feared going there and we did not blame them (P8:21).

After the first panel presentations P4 and 8 discussed their own experiences of research and compared them to those that the learners were going through. P4 explained that the teacher-learner relationship during her own research was not very encouraging and she had to

motivate herself to continue with the study when she received feedback on her work (P:188). P8 still suffered the effects of his own research projects. He explains:

I suffered through the first study, because I was basically doing it on my own. I still remember that very clearly because it haunts me every time I walk into class. I remember that I could not get started because I could not get my research proposal approved. Not because I did not know what I wanted to do, but I could not get my research design on paper, in academic terms. I could not explain in research terms what I wanted to do (P8:28)...

So later, when I was asked to present research methodology, I did not want to do it at first. I was also not the first or obvious choice to present the module. Another seasoned trainer, who used to be a researcher for a research institute, was the first choice to present the research methodology module (P8:11)... and when we did present the research, the other lecturers laughed at me for successfully confuse the learners, so much so that some of them wanted to withdraw from the course after the research module (P8:14).

P4 shared a similar feeling:

It was a big challenge and I felt that I was thrown into the deep sea (P4:170).

Based on their own experiences, they tried to address learner fears at the soonest possible stage of the course. For instance, they requested the learners to write their fears on a small piece of paper at the start of the first lecture. The information was used to try to eliminate these fears during the presentation (P4:94). They also clarified the demands and expectations of the research module right at the start of the first lecture (SAPS Academy Paarl 2013a). P4 shared her work experience to encourage learners to face their fears as it had been the foundation on which she built her own knowledge. She shared that with the learners because she anticipated that some learners might also experience the same challenges. She also hoped to become more reliable to learners by sharing her experience (P4:178).

An introductory icebreaker was used to ease learners into research methodology and to help them realise that research is nothing to be afraid of. P8 reflects on his presentation:

... in which I present my findings on a study that I have done. The topic was one that was so far-fetched that the learners could listen with interest to my arguments. I kept a straight face when presenting the study. I included enough information in the presentation for learners to follow the research cycle, pick up on some basic terminology and to question my findings. In the subsequent question and answer session, I helped them to see the need for understanding scientific research. This was a major breakthrough. I found a way of introducing research without losing the interest of learners (P8:13).

The operationalisation of the research was explained before learners left the Academy. They also received examples of all the necessary instruments that they might need in the workplace and the trainers contact details for after-hours support. An additional checklist that could assist learners with the writing of the report was provided. There was nothing uncertain and nothing for them to fear. They had even been given permission to use eight hours per week to work on their research. However, P4 and P8 applied more drastic measures during guidance and assessment to prevent injury before learners get to the panels. In one report, the moderator stated:

Given the shortcomings pointed out above and the rigorous assessment the learner will be subjected to at the compulsory Panel Presentation, it is recommended that research report be found Not Yet Competent – as was found by assessor (SAPS Academy Paarl 2012c)

P5 explained that when she was the chairperson at the panel presentations she made certain that the atmosphere was more relaxed to protect learners. P5 therefore made sure that she always assisted learners who made it to the panel presentations by encouraging them to continue their studies, to correct the issues pointed out to them and to get used to the idea of being criticised as it would not be the last time that they do research. She argues:

... that it is so much easier for the person who has to present to bring his message if it is a relaxed environment. If you are stressed and the person sitting there, the chairperson and the panel sitting there looking at you and don't even greet you properly or whatever...I know how it feels having to present like that. So I think if you have a relaxed environment and the person feels relaxed then you will get

much more out of them in terms of what they are to present. Because they forget half of the things they have to say, they are in a hurry, they stutter and it doesn't look good then...if they are relaxed then it goes much better (P5:64).

While P5 argues that trainers should understand that people are different and they do not all have the skills and the ability to do the EDLP, P4 says it all depends on the learner.

My experience however is that although the workplaces differ from learner to learner, it also depends on the learner him or herself. Some learners expect to only utilise the official time provided to them to conduct the studies, other learners take their private time or vacation leave to complete the studies and others only refer to the work that did not allow them to study during official hours. This is a debatable question, and I am still of the opinion, that if you desperately want to finish such a programme, it is possible if you are desperate enough (P4:216).

Regrettably, there were instances where the trainers could not step in for the learners. Providing feedback to learners' commanders on their research progress is one such example. In the beginning, the reports and related feedback had to be sent via the provincial or divisional commissioners. Learners feared this feedback as it normally resulted in unpleasant comments about their ability.

Learners were often the cause of the negative responses to their progress. Thinking differently about research was only possible for learners who were willing to learn more about the subject (P1:89). The idea behind the design of the research module was that the learners would be able to follow lectures in the textbook and do further reading after hours for clarity (P2:58). For that, one needs a generally positive attitude towards research to succeed (Schwartz & Human 2012), but the challenge was to get people interested in conducting research (P4:77). The trainers tried to arouse interest by implementing a study buddy system so learners could share their studies and ideas with a study partner when it seemed that lectures, visits to the library, group discussions and extra reading material did not help create interest in research. This concept was not received well and learners threatened to withdraw because they did not want to learn with or from peers. (P8:15).

Eventually the trainers realised that the learners were not really interested in research as such, but they needed to finalise the projects to be declared competent in order to meet the requirements for promotion (P1:181). P8 explains that setting the successful completion of the EDLP as requirement for senior police officers to qualify for promotion was an attempt by the Divisional: Commissioner: HRD to improve the success rate of the EDLP. The fear of the embarrassment of being declared not yet competent at research at weighed more than the fear of punishment for not doing it at all. Many learners were not concerned about paying back the cost of the EDLP and they conspired not to do the research at all. It happened sometimes that learners did not have the first 12 pages of their report done by the time they left the Academy. It was clear that research was not for everyone. Some of the learners would not be able to do it (P5:108) because they just did not grasp research and those are the ones who never submitted anything. They just went back to where they came from and did not submit anything (P5:106)

In 2012, the trainers realised that the learners' fears were justified. They asserted at the time that learners experience a state of 'shock' and disbelief after going through the ordeal of developing a research proposal for the first time and then being told to follow through and actually conduct their proposed study (Schwartz & Human 2012). It is understandable then that learners feel that it should be an option whether or not they conduct the actual research in the workplace. Learners resorted to extreme and unethical behaviour by trying to cheat the system due to the fear of being branded a failure. Documents that do not acknowledge the ownership of other authors due to gross negligence and blatant plagiarism began surfacing. These reports were dealt with in ETD terms by rejecting such reports due to questionable authenticity (Schwartz & Human 2012).

(ii) Adult learning principles

Most learners were older employees with thirty or more years of service in the police (P8) and quite a few were approaching retirement. They did see the need for research and did not show the desire or will to learn about it (P1:76).

The trainers nevertheless approached each course as unique to avoid generalising one cohort's characteristics to another. This was because there were those learners in class who asked to attend the course as it could have assisted them in their private studies. Learner

needs differed with every new programme. The trainers regularly reflected on their approach to the research module and adjusted their methods accordingly (P8:16). As indicated in the previous section, P8 and P4 applied various methods to make learning easier. They started off by ensuring that the learners were comfortably accommodated and that all their concerns about their families and workplaces were addressed. This would enable the learners to focus exclusively on the learning without having to stress about other matters. Lesson plans indicate that trainers then dealt with learner fears by being as open and direct as possible in terms of what the research module would demand of them in the workplace. This was done by moving from the knowledge already known to scientific knowledge not yet known, and by gradually introducing research concepts and creating building blocks that would enable them to master research. The trainers also had to establish interest in the research module as a problem-solving mechanism that could be used to solve issues in the workplace.

The building blocks, as discussed earlier in the chapter, facilitated a process in which learners could learn at their own pace by using a research workbook. Learners were also encouraged to take ownership of their own development and to commit to reading relevant literature and handouts on research. Covering letters which accompanied the research proposals to the HRD Research Committee reflect the various methods of teaching applied by the trainers. These include slide shows, debates, individual exercises, group work, practical literature searches, library exposure and several proposal-writing assignments. Learners received feedback on their progress after each activity. Small group discussions afforded learners the opportunity to explore the need for research in the workplace and to debate certain concepts. Learners could also draw on their workplace experiences when they discussed each other's research topics and defined their research problems. As most learners worked too slowly for the allocated time for the module, the trainers also made themselves available for one-on-one interviews in the evenings. Learners who lacked courage to participate in discussions in class could share their research topics and progress in a 'safer' environment.

Eventually, by negotiating more time for research in the module design, learners' needs were also addressed by giving them more time in class for research. The extra time was used for role-plays, data analysis exercises and roll-out lectures to prepare learners for the workplace experiential learning phase. Learners who could not use computers were taught after hours in a 'hands on' approach. They could practice their skill on computers in the research centre of the Executive Centre. The doors of the Executive Centre remained open to afford all

learners continuous access to the computer resources and internet for literature searches. Learners could also learn from their peers, informally through the study partner system.

Internal correspondence placed much emphasis on the applicability of the research to the workplace. As a result, learners were encouraged to engage in manageable research projects that would enable them to develop implementation plans to address the problems they had researched. The link between the learning and workplace application was made very clear.

Unfortunately, all the efforts of the trainers and some of the key role players, did not help much when the organisation implemented penalising measures for those learners who did not complete the studies. Several learners were eager and capable of completing their research, but their working conditions did not support their efforts. They were met by operational demands and a police culture that did not favour prolonged experiential learning for senior police officers (P8).

(iii) Ontological shifts through problem-solving

The learners found it hard to think differently about the workplace. When asked to identify a workplace problem, learners constantly referred to those that had previously been identified by the National Commissioner of the SAPS. These problems were generally so vague that they could be applicable to any workplace within the organisation. Even when these assumptions about the workplace were explored, the learners still could not approach the problems from alternative perspectives. They displayed a typical police culture in which they wait for some higher authority to identify the problem that has to be addressed. The learners did not struggle with the first part of the program P5 posits that in the other modules, learners can

...sit and they can learn and they can study and they can write a little test or assignment... You must have insight in the problem, first of all. If you don't understand your topic or you don't understand what you have to do with it...(P5:109).

The approaches to teaching, learning and assessment between the other modules and the research module of the EDLP differ. The research module is on a much higher level, which

requires insight into what one has to do, but, in the past, too little time has been allocated to trainers to properly prepare learners or to allow them to reflect on problem based solutions (P2:87). A major challenge was that the bulk of the learners had to read and write in their second and third language. Learners struggled to fully comprehend and contextualise relevant literature in reputable peer reviewed journals published in academic English. This is understandable, given the fact that a large part of the target group has not even completed high school. It was clear that the foundations of second/third language proficiency, problem-solving ability, and the ability to identify, define and formulate problems in clear written English, was lacking in many of the learners (P8:19)

Various problem-solving techniques were used for the transfer of learning into practice (P1:104). The learners were divided into three or four small groups and then tasked with discussing group members' chosen research topics. The topics were to be evaluated against set criteria for the suitability of the research topic and the ability to formulate research problems (SAPS Academy Paarl 2011b). These small group discussions assisted the learners to understand their research topics much better. A learner could define a problem through interaction with other learners who did not have knowledge of that learner's specific environment (P4:89). The discussions on the problem statements took quite a while, but they prevented the learners from working towards their own solutions. The problem formulation forms the basis of the research and if the problem could not be defined, the learner had to consider another topic (P4:89). This is what is measured in the marking rubric of the research report. It requires the learners to accurately describe the context within which the problem is situated and then define the problem in a statement (Marking rubric Phase 2).

To this end, the learners were assisted with electronic searches on the internet and SAPS Intranet databases to find relevant literature to help them explore their research topics (SAPS 2013d). Learners' boundaries were also pushed. This happened, for instance, when the trainers tried to get the learners to read with the aim of understanding the logic of an article that they were then asked to apply practically in terms of Kamler and Thomson's (2009) method which comprised small group discussions focusing on the four moves of an abstract. These were to:

- Locate the article in relation to larger debates or issues and to explain the angle of the author's approach;
- Focus on what the particular problems or issues are that the article explores;

- Summarise the major findings relevant to the argument and to outline the research, sample, and method of analysis; and
- Argue with the author of the article and indicate a point of view that is based on facts.

However, this exercise proved very challenging for all learners, even those with qualifications.

The group discussion approach was further applied to explore different stages in the research process. Each person had to explore particular concepts and compile a presentation. The presenters then discussed the parts that were relevant in the presentations and what additional information and readings could assist the learners to achieve the expected outcomes (P4:59). If the problems could not be defined clearly, it was picked up later during the assessment and moderation of reports and during the panel presentations (P1:104). The learners were assessed on the clarity thorough comprehension of the context and origin of their research problems, and whether or not they were considered from various angles.

The methods used by the trainer to help learners think differently about the problems in their workplaces did assist a few learners. P5, who had been a learner in the EDLP in the past, could, during panel presentations, apply the skills she had acquired to listen critically to what learners were saying. She warns that one needs to be committed to think for oneself, because in the police it is culture to just do what you are told to do (P5:115). While P4 asserts that the trainers promoted research as a problem solving technique that could assist the management in an organisation (P4:154), P1 remarks that it is unlikely to happen as most senior police officers could not identify a researchable problem to “correct something in the workplace” (P1:200).

(iv) Empowerment for fieldwork

Empowerment was not restricted to the learners. P8 explains how he got involved with the research and how he struggled initially to present the module. Not only did he have to teach research to novices, he also had to promote the development of research methodology in his colleagues. It is the combination of teaching and mentoring that assists learners to do research.

While the learners were empowered through the trainers’ implementation of research building blocks, they were also encouraged in other ways. On a practical level, the empowerment

included teaching the learners how to use a computer or laptop to type their proposals and how to access information on the internet (P8:19). The trainers could, as a rule, not review all learners' work electronically, because they did not know how to use the review function on the MS Word programme. For those learners who struggled, the reports were reviewed and assessed by hand, then scanned for emailing or faxing to the learners (P8:20). Others were helped telephonically to get used to electronic guidance.

Learners were skilfully drawn into small group discussions when they were tasked with exploring and debating unknown topics during breakaway sessions. They had to draw from each other's insights in these discussions and reflect on those interactions during their meetings with the trainers. Learners were encouraged, on a one on one basis (P4:89), to share their understanding of their research problems and the methods they could use during the study as well as to clarify concepts that they struggle with. This was done to help learners articulate what they understand and to encourage them to discuss their research when they do their field work.

Learners were taught how to reflect on their progress, their current challenges and on what needs to be done to solve the research problem. P8 found a way to introduce the research terminology in 'police language' to create a link between the theory and the police practice (P8:13), but this led to a writing style that was related to the police culture. Some learners could not formulate arguments in their writing and expressed themselves in police jargon, which only suggests something without really explaining the full detail of the matter (P8:19). However, trainers also shared their own experiences in order for learners to realise that what they were experiencing to get to grips with research language, was normal. In the process, the trainers encouraged learners to look out for each other and to encourage each other by establishing informal peer support groups in which they could learn the research terms and concepts informally (4:94). Yet, after all the effort to make research methodology understandable, some of the learners still did not. P5 refers to the inability to understand research as a product of organisational culture, because most police officers have never been involved in research or have never done research (P5:106).

For P4, real empowerment of the learners was anchored in the way in which guidance was given to the learners. Learners were constantly reminded of their progress in the research process and what they have achieved in terms of their projects. For instance, after their initial

five days of instruction, learners were informed that they would develop research proposals in the first four weeks of the EDLP and the rollout of these projects in the last week before they returned to their workplaces. The learners were prepared for fieldwork, and assessment instruments were discussed and cleared of all uncertainties (P4:144). P4 made certain that the learners always received the correct information. She explains:

I ensure that I consult with experts and provide the correct answer afterwards. I never let an unanswered question not be answered, even if it is just a little bit later. I believe this approach create the trust amongst me and the trainers and me and the other team members (P4:178).

Learners were also empowered to escalate their challenges in the workplace to the trainers because the trainers knew that the learners' commanders generally did not support them. An email was sent to the learners at least once a month to determine if they needed any assistance and to determine how far they were with their projects (P4:205). P5 asserts:

... I also don't think it's the support from our side, because we...more than 100 times maybe, we tell them 'we are here for you, you can email, you can ask, you can phone, you can whatever...' (P5:112).

The administrative personnel were informed enough to guide learners on the research process, to reduce feedback delays and to empower learners to make the necessary decisions when they have to. P6 explicates how she was empowered to guide learners:

... as we learned the research process and its many documents and steps, we could even use more initiative to assist the learners ourselves. We did not have to escalate the enquiries to the trainers anymore. They trusted us with that (P6:7).

The trainers realised that they were not helping the learners by letting them believe prematurely that they were ready to present their findings at the research panels. After their experience of the severity of the first panel's approach, the trainers lifted their standard of assessment to spare the learners that emotional demoralising experience (P8:21). A learner explained that the challenge with such feedback was that since it was the first time to conduct research, the terminology and the format of research was very difficult to understand

(Schwartz & Human 2012). To this end, they had to be strict with learners but also be in a position to support them when they reacted negatively to the review feedback. Participants 4 and 8 adopted an approach to assessments or review feedback of starting their feedback with a positive response and ending it with encouraging phrases (P19:30) such as the feedback to a brigadier on 2011-09-29, which read:

Brigadier,

Thank you for your report and the excellent work you have done so far. I am excited about the outcome of your study and I think it will add value to the SAPS and even the Southern African countries (P28:27).

The mentoring of P4 was a long journey, which, after six years, would see the trainer completing a doctorate degree (P8:24). Mentoring was done purposefully by sharing relevant reading matter discussing the articles during lunch breaks, or even when planning the next EDLP (P8:15). The development of P4 as co-facilitator was embedded in P8's approach to teaching research methodology. P4 explains that her formal education was not enough to become capable of teaching research:

... it took me quite a lot of discussions, readings, books and the generation of vocabulary, to improve my understanding of research and to be able to assess research reports of the learners... we discuss issues that I am not sure of and to ask guidance if I am not confident that my view is correct... It is also important for me and something that I love, to conduct a team study with the other presenter to determine what can we as a team do to improve the programme and to lift the level of the programme. (P4:160).... The fact that we were more than one presenter provides a more objective approach towards how the research module was designed and delivered (P4:82).

Some of the other role players in the research module hold different views. A member of the HRD Research Committee argues that the knowledge acquired with regards to the research module was through formal studies and research courses. There has been no empowerment for assessors other than that (P3:112). However, this argument is in contrast with P8's view. He claims that HRD Research Committee had left him cold, because many of the assessors themselves had stated openly that they do not really understand research. He also noticed

that the committee members did not understand their role in the teaching of research. He was required to represent the learners at that committee, to account for their work, and he used the opportunity to mentor some of the assessors who made recommendations that were inconsistent with the literature (P8:17). The matter of clarifying roles and responsibilities extended to the workplace supervisors and commanders of learners. Their roles were not properly identified or communicated to the different provinces (P4:194). Noticing that panel members are briefed before and after panel presentations, P5 took the initiative to mentor other panellists in between presentations. P5 elaborates:

... Sometimes we have like a short meeting, but you don't really address the issues or you don't really empower the people and that's also the other thing. We should empower the people that we put on the panels more, because it's unfair also towards them to expect them to go and sit on a panel but we have not empowered them to properly do the things that we expect of them or to assess when they are on a panel so there is some work to do there (P5:61).

When the research trainers realised that they were being overloaded with research activities, especially the assessment of reports, they engaged with the commander of the Academy, the training manager and the trainers to encourage them to get involved in this assessment. Many of the Academy's trainers had attended research workshops and short courses, but they responded that they had forgotten everything already. Another workshop was arranged for the trainers to empower them to apply what they had learned, but of the seventeen who indicated that they would attend the workshop and assessment orientation, only 4 attended (P8:23). It was a hopeless case. Their fears were laid to rest by P4 who shared her experience of the mentoring process and how gratifying it was for her:

...satisfying factors is the feedback from the learners and if they start to study further and share it with us. It is good to feel that we make a contribution to a learner's development and future planning (P4:162)... I was part of a research team that picked me up before I drowned... introduced me to research books, articles, share his knowledge and take me by the hand to go step by step through the whole process... I asked a lot of guidance and he mentored me through the process... I was sometimes left on my own and as a good mentor, he gives me the self-confidence to take this opportunity with both hands (P4:170). There was

also an understanding in the team that you need to read first about your challenge and if you do not get an answer you can come back for advice. This approach worked very well for me and I started to love my research books. I must also acknowledge that in the beginning, it was not so easy to understand all the terminology in research and until today, there are still a lot to be learned regarding research methodology (P4:174)

The empowerment of learners needed to cover the experiential learning in the workplace as well. This empowerment effort had much to do with learner support.

(v) Learner support in the workplace

Everything in the research module builds up to the execution of the research project. To this end, each learner was formatively assessed three times during which learners were guided towards a research proposal (SAPS 2012d). Once the research proposals had been approved by the HRD Research Committee, they could be executed in the workplace and learners were given access to all data sources. However, learners had to be prepared for the operationalisation of their projects. They needed to understand the implications of their proposed projects.

Since the trainers had already negotiated eight working hours per week to work on their research projects, the expectations on learners would be much higher than in the initial stages of the EDLP. The learners had to use a specially developed research logbook to record the history of their research activities and to account for the official time spent in doing so. Learners therefore had to meticulously record everything they did to account for the approximately 20 working days spent on research. They were urged to prioritise a meeting with their provincial or divisional commissioners to obtain buy-in and support during the execution of their studies. P8 explains that having the support from the most senior commander in the province or division could make life easier for the researcher, especially if the research topic is one of interest to the commander.

Although learners were provided with a textbook, which they could keep and use during fieldwork, this did not improve the quality of their reports (P8:15). Learners received copies of

the slideshow presentation on research methodology, all the additional handouts and the workbook in which they had made notes in class to support them in the workplace (SAPS 2013d). However, these sources appeared insufficient for the learners when it surfaced that if learners could not obtain enough literature while at the Academy, it was likely to be a challenge to conduct a literature review in the workplace (P4:105).

The support for learners in their workplaces centred on the relationship between the learners and the trainers. The fact that the learners had direct access to their study leaders and received regular motivational emails from them created the impression that the learners were important to the Academy and that the Academy wanted to support them (P4:123). From a trainer point of view, the trainer-workplace relationship contributed towards a positive experiential learning experience, but from the learners' position, commanders were less supportive during their research. Learners preferred to approach colleagues or fellow learners to assist them with literature reviews and data collection (Schwartz & Human 2012). P5 explained that learners' commanders have a huge impact on the success of research.

You will also find them saying when they come in 'I want to thank my supervisor for supporting me and giving me the time to do this' and in most of the times it's excellent reports. They sometimes even present it to their supervisors before they come. But then you find that there are other who just aren't interested at all in what this person is doing (P5:103).

In the research trainers' study of 2012, they noticed the impact of the workplace on learning and recommended that more be done to prepare learners for the workplace. They argued that the first thing EDLP learners needed to do was to learn how to learn while continuing their everyday jobs. There was often very little understanding for the peculiar position in which EDLP learners found themselves, but where there was understanding and support, things went well (Schwartz & Human 2012). Unfortunately, the learners also faced the consequences of rejecting the principle of learning partnerships that was introduced on 2011-11-11. This venture aimed at teaming up pairs of learners to provide mutual support during the experiential learning phase. P8 explained how much time and effort went into teaching learners to access literature. Learners were afforded time to practise information searches on Google Scholar, research databases and the SAPS' intranet databases. Learners could access the articles on the SAPS intranet, but thereafter they never tried again. Their

responses to P4 and P8's prompts were that they would ask their secretaries and children to assist them 'when they are back at home' (P8:19). The SAPS intranet is available to every police officer, which nullifies the learners' excuse of not having access to literature sources.

The SAPS Academy has in the meantime embarked on infrastructure improvements, which include the upgrading of the Academy library, to provide better support to learners. The upgraded library would be able to support learners with literature and general research guidance once the research component becomes (SAPS Academy Paarl 2014). This comes six years after the launch of the SAPS EDLP, but, in the absence of such service, the learners are left to do their own research.

(vi) Dealing with challenges to learner fairness

The learners were very outspoken about the perceived unfairness of the research module, but most of these matters were out of the trainers' control. The allocated time to learn the theoretical foundation of research methodology was too short as the amount of reading and learning required, and this time coincided with the teaching of other modules of the EDLP. The institutional phase of the research module required learners to read extensively on their chosen research topics, research methodology and academic writing while many had to learn computer skills to type their proposals. EDLP learners applied self-study to make sense of it. However, learners were given after-hours guidance and one-on-one sessions by trainers to clarify their understanding and to guide them towards constructing research proposals (SAPS 2010e). However, in P5's experience, the problem was not with the way of teaching but due to teaching being on a very low level. The trainers really try to make people understand when they teach. Compared to university teaching of research, the EDLP research approach is much more down to earth, trying to explain in a really simple way what research is (P5:112).

Learners also referred to the delays in getting assessment feedback. Some EDLP learners experienced delays in feedback when reports started accumulating due to approved extensions and additional opportunities to submit having been allowed by Division: HRD (SAPS 2011g). This is confirmed by P8 and P4 who, at one stage, worked at night for two consecutive weeks to assess research reports. At that time, they were behind on assessments, with some reports being behind on marking for nearly a year (P8:23). The

learners claimed to have lost interest in their studies as a result of not getting feedback or getting it so late.

In accordance with the assessment strategy, the research module and assessment instruments were set on a level that was relevant to the level of teaching, but stricter measures were implemented when the organisations demanded better quality research output. The initial use of references, for instance, represented only about 8% of the maximum research mark, but the organisation's emphasis on quality demanded stringent plagiarism checks, which caused many learners to fail their assessments. Where the original emphasis of plagiarism checks was on learning and acknowledging literature sources, it moved its focus to searching for signs of blatant dishonesty. This was seen by learners as a disconnect between learning and the assessment strategy (P8). From an organisational point of view, such dishonesty, or misrepresentation of facts, or even the inappropriate ascription of other authors' work as their own, necessitated strong measures to protect the SAPS against learner negligence or wrongful intent. For the learners this was a change in the assessment strategy that affected them negatively.

Learners were frustrated with at having to meet the expectations of the EDLP while they received very little substantive learning support in the workplace. The most significant source of frustration was not being allowed to work on their research when they were back in the workplace (P9). Another concern was the level of interrogation of the learner's research methodology when they presented their research to the research panels. Subject matter experts were to be included in the phase 3 panel presentations with the purpose of assessing the practical value of studies (P5). Learners were required to include implementation plans as part of their recommendations following their research findings (EDLP facilitator meeting held in March 2011). The same problem surfaced with the new SSED in 2015 when learners had to complete their studies in little more than two months while having to submit a ten-page assignment every week for the other modules (P8). The feedback after the EDLP research panel presentations was also not very clear. Learners had to make notes of the panel's questions and concerns and in order to address them later. However, the written feedback on the panel presentation improved over time, eventually specifying the areas requiring correction.

Comments and questions posed:

- *Presentation time was not within the required standard of between 20 and 30 minutes. The candidate was penalised on presentation skills;*
- *Feedback given was to guide the candidate to improve the research product;*
- *The major criticism about the study was the methodology and sampling used in the study;*
- *The full data analysis did not appear in the report or presentation. Raw data contained in interviews needed to be coded and themes or categories identified. The steps used in the analysis was not reflected in the report and the analysis of interview notes/transcripts was not shown. This should have be part of the data display; and*
- *No limitations were offered. These could be stated in the last chapter of the report when the conclusions of the study were drawn.*

(SAPS, Academy Paarl 2012d)

The learner feedback indicates that research presentation panels assess research reports and presentations on subject matter. This is a further assessment of the research report in addition to the research assessment by the trainers or assessors at the end of phase 2. This additional assessment raised an issue about the level of assessment of phase 2, or whether it was even necessary.

EDLP learners appeared very frustrated when the organisation demanded reimbursement of incurred costs from learners who did not complete their studies (SAPS 2011e). Participants 4 and 8 supported this step on the grounds of the poor return on investment, but simultaneously opposed it because they claimed it is the organisation that requires the learning intervention without any prior determination of the learner's abilities to master research.

5.3.3.4 Experiencing the shaping of the Research Methodology Module

This section deals with the experiences of the role players who were involved in the shaping of the research methodology module as well as the experiences of learners. Themes emerged from the data such as those based on workplaces as volatile learning environments in which learning is negotiated in the disconnect between research expectations, trainer

capacity, informal learning, development of research administration systems through problem-solving, the effect of police culture on learning, and developing critical thinking skills. These themes are offered next.

(i) Workplaces are volatile learning environments

Those involved in the research teaching, regardless of the degree of involvement, had different experiences of who acted as the gatekeepers to learning. Whereas P1 (programme developer), asserts that the trainers are the gatekeepers, P2 (programme developer) concurs with the statement as far as the teaching is concerned, but qualifies the response by arguing that the Component Heads of the Leadership, Management and International Development (LMID), and General Research and Curriculum Development (GRCD) were the gatekeepers for the development of the research module. They are the custodians of the research module. P3 (research committee member) holds that the HRD Research Committee, made up of members from all components within the Division: HRD, is the gatekeeper for technical and ethical qualities of research projects (P3:75).

P4 (trainer) considers the practical dimension of the research module to argue that the only gatekeepers in this process were the provincial commissioners who had to approve the topics, and the HRD Research Committee who had to give the go ahead for learners to continue with their studies (P4:131). P5 explains that research did not really exist in the SAPS. It was only when the Component Head for GRCD assumed responsibility as custodian for the research module that it really became a viable part of the curriculum. However, P5 (research panellist) argues that the gatekeepers of the EDLP research were the members of the research presentation panels, because the panel controls the quality of research in both the reports and the implementation plans (P5:6). Later in the interview, P5 admitted that she is not sure who the gatekeeper is (P5:7). Like P4, P8 (trainer) also put the gatekeeping responsibilities in the hands of the HRD Research Committee due to its processing of the research project registrations, but P8 adds that the learners' immediate commanders control learning in the workplace. This results from the working environment explains P5. What people experience in the field and what occurs in the learning environment are two very different things. While thinking and acting on a higher level at the Academy, learners encounter the opposite when they return to their workplaces. There is no support and sometimes no resources available. So learners struggle to keep thinking on the same level

as when they were in the Academy (P5:120). P8 supports the point of view that learning is really in the hands of the learners when they are at the Academy (P8). It is clear that the experience and exposure of role players to the research module influences their view as to who the gatekeepers for learning in the workplace are.

Another aspect that indicated a divergence in the organisation, is the management of research. The existence of two research committees, the research committee of the research section within the strategic management component and the HRD Research Committee, creates confusion in the provinces as to which research committee takes priority. Moreover, the establishment of a research institute at the national office added to the dilemma. Who is responsible for what? Not only is there an overlap of functions and responsibilities with regard to research among the research committees, there is also no clarity about accountability of the HRD research committee, or how to deal with the product of the research once the ETD process is complete. Provincial offices maintain that research in the police is dealt with in terms of the National Instruction 1/2006: This deals with research in the service and therefore manages the EDLP learners' research topic approvals accordingly. The HRD Research Committee is still in the process of developing its own research policy and guidelines on research ethics for all ETD research projects. The uncertainty as to which research committee takes priority, leaves the EDLP learners with conflicting instructions pertaining to their research topics. Provincial commanders may approve the research topics as relevant enough for research, but the HRD Research Committee may disapprove of them due to them being over-researched or the problem not being well defined.

The custodians of the EDLP often disagreed about the design and delivery of the research module. This divergence of direction surfaced during power plays between the custodians of the research at EDLP trainer meetings, but both custodians had had limited exposure to the teaching of research. Thus, they did not understand the impact of their decisions and instructions (P1:61). The learners experienced the impact of these research decisions when faced with a lack of understanding from commanders about the intensity of the projects. Learners were not always afforded the time they needed to adequately conduct their research (P2:147). Learners tried to deal with the apparent ignorance of commanders by requesting an extension from the custodians (LMID and GRCD) to submit on later dates. The requests were usually granted, which not only placed the assessors under pressure, but also delayed the updating of the Training Administration System (TAS) and the closing of courses. Such

uninformed decisions culminated in tarnished relationships between trainers and the learners who failed to submit their reports after the extended time, because their circumstances in the workplace did not improve (P4:123). P7 argues that such decisions are the result of the senior commanders not knowing how much work is involved in research. They still do not know (P7:18). P8 posited that the trainers learned to accept the custodians'- instructions and to deal with the consequences later, because 'that is how it is done in the SAPS'. In their experience, P4 and P8 were only supposed to follow instructions and not to make suggestions for improvement, because when they did, their suggestions were either not considered, or overturned by the senior ranking custodians. While disregarding earlier requests for textbooks for the EDLP learners, a decision was finally taken at an EDLP meeting in Pretoria that facilitators of the EDLP should identify prescribed and recommended books for the respective modules presented by them (SAPS 2011b).

Signs of a subtle power play also surfaced amongst the trainers. P8 noticed that the trainer who controls the research database has control over the information and can therefore dictate further decision-making. Such decisions could include how to manage a learners' progress or the study leaders' reports on progress to workplaces. The administrative personnel were also not always sure which of the trainers was in command due to the inclusive leadership approach of the trainers (P8, P7). However, P6 asserts that the differences were so minor that it never influenced the operations or capacity of the research team at the Executive Centre. For P7 it was clear who was in charge of research because of the person's knowledge, experience and interaction with learners. Neither P4, nor P8 were concerned about differences between themselves.

The trainers instead shifted the focus to the poor cooperation of other role players who failed to make the learners' life easier in the workplace. P2 and P4 shared their experiences of the cooperation among role players:

...I am afraid to say, they didn't. I experienced that only a few had knowledge of the subject and others were not interested in it. Therefore, it fell to the few to carry the subject forward on their own (P2:129).

... The other people criticise - most of the time - the attempts of the research team, but without proper consideration of the practicalities to make the programme progress... (P4:192).

P4 explains that this is an organisational problem. There is little shared vision among the different divisions in the organisation. It is evident in the different national circulars with contradictory instructions on the same topic. It is therefore not strange that there is also little support in the organisation for personnel development and improvement of the organisation. Instead, the development of senior managers is conducted merely to adhere to instructions or legislation (P4:230). P4 regarded the HRD Research Committee as being very positive towards research and the driving force behind it, but P4 remarked that even that committee has lost interest in seeing the process through (P4:192). P3 mentioned that she has never seen any cooperation among role players since she joined the research team. For P3, it would make sense if role players could meet before learners start the programme so that all assessors, supervisors and markers understand the standards in the same way to streamline the processes more (P3:127). However, this had been done through regular EDLP trainer meetings and the initial meeting of the HRD Research Committee. In fact, at their first meeting in 2011, the roles and responsibilities of respective role players within the division were clarified (SAPS Research Committee 2011). Realising that the roles of the HRD: Research Committee was not clearly understood by everyone, the trainers started briefing the research committee members who assessed the proposals on all the learning activities or processes the learners went through. An overview was provided to keep the HRD: Research Committee informed about the background against which learners had to prepare their research proposals (SAPS 2013d). P8 explained that he was required to represent the learners at that committee and simultaneously account for the trainers' work. P8 did not agree with the assessment by the HRD: Research Committee and asked them several times what the committee's role was. For P8, the HRD: Research Committee should have only considered the proposed topics and methodology for ethical clearance, but the committee instead, insisted on assessing and moderating the research proposals and evaluating the anticipated value of the study for the police (P8:17). This evaluation stretched beyond the scope of the assessment strategy of the research module (P8). The trainers experienced the HRD: Research Committee assessments as a measure of their ability to develop learners rather than assessing the learners' readiness to continue with their research projects.

The custodians' decision to integrate the Service Delivery Improvement Programme (SDIP), and to let all learners return to Paarl for the third phase, created several practical problems for the EDLP administrators, the coordinator, research panellists and the learners. P4 added that initially the provincial commanders were involved in the research panels. These

commanders supervised the learners and also approved the research topics before the learners started with the EDLP. They were supposed to assess the practical value of the research in terms of solving workplace problems (P8). The research presentation panels were conducted in the provinces, as it was convenient and cost effective for both the panellists and the learners (P4). Later, when the third phase was amended to include a SDIP, all the learners and panel members had to travel to Paarl. The duration of this phase was three weeks. While this step challenged the administrative processes in Paarl, it also put more pressure on the research assessors who had two weeks to assess approximately 25 reports of 80-100 pages each. The course coordinator who was one of the two research trainers, also had to arrange for the printing and signing of certificates from the Division: HRD office in Pretoria in the last two days of the third phase. Unfortunately, the provincial commanders lost interest in being part of the research panels, perhaps because it was no longer convenient, but this was not fair considering the hard work and commitment of the learners. To this end, learners questioned the double assessment process in the research panel presentations. Ironically, the panel chairpersons who instructed the development and implementation of the panel assessment could not explain why they assessed the same content twice (P8:18).

According to P8, the EDLP custodians attempted to address the fading interest of the provincial commanders by appointing conveniently available substitutes. These 'alternative' panel members had to replace the provincial commanders if they could not attend the panel presentations. However, the substitute panellists were not sufficiently knowledgeable in research methodology and were often not considered experts in the learners' field of studies. Moreover, they were inexperienced. P5 shared her experience in these panels:

... You have to sometimes follow what you are thinking and sometimes we as panellists do not agree with one another, because I have my own concept of thinking and the person next to me is different and as I said, it's just something that I had to...and I promise you, still up until today, sometimes I don't know whether I am right in my assessment, because how can I say to someone that something is wrong when I haven't studied (it) myself and I'm not a content expert... (P5:35).

The new research panel lost credibility (P8) and the spike in assessment results indicated that the new panel was much more lenient in their assessments than the earlier panels had

been. P8 recalls how he and P4 reflected on the implications of the high marks of the new panel. For them, the high marks resulted from the inability of the new panel members to assess critically while listening to the presentation, the absence of experts in the specific field, the lack of understanding of research methodology, and the eagerness to improve the success rate of the EDLP. On the one hand, the HRD: Research Committee endeavoured to improve the quality of the research and ensure a better return on investment, but on the other it lowered the capability of the research panels by awarding higher assessment marks to increase the number of successful learners. This dichotomy adversely affected the credibility of the research panel, and questioned the need for its existence if it did not include qualified research methodologists, ETD specialists and relevant police experts.

P4 reiterated the need for proper collaboration between the research committee, presenters, assessors, moderators and panel members. P4 argues that the amount of work that is involved in the EDLP research projects should not be underestimated. It needs to be properly communicated to all parties involved to secure the necessary support from the Division: HRD, the provinces and the SAPS Academy (P4:140). Workplaces do not support the EDLP learners during their experiential learning or research phase. P4 asserts that the reason why the workplace does not always welcome workplace learning, or does not recognise the advantage of experiential learning in the workplace, is a lack of knowledge and proper consultation with the Division: HRD (P4:230).

Divergence was also found in the development efforts of the Division: HRD to assist the trainers of the SAPS Academy to become conversant with research methodology and to increase the research trainer pool. The trainers were afforded several opportunities to attend courses and undertake formal education to improve their research skills, but they were never actively engaged in the teaching of research. Also, the Academy did not hold the trainers accountable for not applying these skills after all the development efforts. It appeared as if the SAPS Academy and the Division: HRD had different understandings of the purpose of the trainers' development. Other visiting trainers were eager to get involved at the beginning, but once they experienced the amount of work and the responsibilities of the research presenters, they found excuses as to why they could not do so (P4:192). In the end, the research module remained the responsibility of P4 and P8. In the meantime, the custodian for the research products indicated that the SAPS Academy library upgrading had been done to afford all learners access to the research databases on the internet. He added that all

learning programmes would have research as part of their curricula in future. SAPS Academy must therefore be able to provide the learners with the necessary assistance (SAPS Academy Paarl 2014). The neglect of the SAPS Academy to engage its trainers in practical research experience might thus derail the Division: HRD's strategy of capacitating the Academy.

In the meantime, the lack of support from the SAPS Academy for the research trainers escalated to not providing adequate resources for them to do their work, especially after-hour research guidance. P4 elaborates on this, but immediately claims responsibility in part for not getting the resources for which she had applied. P 4 explains:

I applied once for the necessary resources, but it was turned down. I believed it was turned down because the people who had to approve the application did not have enough knowledge about the [research] process what it entails. I also did not motivate the need satisfactorily (P4:201).

P8 argues that it was unfair for P4 to accept responsibility for not having resources. It took the trainers five years to get their personalised official email addresses, three years to get a cellular phone for one of the trainers, four years for the other trainer to get an official mobile phone and four years to be provided with a laptop computer. P8 vented his frustration with the situation at the time. The trainers worked in offices where temperatures reached up to 53 degrees Celsius while there was no air-conditioning system installed. Yet, the organisation demanded better quality work from the trainers, who worked without support in challenging conditions, on an overwhelming number studies at any given point in time. The situation has improved since 2015 when P8 had an air-conditioner installed in his office. A landline telephone has, in the interim, also been installed. P8 ascribes this sudden improvement of support to his involvement with the universities and his function of coordinating tertiary programmes. More resources were made available when the SAPS partnered with a university to offer leadership programmes and policing qualifications.

- (ii) Negotiating learning in the disconnect between research expectations and trainer capacity

When one considers all the activities involved in research, one would expect to find a larger trainer pool presenting the module research of the EDLP. However, this is not the case (P8). In reality, one finds that the bulk of the work rests on two trainers. This would still be acceptable if the learner-trainer ratio was 1 to 15 as in some tertiary institutions where lecturers supervise Honours and Master's Degree dissertations, mini-dissertations or long papers only. However, in the EDLP, the ratio was closer to 1 to 60 learners at any given point (P8:16) and the custodians of the programme expected the two trainers to increase the number of successful learners with every new programme. P1 confirms that at any given moment, the trainers were overloaded with the volumes of research projects (P1:173). P1 added that the supervision of the learners in the workplace made the workload even worse as the learners' chain of command was mostly not acquainted with the subject itself and thus did not allow for structured learning in the workplace (P1:181).

Some people have the skills and the ability to do the EDLP while others do not and are thus unable to complete the research part of the program successfully (P5:109). The level of exposure to research methodology was not included as a prerequisite of attending the EDLP. Learners had to have a Matric (Grade 12) certificate and at least a NQF level 6 qualification (SAPS 2011e). The reality is that the research trainers did not have any control over the nominations of candidates to attend the EDLP. It was thus equally possible for learners with doctorate degrees to be included in the EDLP cohort (Schwartz & Human 2012). P8 explained that the uncertainty of the credentials of the learners made him feel uncomfortable at first. He added that he struggled to build enough courage to walk into a class where it is not known whether or not there were any researchers who could expose his insecurity to the class (P8:11). But in P1's experience, P8 was excellent in "breaking" complex concepts into manageable chunks to assist understanding, as well as for his ability to use simple examples and apply the research concepts and approaches to the examples. P1 asserts that most trainers do not have this ability (P1:94).

The trainers' ability to teach research was hamstrung by the reluctance of many learners to learn research. Instead of taking ownership for their development, they waited to be told what to write in their proposals. The trainers argued that they could force the learners to take

ownership by just prompting them to readdress the concerns in the proposal. For some learners it helped, but most could not address the matter. They relied on the trainers to correct the proposals for them. P8 admits that the trainers did so to protect their own image, because the HRD Research Committee blamed them for the learners' inability to draft proper research proposals. This might be true, argued P8, but the reality was that many of the police officers only had a school leaving certificate, a few had a vocational diploma and even less had a first degree. Most learners were older employees with thirty or more years of service and some of them were close to retirement (P8:16). P4 posits that the trainers did their best to help all learners understand research. To this end, they tried to explain the research terminology by using common examples from every day happenings (P4:94). Everyone commented on the method of teaching research and on the lenience in the assessment of reports as well as on the fact that the quality of research was not of an acceptable standard (P8:17).

However, considering the learning outcomes of the research module, and taking into account the capacity and will of the older learners to learn, one might consider the expectations of learners as being unrealistic. Learners were supposed to apply self-study techniques, understand scientific knowledge and distinguish it from personal opinion, tradition and instinct. They were required to be able to give an overview of the research process, the steps of the research process and to be able to discuss them, develop a research proposal and implement the research project, whilst applying at least one scientifically correct referencing technique (SAPS Academy Paarl 2011b). P8 explains that this is much to ask of a person who is not ready to take on such a challenging endeavour, but P4 optimistically comments that the research presentation builds on their passion for research. They analysed the learning outcomes initially to have a clear understanding of what would be expected of the learners before deciding on the learning activities. The lesson plans were always flexible to address the needs of the learners (P4:59), but despite this effort a few learners were regularly not ready to submit their proposals for assessment after four weeks. This was explained to the HRD Research Committee. One such letter read:

Several learners' proposals were not yet at an acceptable level. They were given the opportunity to correct mistakes in their proposals as alluded to above. However, these proposals were not assessed again due to the time constraint caused by the EDLP work session in Pretoria and the time needed to assess same by the research committee. (Their original proposals that were assessed,

together with its marking rubric, have been made available for easy reference)
(SAPS 2012d)

Other documents also indicate the extent of the trainers' responsibilities at the SAPS Academy while teaching and supervising research. One documents reflected on P4 as being involved in the assessment of more than a hundred research reports. These reports have due dates, cut-off dates, assessment periods and reporting periods scheduled. As part of the research team, P4 is therefore booked for research assessments for the whole year. She did not have the 'luxury' of being involved with anything else that the Academy has to offer (SAPS Academy Paarl 2011e). Learners were taught in class, guided towards research proposals, encouraged to read on their topics, helped to develop an understanding of research methodology and academic writing, and taught computer skills to type their proposals. Trainers also had to give after-hour guidance and one-on-one sessions to help learners clarify their understandings (SAPS 2010e). P8 explained that he and P4 often met to reflect on the learners' progress. These short meetings could not coincide with their lunch breaks because they did not have time to break for lunch. At one stage, they worked extra evening shifts for two consecutive weeks to assess research reports. "*At that time we were behind on assessments and there was no other assistance*" (P8:23). However, the records indicate that other trainers had been developed to assist in the research module (SAPS 2012g). These trainers just never got involved. The result was that the trainers who were involved had to apologise to the learners for not being able to respond promptly (SAPS Academy Paarl 2011f). There was interest in assisting with the research, but such interest came from role players who could not be released from their own jobs. P2 indicated that not everyone understood research as he did, because he had to learn to understand it in different forms in order to be able to teach what he understood. It was more a trial and error approach (P2:120). P2 subsequently indicated that he could get the concepts over to the learners if requested to assist (P2:117), but P3 pointed out that being involved as supervisors or assessors impacts negatively on their existing workload (P3:139). Nevertheless, the other role players who were not working at the SAPS Academy were under the impression that the research module ran smoothly. P1 asserts that the trainers did an excellent job by dictating to other role players what should be happening without feeling the pressure of the workload and working with non-willing learners. The trainers experienced a very difficult situation (P1:122).

An annoyed P8 explained that it had taken him several months to get as far as to put his dissatisfaction with his job and added responsibilities on paper (P8 Diary 2012-11-27). According to him, the more it seemed as if they were coping with the assessment of the research reports, the more they were tasked with additional responsibilities. The trainers had to travel frequently to panel presentations and research committee meetings in the institutional phase, leaving one trainer in the field and one in class (SAPS 2012h). The workload of trainers due to class commitments and additional responsibilities pertaining to the running of the Academy caused delays in the assessments and the research processes (SAPS Academy Paarl 2012e). Other documents also reflected the limited capacity of the Academy to teach research effectively. The capacity of research trainers was sufficient for the initial period (SAPS 2011b) but the situation spun almost out of control with continuous extensions, and supplementary submission opportunities. The capacity to present lectures, assist learners to develop proposals and assess proposals and research reports is not sufficient (SAPS Academy Paarl 2011a). A new set of requirements for EDLP facilitators were meanwhile introduced (SAPS 2011h).

(iii) Informal learning through work

Trainers, P4 and P8, were very involved in the research process and their learning experiences are explicated in this chapter. P8 learned from both experience and obtaining advice from fellow students during his Master's Degree. P8 explained how he struggled to get learners to understand research methodology. In an effort to help them learn, P8 and P4 provided the learners with more and more reading material. From his discussions with fellow students, P8 learned that he was actually drowning his learners with reading matter, to such an extent that they felt hopeless. The reading material overwhelmed the learners. Instead of reading a relatively small textbook, they ended up reading nothing at all. An indirect result of the additional reading material handed to learners was that the other trainers of the Academy witnessed the amount of work involved with teaching research methodology and subsequently steered away from learning research even though they had been afforded several developmental opportunities in the form of external courses. P8 was also able to learn from his interaction with P4. P8 became complacent with the format of research documents, but P4 found a way of continuously improving the appearance and practicality of the layout of documents such as the files used by research panel members. P8 learned to pay attention to detail because the other role players may think that the trainers had lost interest in research

or that they might not be doing enough for their learners. P8 learned to trust P4's instinct about the perceptions that other role players might have about them.

All role players alluded to how they had to engage with other people to broaden their understanding of research. P1 explained that his exposure and discussions with the trainers and assessors of the EDLP helped him to build knowledge of specific problems with the research module and how to overcome them. P3 learned from the different research proposals that she had to mark for the HRD research committee and engaged in self-study on the concepts she came across in those proposals. She had to read up on research in general to provide feedback to the HRD Research Committee. P4 learned informally from the discussions between the learners and her colleague, but P4 cemented the understanding gained in class by confirming it in the literature that she read after work. From her interactions with P8 she had learned that "*nobody knows everything and everybody needs to read relevant literature to maintain confidence in research methodology*". P4 gained confidence by reading more textbooks. Perhaps the greatest lesson for P4 was that she had to learn how to learn. P4 explained how she initially had to read several articles and textbooks before she could ask P8 to explain a concept. P8 made certain that P4 imbued knowledge that was reliable and that would give her the confidence to explain the concepts clearly to her class. P4 followed through on the same approach when she had to guide learners in their research. She learned to study an unfamiliar concept before presenting it to a learner. For P5, learning to cope and maintain status in the research panels gave her the confidence to improve her feedback methods in the panel presentations. P5 alluded to how she had to learn how to listen critically to the learners and, to put learners at ease before their presentations, she had to reflect on previous occasions when she had been part of the research panel. P5 explained that the use of the assessment instruments was not a problem, but doing different things simultaneously was challenging. P5 also had to learn to overcome the effect of police culture during panel discussions in order to allow junior panel members to pose questions to their senior learners. P5 elaborated on the importance of research for her and how she had learned during the research teaching:

... if I have to write a policy I have to follow the research process to be able to write the policy and that has taught me a lot. But I do feel that research is very important, specifically in our Academy, for what we are doing, and even to all our learners, even if we just teach them the basics of research... (P5:14).

However, learning to play her part was not easy, because there was no guideline on how to prepare for panel presentations. P5 posits:

... There's a guideline in terms of the assessment that you have to follow on how do you assess and evaluate, and the marks that you give and whatever. But on what to look for and what to listen for when a person is presenting...there's no guideline on that and it is very difficult ... I can evaluate and assess people on the process, but I'm not a content expert so I cannot tell them 'what you did here is wrong or right or whatever'. So it's just a feeling, but sometimes you get really very poor researches and you can see that this person doesn't have a clue. And if you ask a person a question, at least he must be able to defend his study and if he can't do that, then I know this person obviously doesn't know what he or she is talking about. I think that's the big thing: if you can see that they can defend what they are doing, and if you look at the sources and resources that they have used, you can see that this person has really gone through a lot of trouble. Those that haven't, you can immediately see when you open that research (P5:35).

P5 learned to act as chairperson of the research panels:

... I think during the presentations, you know, at first I just listen and I give other people chances to ask questions and this and that, but I didn't really sum up at the end what everybody said and on the presentation. But the more I did it, the more it became easier for me to in the end sum up the whole thing for the panel, as well as for the person who presented. I think by doing that at least it made it for everybody a little bit easier to say 'this is what have happened, this is what should happen, this is what you should give attention to' and even then to the panel members to say 'okay, these questions, this question' or 'let us in the next presentation look at this or that'. So if you see something is going a little bit wrong you rectify it there and then before you go to the next presentation. So I did find that the more you do it, the easier it becomes... (P5:94).

Role players like P2, P5, P6, P7 and P8, found themselves constructing new identities. For P5, assuming another identity was something that spontaneously happened. P4 and P8 started using P8's academic title to emphasise their professionalism as lecturers (SAPS

Academy Paarl 2013a). The participants explain:

... that unconsciously you take on that role the further you go, because there are so many...I mean some weeks we are sitting there two, three days on panels assessing people on what they are presenting and what they research. So because of that role, more and more, you start thinking and doing in terms of that (P5:52).

... I have experience in research methodology and try to update myself on new methods (P2:114).

While stating this, I often found myself moving away from my police identity towards becoming an academic. I did not see myself as a police officer and as such did not wear police uniform at work. It was only recently that I was compelled to wear uniform again (P8:13).

Participants also learned from their own observations. P7 and P6 could step outside their normal administration roles to assist learners with their research proposals and reports. P7 explained how she could look at the format of a research proposal or a report and tell whether the standard would be acceptable to the trainers. P7 learned from the assessed reports that she had to send to learners. When the trainers were not available to respond to learners' enquiries, P7 and P6 could use examples in older reports to respond without having to refer to the trainers. P6 alluded to using her computer as a databank of examples that she could use to guide learners. However, P7 and P6 also learned informally what learners normally struggle with by having short social discussions during the learners' tea breaks. P6 explained that the administrators could determine which learners would not be able to cope as early as their day of arrival. P6 recalled that her previous observations and suspicion that certain learners would not be able to complete the research successfully were confirmed by their poor results. P7 and P6 empathised with these slower learners and tried to assist them to complete at least the first phase of the EDLP. Their interaction with the trainers and the learners enabled P7 and P6 to put the initial research administration process in place. P6 was particularly conscious of the integrity of the assessment process and managed the flow of research reports in such a way that it protected the confidentiality of the learners' work. P6 explained that although she does not work in the training provisioning section, she has heard

from trainers that the training manager was strict on the way the trainers handled assessments.

P7 elaborated on how P6 taught her what to do step by step. In the beginning P6 showed P7 how to do the administration, to fax the feedback to the learners and later how to use the document scanner. P6 had become P7's mentor in the administrative process (P7:24). P6 extended her mentoring role to assist learners. However, P7 also confirmed that she had become a mentor to struggling learners. P6 asserts:

... I could help learners with their 4-pager research designs, because I could pick up from the learners' interaction what the trainers want in the learners' assignments. I knew the layout or structure of the research proposal and I eventually started to pick up on the terminology so that when learners ask me something I could be in a position to help them (P6:09).

For P4 and P8, much of their learning had to do with finding ways of making learners realise that the learning was their own responsibility. They realised that when EDLP learners were appointed into senior positions, they demonstrated their willingness to learn from a combination of sources (Schwartz & Human 2012), but they showed reluctance to do that for research. P4 explains that the trainers had to develop checklists and other mechanisms to help learners check their own work for completeness. While learners were taught to check their own work, the trainers learned to let learners check their own work (SAPS Academy Paarl 2011b). The trainers also had to make sure that panel members received the research reports of the learners well in advance to prepare for the panel presentations. They have learned that if the panel members are not prepared, the learners were likely to be overwhelmed with unnecessary questions about nonessential issues in the reports. Subject matter experts had to be included in the phase 3 panel presentations to assess the practical value of studies. Learners were required to include implementation plans as part of their recommendations following their research findings (SAPS 2011g). P8 argued that it was possible that the value of the study might be overlooked or misinterpreted if the panel members were not prepared. More than anything else, the trainers learned to cope with the pressure of the programme by relying on each other's abilities and support. Together, they have developed systems to help them manage the research process better. P8 explains that they had to find out for themselves why learners failed to submit their research reports and

decided to do their own research on the matter. Later when the workload escalated, they were faced with several versions of the research module, too many learners and studies to remember and an unreliable report tracking system. At that stage, they decided to develop a new database that could position a learner's status with accuracy (SAPS 2011b).

P14 and P12 managed to reflect on their research module when they were in management meetings. They shared the experience of asking more probing questions during these meetings. They have learned that the first response to a situation is not always the best one, even if it is the correct one. The learners had not learned to do research, but they had learned to selectively apply elements of research in their daily practice. P15 explained that he has learned to prepare better before going to a meeting. He reads more critically. However, P14 explained that only parts of research are used, because the culture of the organisation is restrictive for learning. The participants explained that they are not allowed to question authority, but now they prepare better and analyse documents before arguing in a meeting.

(iv) Development of administrative systems through problem-solving

The research administration process was developed over time. As alluded to earlier in the chapter, very little thought was initially given to the administration of the research module but documents and instruments were developed as the research module started to gain momentum. In P4's opinion, more provision should have been made for administrative activities. P4 asserts that to include a research module in a learning programme requires proper planning and the establishment of an efficient administrative and record keeping process. However, this was not the case, and the research trainers and administrative personnel had to find ways of becoming more efficient in their work. The initial administrative processes of the EDLP entailed capturing the respective modules assessment marks on an Excel spreadsheet. These marks could not yet be captured on the TAS due to the outstanding assessment marks of the research module.

The trainers developed a database to keep themselves informed of learners' progress. Learners' research topics did not present challenges in the first two programmes, but later the trainers realised that they needed to keep records of the different topics to avoid duplication of studies. Thereafter, the topics were registered on a newly developed EDLP research database while the hard copies of the learners' work were filed in their portfolios of

evidence (P8 EDLP trainer meeting notes 2010-09-06). The database needed to be as complete as possible to accommodate any future enquiries such as learners' submission dates, feedback dates, the assessment results and the overall status of a learner's progress. This database proved invaluable when the SAPS' TAS could not provide reliable learner statistics. The TAS needed reviewing to accommodate the amendments to the EDLP and the research module. However, the system still experiences challenges because the system developers failed to understand the different versions of the EDLP (P4:135). P7's body language indicated that she was very frustrated by keeping the TAS up to date, particularly with all the different course codes (P7:27).

The development of an administrative process for research, especially for dealing with phase 2 of the EDLP, proved to be a tedious process. Every step in the process needed elucidation. If there were flaws in the process, it would reflect on the records of learners. Reports had to be acknowledged when received by mail or e-mail, then registered to account for them in the system. Results needed capturing, feedback given and somewhere in the process penalties for late submissions had to be applied (SAPS 2011i). Initially, the administrative personnel used a register to record the receipt of a report, and the movement of the report during assessment, moderation, feedback and filing (P8:27). The learners received feedback directly via electronic media. Reports were either scanned then e-mailed or faxed to learners, but all correspondence with learners was printed and filed in the learners research files for future reference (P4:205). The administrative personnel learned to make back-ups of the data on the computer because it had to support the recording of the marks onto another learner record database situated in the office of P7 (P7:26).

The mode of communication with learners had to be standardised in templates. All communication, especially feedback after reviews or assessments, had to be done in writing and in such a way that learners were guided and encouraged to continue with their studies. This included the research panel feedback. The panel administrator, usually one of the trainers, had to minute the proceedings and distribute the typed minutes within three days of the panel meetings. The minutes were filed in the trainers' research communication file (SAPS Academy Paarl 2012f).

The administration process had to be refined on a continuous basis. The administrative personnel experienced challenging times in the beginning. P6 explained that she had refused

to follow an instruction because it would jeopardise the integrity of the administration process. P6 explained:

...Another officer instructed me to make copies of reports to make sure that none is lost, but I disagreed because then we would not be able to track the progress or a report could be booked out to more than one assessor. I therefore just ensured that I exercise stricter control over the research file and the reports (P6:9).

P7 mentioned that there was a time that things did not work that well. “*The reports did not flow as it should have*”. The report should have gone from the assessors to the administrators, to P6 and her, but the reports skipped P7 to go directly to P6’s office for feedback to the learners. When the reports skipped P7, she stepped up to address the matter with the trainers and the problem was resolved (P7:26). When the trainers felt that there was not enough information in the administrators’ research file to address future queries, they decided to develop their own detailed database of all learners’ progress (P8:27). P8 considered the research process of mapping out the administrative tasks of the research module. These tasks are indicated in Figure 5.4 on page 232.

(v) The effect of police culture on learning

The SAPS is very target driven in its approach to developing its executives (SAPS Academy Paarl 2011h), but this approach does not support a focus on the quality of the EDLP. The EDLP learners, however, found themselves in an organisation that acknowledges the legitimacy of the South African Qualifications Authority (SAQA) and the Safety and Security Sector Education Training Authority (SASETA) that regulate the standard of skills development in South Africa. Despite this, the custodians of the EDLP did not allow for recognition of prior learning for EDLP learners who have already done research in formal education. To this end, the employer dictated the learning outcome and controlled the conditions of work and the conditions of learning. It further dictated when the EDLP was had been completed by a learner, regardless of the state of competence (Schwartz & Human 2012). This is typical of the police culture (P8).

The organisational culture influences the researchers in the workplace (P1:210). P1 explains that the qualified officers become a threat to the “not so qualified” members. Then there is the conjecture that qualified officers cannot solve operational issues and tend to use academic backing to explain the position of any phenomena. In addition, argues P1, the notion of classism manifests as soon as the learners start to do research (P1:210). The divide is between those that could and those that could not do research. A learner in an earlier study pointed out that the ranks of the trainers should be on the level of the learners to be taken seriously. The learner argued that higher-ranking trainers would ensure that learning takes place in a disciplined manner. It could overcome the police culture of stereotyping members due to their ranks. The learner explained that education, skills and police ranks are different things (Respondent 8 in Schwartz & Human 2012).

During reflection, P4 and P8 realised that EDLP learners were not fond of reading. The quality of their reports did not improve when learners were provided with textbooks that they could retain and use during their projects (P4:209). Instead of exploring the possible causes for poor performance, the other role players pinned the problem on the method of research teaching (P8:15). Referencing was a major problem for the learners even though a whole afternoon was spent on the Harvard referencing method and issuing learners with a referencing textbook for use during the first six weeks of the EDLP. A few learners attempted the referencing technique, but the majority waited for the trainers to correct their work (P8). P5 argues that people do not learn to think for themselves in SAPS. They never learn to speak critically because they work in a disciplined environment where they act on instructions. Research is contrary to the police culture (P5:115). In research, you are required to think and reason, and read and compare things. Yet, according to P5, the learners were not doing that in their working environment and therefore they never learnt how to think for themselves (P5:118).

Knowing that the trainers had no software available to scan for plagiarism in the research reports, the learners tried to take advantage by submitting work that was copied directly from the internet. Authenticity was a major challenge, even though its significance was taught in class and repeated often during research guidance (P8). However frustrating it was to use Google to find the original texts, the trainers persisted in their quality checks. Appropriate software would have saved a lot of time because the trainers spent up to 4 hours per session searching for the information (P4:201). P4 concludes that even without the necessary

resources, the trainers still managed to minimise plagiarism. A few learners were disciplined for their blatant disregard for others work (P8), but the level of leeway on issues of originality was never determined. It was obvious that learners would not be able to produce work that was 100% original. To this end, the trainers could not establish what would be an acceptable threshold for plagiarism for the Division: HRD. The matter was also commented on by P8 when the draft South African Police Service Education, Training and Development Research Policy was distributed in the organisation. P3 explains that it is for this reason (lack of proper resources and time) that she regards herself as a gatekeeper for the research proposals. As a marker, P3 ensures that research standards are maintained by evaluating accuracy and guiding learners in research methodology as part of the marking function (P3:82). As an employee of SAPS conducting research in SAPS about SAPS, one is, in a sense, subjective (P3:177).

Organisational structures often worked against each other. When the SAPS' Language Services refused to assist EDLP learners to edit their reports, the responsibility fell on the two trainers (P4:52). This meant that they had to check grammar and spelling and the layout and structure of each report, then scan each one for originality before a learner was allowed to present the findings to the third-phase panel (P8:18).

The custodians of the EDLP research module insisted that the trainers improve the quality of the research output, but P8 and P4 experienced a fading interest in the EDLP research and its output. P5 explained that she was just instructed to chair a research panel. P5 officiated on the SDIP panels before being told to sit in on the EDLP panels. Shortly thereafter, P5 had to chair the EDLP research panel, which was normally done by generals, provincial commissioners and the Divisional Commissioner: HRD. As time went on, the research panels were downgraded to be chaired by a brigadier (P5:10). The ceremonies for the handing over of certificates to successful learners was also downgraded from big glamorous events to small informal get-togethers due to the design of the latest EDLP model that required learners to return to the SAPS Academy for phase 3. There was no time to prepare for prestigious events as the trainers were occupied in other training activities.

The EDLP also lost prestige in the executive development programme as more and more middle managers started attending the programme. However, the learners were nominated for the programme and it was not necessarily their own choice to attend (P4:69). P4 suspects

that there is a culture in SAPS that propagates the notion that researchers only conduct research to expose other people (wrong doers) or for their own benefit to misuse other people to finish their own studies (P4:225). Even if some individual learners' experiential learning is successful and maybe documented or demonstrated, it will not necessarily be used by officers or colleagues. Moreover, the research reports may be kept in a knowledge management repository, but this remains merely a collection of reports. Most officers do not read a lot (P1:218) and there is currently no corporate climate that encourages employees to read and reward researchers properly for what they are worth (P4:230).

(vi) Developing critical thinking skills

However, the learners were in general not able to think critically about their research problems and they were also not able to read critically, if they read at all (P4, P8). P4 asserts that the reading material was given to learners to stimulate critical reflection, discussion and debates in class (P8:59). Learner guidance reflects how the trainers encouraged the learners to think critically about their topics, to approach them from different angles and to follow discourses on the topic in relevant literature but such guidance usually had the opposite effect on learners. Many of them quit their studies after such feedback, but P5 posits that learners need to use critical thinking skills when they reach conclusions, make recommendations and develop implementation plans for their proposed solutions. P5 explained that she had learned this skill when she attended the EDLP and still applies it in the workplace today. P5 explains that when she reads a research report, she thinks about what it is saying and considers it in relation to her own responsibility at work. If she could find relevant texts, she would incorporate such learning into her own environment. For P5, the research panels taught her to listen critically because the assessment feedback of the learner would be based on that. Without such critical thinking skills, one cannot debate an issue with a learner (P5).

However, the trainers have realised that learners learn through various ways in the workplace but mostly after having received a promotion in their job. Learners who have done the EDLP explained to the learners that after a promotion, they could ask anyone for assistance to get to grips with their new jobs, regardless of the other person's rank or position. However, when they are doing the EDLP, they only approach their colleagues or fellow learners for assistance. P8 explains that the senior police officers feel embarrassed to ask the trainers who are their junior in rank, because it would expose their lack of understanding. Learners who struggled

to understand the research module blamed their childhood schooling system as it had prevented them from learning to understand research. For P8, this was just their way of avoiding further questions about their reading and commitment to learn, because the work that the learners were doing in the workplace demanded much more thinking than that which research was demanding from them.

5.4.1.3 Lessons learned during the teaching of research

Teaching research does not come without mistakes. The trainers often referred in their teaching to how challenges were addressed in previous courses. P8 explains how the implementation of new approaches was fairly easy, but the effect of such improvements was only visible at the end of the learners' research projects. What seemed an appropriate solution at the time often did not yield the anticipated results. This was ascribed to various reasons as the trainers could only control the institutional part of the EDLP. When analysing the data, several themes that indicate workplace learning emerged. These themes are: (i) misconceptions and unrealistic expectations, (ii) developing coping mechanisms, (iii) reflective practices used for teaching, affordances and active participation, (iv) CoP and newcomers, workplaces and police identities, (v) experiential learning and guidance and (vi) integration of learning and practice.

(i) Misconceptions and unrealistic expectations

Members of the SAPS have a general misconception about the subject of research. The majority of senior police officers think of research as something that is done only in academic circles and fail to understand that it is a mechanism to explore phenomena in the workplace as well. Because research methodology is not seen as relevant to the executive development training that senior officers receive, it tends to be resisted. P8 and P4 explained how they had to emphasise the need and use of research and its relevance to the learners' workplaces. In contrast to this view, several learners also misconceived the research process as something that is very simple to do, ignoring the scientific element of research or the rigorous testing of findings. P5 (112) explained:

... people go back and they think 'hmm, easy'... and then they put it aside and then they go and do their work. And then suddenly they remember they have to do this thing and then in a very short time they have to do this and then they find it's not so easy...

P1 maintains that learners were not sensitised to the strategic direction of the organisation before attending the EDLP. They subsequently arrived with topics that would be challenging to research in their immediate working environments. It was only when learners arrived and the module was introduced to them that they realised the scope of their selected topics (P1:50). The module content was not designed to produce output at a Master's Degree level. It was designed to be an introduction to research so that the use of research could be phased into the organisation, but its importance escalated when the custodians wanted to secure returns for the money spent on teaching research. However, as previously mentioned, the module design did not take into account the varying levels of exposure to prior learning of research. All possible efforts were made to encourage learners to participate in generating new learning and skills, but some of the less experienced learners did not cope with the content of the module or the form in which it was presented. Learners were so overwhelmed by the content that they did not progress further than just trying to cope with writing a proposal (P2:78). When, after many learner attempts and verification by trainers, the HRD research committee received research proposals for consideration, they found that the standard of most of these research proposals was not high (P1:171). Most learners just did not have the ability to master the learning content (P1:113). One could say that 'under-learning' occurred, as learners were not prepared for the intensity of the research module (P2:69).

P8 explained that he overestimated the abilities of learners and their exposure to research when he first started teaching research methodology. After the initial lectures about research, P8 asked the learners to read and discuss two different articles about the same topic. The methodology applied in the two studies was different and learners were asked to highlight the differences in order for them to realise that there can be several methods of doing research. After the exercise, learners could mention different terminology, but could not distinguish between methods. This realisation prompted P8 to develop an icebreaker that could help learners to gain an understanding of why they need to know how to do research. P4 expressed a similar experience with learners who could not participate in debates about research designs, data collection methods and data analysis, because the learners could not

understand what they were reading. At that moment, the trainers realised that the organisation had not taken the readiness of learners into account when they designed the module. Moreover, neither the trainers nor the learners' abilities were considered when a decision was taken that learners need to develop plans to implement their research findings. Learners could not develop critical skills, found it hard to formulate research problems and showed very little commitment to understanding research. On the other hand, the trainers could not keep up with the organisational demand of delivering a high quality programme whilst simultaneously teaching new learners and being overwhelmed by the number of learners that required guidance. It was a recipe for failure (P8).

Almost half the learners did not have the computer skills required to conduct literature searches, type their work or even store their work on a computer. Yet, they were expected to complete their studies at the same time as the learners who were computer literate (P7). For P5, learners' failure to do research had nothing to do with the trainers teaching abilities or their knowledge. They simply underestimated the module.

However, P8 was shocked when he walked out of class after teaching research for the first time. He could not believe that the SAPS would expect the learners to grasp in two days of lecturing what he had spent five years learning. Not surprisingly, learners who failed to complete the research module successfully were left with bad memories (P4:123). P8 nevertheless admits that he unrealistically expected the EDLP learners to read difficult research textbooks for self-study while at the Academy. Learners were given a textbook to use at home during their fieldwork, but very few learners could provide evidence in their reports that they actually consulted the textbook. The issue was that learners could not understand the research terminology and did not make the effort to understand it (Schwartz & Human 2012). Part of the reason is that the workplace does not allow time for the learners to prepare for fieldwork before they engage in data collection. While learners do get eight hours per week to work on the data collection for their research projects, they are not supposed to read the textbook at work (P8). The reading was supposed to have been done in their private time. Needless to say, when other life roles kicked in, the learners found very little time for reading

(ii) Developing coping mechanisms

This theme mainly involved the trainers and the learners. Drawing from their own experiences with research during tertiary studies, P4 and P8 realised that the journey of conducting research can be a lonely one in the absence of good communication between researcher and study leader. P8 alluded to not having anybody at work or at home to assist him in that study. He referred to himself as a “lone ranger” (P8:5). P4 did not get positive feedback and that made her so negative that she could not complete her studies. To this end, the trainers devised ways of strengthening the emotional intelligence of learners.

One of these ways was to use the building blocks of the research module to increase the levels of emotional intelligence gradually. This was done by making learners understand that research is difficult for everyone and that feedback was not meant as a criticism of them personally. The feedback was a commentary on the written product of a learner. P8 explains that the building blocks used to teach research provided the opportunity to expose learners to escalating levels of feedback. Learners had to learn to deal with feedback as part of the reinforcement of their learning and to make them emotionally stronger to cope with phase 2 feedback (P8 notes for EDLP trainers meeting 2010-09-06). Learners often struggled to regain momentum after the trainers’ feedback, both during the development of their proposals and during the writing of the reports. P8 explained that the trainers usually experienced some period of silence from the learners after they had received feedback. P4 and P8 alluded to how they dealt with telephone conversations with crying and swearing learners who could not emotionally deal with their report reviews. In P8’s opinion, very few senior police officers had the emotional intelligence to deal with personal setbacks such as experiencing failure during research.

However, P4 regularly prepared learners for an unsympathetic workplace when they conducted their fieldwork. P4 explained that people do not want to participate in research, because they do not necessarily want to assist researchers who are also their competition for future promotions, in finishing their studies (P4:225). She also encouraged learners by email not to lose hope and to persevere with their studies. Both trainers referred to putting extra effort into encouraging learners in all forms of communication. As can be expected, those learners who communicated with trainers more regularly were the generally the ones that completed their studies (P5:85). P5 asserts that communication is very important in research.

Those learners who did not communicate or those who did not regularly send parts of their research for review were the ones who struggled in the end. Learners who left the Academy without an approved research proposal never recovered or submitted a research proposal. Some learners, like those of the EDLP 1/2013 whose proposals were not approved in the previous research committee meetings, resubmitted their corrected proposals, but it was done much later that agreed (SAPS 2013d)

Learners showed a lack of engagement which P8 regarded as a manifestation of the learners' fear of research. Some learners could not grasp research, but others conspired before they left the SAPS Academy not to do the research (P8). They just went back to where they came from and did not submit anything (P5:106). When the learners were requested to complete the 'Registration of the Research Project' form of the HRD Research Committee, the majority of the learners reluctantly did so, but many of the forms were so incomplete that it could not be used. The document appeared to be straightforward, but learners experienced it as a challenge. A few learners did not even try to complete it (SAPS Academy Paarl 2011i).

Learners who completed their research did so irrespective of what the results would be. P8 explained that learners used various methods to deal and cope with research. During 2012 2013 and 2014, some learners explained that they completed their studies because they expected a promotion while others feared embarrassment if they did not finish and a larger group succumbed to the pressure of their commanders or to Head Office threats of having to repay the course fees. (Schwartz & Human 2012). A few learners tried to submit old research reports from their tertiary qualifications (P4:77). Other learners, who had been exposed to research in the past or could access articles on the internet, simply copied large parts of the texts and presented that as their own work (P8:19). The time constraints and expectation of better quality reports prompted learners to revert to extreme and unethical behaviour to cheat the system. Documents that did not acknowledge the ownership of other authors, either through gross negligence or blatant plagiarism, started to surface (Schwartz & Human 2012). This led to a few learners being tried departmentally for contravening the ETD policies. It later surfaced that some of the learners who submitted plagiarised papers were suspended on charges relating to corruption in the workplace (P8). There appears to be a link between unethical research practices and lack of integrity in the workplace.

Trainers tried to cope with the workload by motivating each other during their coffee breaks. P4 and P8 had an increasing workload, which included dealing with tasks such as preparing for panel presentations, assessing research proposals, attending HRD research committee meetings, acting as training manager, doing training in other EDLP modules and acting as parade commander. P4 had to attend research committee meetings in the absence of P8 even though her involvement there was met with antagonism. P4 was also engaged in the perusal of portfolios of evidence (SAPS Academy Paarl, 2011e). Both trainers and P7 shared their habit of reflecting on work problems at home as a form of planning for the next day thus saving time for other tasks when at work.

The SAPS Academy trainers who were afforded opportunities to attend courses to develop their research skills were either not willing to work as hard as P4 and P8 or were afraid of being exposed as not competent to do research. Consequently none of them wanted to assist the research trainers. The other trainers claimed that the EDLP research was at a higher level than the research courses they had attended (P8:22). This frustrated P4 and P8 so much that they withdrew from the SAPS Academy activities such as sports days, Academy meetings and parades. P8 expressed his disappointment for not being recognised by the Academy. He tried to make the effort and the emotionally draining effect of the research worthwhile by asking for a special salary dispensation. P8 wrote:

I have devoted my time, official and private, to developing better learning material and instruments to make the implementation of research in the SAPS a reality. I believe that I am playing a pivotal role in the development of the research learning process and much of what is presented in research is due to knowledge I have obtained in my private studies. I have developed parts of the course material, all presentations and assessment instruments. I must add that I do receive appreciation for this effort by means of verbal expression from my commanders, but this does not level the playing field in the organisation in terms of reward (SAPS 2012i)

P8's application was not approved. In order to deal with his frustration, P8 vented his emotions in letters addressed to the commander. These letters were never sent, but it gave P8 the opportunity to reflect on his position and emotions and to get clarity on his work. After this, P8 no longer experienced job satisfaction. Furthermore, both P4 and P8 were also overlooked

for promotion on several occasions. The appointed candidates both had much lower qualifications. In P4 and P8's view, the management could not promote either of them because they could not afford to lose a research trainer. P8 has since scaled down his involvement in research. The management of the library, which had been P8's responsibility, has been allocated to P4 in the meantime.

(iii) Reflective practices used for teaching and learning

The EDLP was implemented as a training intervention without proper consideration as to how and by whom the research module would be presented and with no analysis of what the research administration process would entail. These activities were shaped in the process of teaching the research module. P2, in reflection, agreed that a better strategy could have been used to implement research methodology. Such a strategy could have taken learners on a journey through research methodology instead of overwhelming them (P2:84).

P8 explained that, for the second version of the EDLP, he had to develop the research module content and the presentation slides as well as the formative and summative assessments for the first and second phases of the programme. It was only when the assessment instruments were reviewed that other trainers, but mainly P4, assisted with the development or refinement of these instruments. The activities in the research process were developed by P8 and P4 during regular mentoring and reflection meetings. These meetings enabled the development and establishment of a dedicated team consisting of trainers, assessors, moderators and administrators. Several of these roles were performed by the same people and to such an extent that P8 could say the real research team consisted of two trainers, two administration clerks, five research committee members, and three third-phase panellists only. Obviously, the learners feature somewhere in all of these activities (P8:31). After each meeting between the research trainers and the administrators, P8 made notes and reflected on the impact of the suggested improvements on the research and administrative processes. P8 and P4 developed a process of monitoring their growth in the development of a 'good' research module while at the same time, determining what still needed to be done to improve the research process. The research module could not be changed by the trainers, but they could influence the model used to present research to senior police officers. One such instrument is illustrated in Figure 5.1 (p.216), which indicates the research process. Figure 5.2 (p.219), indicates the problem areas in the model and Figure 5.3 (p.224), portrays the progress made

in the refinement of the research model. The same reflective process was used to develop a map as illustrated in Figure 5.4 (p.232), to capture the research activities and to identify gaps in the research administration process.

P2 explained that when the HRD Research Committee considered proposals, the assessors assisted the learners by suggesting or making recommendations that required learners to reflect on what they had proposed and to reconsider other options, especially if they were taking the wrong path in the proposal (P2:140). For P2, this was part of the learning curve for both learners and assessors who needed to reflect on their own roles in the training of the learners. Feedback to learners subsequently took the form of guidance and probing questions, similar to the teaching process applied by P4 and P8.

P8 used reflection to determine the effectiveness of his initial research training session. P8 explained that he had failed dismally and that learners had learned nothing, except how to save face in class (P8:12). This reflection helped him to develop a new 'ice-breaker' for the research module. This was a major breakthrough for P8 as well as P4 as he had found a way of introducing research without losing the interest of learners (P8:13). The debriefing session after each programme on the progress and the reflection on the shortcomings of the module was one of the most valuable contributions to lifting the standard of the programme and towards finding better ways of delivery that advanced the learners (P4:82).

From that moment on, reflection became one of the main approaches in the research module. While the presenters frequently reflected on the design, they also facilitated the use of reflective processes in class to help learners monitor their own progress (P4:98). Improvements were made with each new programme. To this end, the trainers learned to plan for at least four one-on-one sessions with the learners in which they could explain their studies and reflect on their progress towards their proposals (P8:16). The feedback of the learners was a valuable source of information and could later be used to consider changing activities on the programme and determining the effect of such changes afterwards (P4:160). By regularly reflecting on the research progress when the administrators and other support personnel were present, the trainers established good cooperation in the research team. The role players who worked at the Executive Centre managed to understand each other's way of operating; they could discuss the trainers' approach to teaching and clarify misunderstood

aspects of the research module. P4 explicates that going back to the drawing board and discussing the research challenges assisted her in understanding the research model better.

It was easy for her to believe in the process they followed (P4:172). The administrators, P6 and P7, explained that they had learned from previous courses how to identify those learners who would struggle with the whole course, especially the research. P7 explained that they knew that the older learners would need assistance and because they could remember what learners in previous courses had to do, they were able to explain to these older learners how to present their information in the proposal format (P7:26). P7 elaborated that when she struggled with problems when the trainers were not around she thought about how they used to do the work in the past in order to solve a learner's problems (P7:26). If they could not remember, they searched for previous examples on P6's computer and used them as templates for the learners to structure their reports better. P7 argues that she had never done research before, but when thinking about it, she realised that she had gained a good idea of how to do research (P7:14).

P5 reflected extensively on what she had experienced in the EDLP to know what to look for in the research panel assessments. P 5 explains that it was initially really difficult and she sometimes wondered if she assessed people on how she was assessed before, or on how she conducted her research. P 5 asserted that she learned to assess panel presentations while going through the motions even though she felt that she lacked the experience of certain people on the initial research panel (P5:10). However, she explains that the panels do not conduct debriefing after panel meetings, although it is considered something that should be done (P5:62). Yet, P4 and P8 referred to their improvements to the research process by writing and distributing minutes of panel presentations to the learners and chairpersons of the presentations. They even planned for debriefing sessions to take place before the panels adjourned. The debriefing was also a method of monitoring the fairness of the panels.

The assessment results of the panel presentations were used by P8 and P4 to measure the consistency between phases 2 and 3 assessments. The trainers needed to determine whether they were consistent in their judgements in phase 2 when compared with ratings allocated by panels in phase 3. P8 and P4 argued that this step was necessary to exclude assessor bias as a reason for learners' non-completion of studies, specifically when taken into account that learners withdrew after receiving the study leaders' feedback. In other words,

the trainers needed to confirm that their assessment judgements were reliable. The only test available for such assessor reliability was to compare phase 2 assessment percentages with phase 3 assessment percentages, since the research instruments used in both phases contained the same elements. The results of the analysis were then discussed objectively to consider amendments to the level of assessments of the trainers.

Finally, reflection was used at EDLP trainer meetings to keep custodians and fellow trainers informed of what was done in the research module, how it was done and what the next steps were to be. P8 explained that keeping the other trainers informed helped them to understand the impact of the research module on the other modules of the EDLP. However, reflective thoughts were also used to summarise learner activities in the EDLP research module as a way of informing the HRD research committee of the trainers' and learners' efforts to develop research proposals. The HRD research committee had to take cognisance of the fact that the learners were novice researchers who needed guidance rather than criticism.

(iv) Affordances and active participation

This section reveals how participants made use of affordances to get exposure to new knowledge of research and how they engaged in the activities of the research module to learn how to do research.

P3, who was a member of the HRD research committee, attended short courses that were paid for by the SAPS and arranged by her own component, to gain an understanding of research. P3 explained how she followed up on the courses by making a concerted effort to read more on the internet about research methodology. P3 used her involvement with research assessments to broaden her research knowledge. She explained how she had to read more about certain designs and methods when she considered learners' proposals for recommendation to the HRD research committee.

P4 was willing to learn and got involved with the research module at every level, but it was not an easy journey. P4 studied at a tertiary institution, but quitted her research due to unsatisfactory and unclear feedback from her study leader. P4 explained that she was invited to participate in two organisational research studies, which helped her to understand that research should have value to the organisation. P4 attended the first lectures of the research

module shortly thereafter and joined other trainers on a short course that was offered by a university. This opportunity was organised by the SAPS Academy. P4 volunteered to coordinate the research module when the new EDLP was announced, but she would not present the module due to a lack of confidence. P8 took the responsibility of mentoring P4, because he realised that P4 had the potential to become a good research trainer, mainly because of her commitment to the learners' progress and well-being. P8 guided P4 in a structured way to understand everything that was covered in the research module. After the first two years, the trainers completed a study on the EDLP research submission rates to ground P4's research knowledge. Thereafter, P4 could present, guide and assess research with only minor uncertainty on a few concepts, but P4 and P8 could interact on a regular basis to discuss her understanding of concepts. The study done by P8 and P4 was later used to negotiate recognition of P4's learning and for the experience gained in the teaching of research. A prominent university has granted P4 recognition for prior learning at Master's Degree level. P4 has been actively involved throughout the research process, and has helped to develop instruments and refine the research model. P4 is currently writing her thesis for her doctorate degree.

P7 was transferred to the Executive Centre. She explained that she did not understand the research process or the administration of research projects, but P6 became her mentor to the extent of explaining the whole process before they got into the different stages. Once she had gained an overview, P6 explained every step in detail. This ranged from acknowledging receipt for research projects to capturing the results on the SAPS' training administration system. P7 had learned enough to be able to assist learners when they made enquiries or even while they were attending the programme at the Academy. P7 alluded to how she was able to assist learners who struggled with their research proposals. She even worked over weekends to assist learners who were not computer literate. When something went wrong, P7 could approach the trainers and they would make time to listen and address the matter. However, when something about the administration bothered her, she also reflected on it when she was at home. P7 explained that research is not tiring to the body, but it occupies one's mind day and night. After four years of working with training administration, P7 was afforded the opportunity to attend an office administration course. This was part of the Academy's skills development effort and not a result of P7's commitment to her work. P7 gained a good idea of the research process while handling the research administration.

Unfortunately, not everyone who is afforded the opportunity to learn really engages with the practice. P8 had seen how other trainers were afforded three separate research methodology courses in a two-year span. As part of one such course, they had to conduct their own research projects before being declared competent. Their achievements were announced with fanfare in the personnel meetings (P8:22). However, the trainers refused to get involved with the research module and claimed that P4 and P8 had made it their own domain. An internal memorandum written by P4 to the commander revealed that a special workshop was organised for the Academy trainers with the intention of helping build their confidence by guiding them through their research projects. The trainers did not attend P8's workshop. There was no reply to the memorandum on the matter either. P8 also arranged for the trainers who would present research in another course to attend the contact session of a university. They attended the class, but only one of the trainers started teaching research methodology in that course. When P4 eventually managed to get the other trainers involved in the assessment of the research reports, the training manager did not want to sign for receipt of the reports, because he did not support the idea of letting his trainers spend time on research assessments. He merely followed the commander's instruction. The effect on the other trainers' involvement was disastrous. One of the reports was lost, and the others were returned without any marks or guidance to the learner. A few reports had an assessment mark, but the rubric was not completed. P4 and P8 realised then that they were expected to remark all those reports that had been with the other trainers for almost three months (P8:23). Instead of assisting the research trainers, the other trainers started referring to the executive centre where the research trainers work as "the old age home". They claimed that the people working at the Executive Centre were living on their own little island.

Having a qualification did not work in P8's favour. It was argued that he already had a doctorate and therefore did not need to attend any other course. Until 2013, no other trainer at the Academy had a Master's Degree and only a few were in possession of an Honours Degree. P8 sensed professional jealousy. Eventually after 4 years of working with research, P8 and P4 managed to attend a three-day workshop on referencing techniques, which had been organised by the Division: HRD. The Academy arranged a five-day mentoring course for all trainers in the following year. P8 explained that he realised that he was on his own, but still applied for a bursary to further his education for five years in a row without success. Nevertheless, he managed to complete another Master's Degree before any of the other trainers who formed part of a special project to improve their academic qualifications.

However, when the Academy started its transformation towards becoming a university, both P4 and P8 received bursaries to cover the costs of their doctorate degrees, because it would assist the Academy's transformation and meet the requirements of the Council for Higher Education. Both research trainers are still actively involved with supervision of researchers and coordination of leadership programmes.

P5 explained that research did not make sense to her initially, but once she made an effort to understand it, everything became clearer. P5 completed her EDLP research project, which gave her enough grounding for her Master's Degree. P5 realised that her efforts to read about research methods and concepts during the EDLP paid off. She shared her application of research methods and the skill of critical reading that she had developed during her first attempt to do research. She explained that she uses it when she reads others' reports in the workplace, or when she drafts her own. Now that she has learned to read articles and other literature, she understands her workplace so much better. P5 has since engaged in the assessment of research during panel presentations. She has also used her experience to improve the debriefing of panellists after panel presentations.

It appears that the majority of learners struggled to engage in research while others did not commit to learning research methodology at all. P5 explained that many learners had left the Academy at the end of the first phase of the programme without proper understanding or an approved research proposal. Some learners who did not show the ability to grasp research colluded with each other not to do their projects. While the trainers continuously offered their assistance, both at the Academy and when learners were at their own workplaces, the bulk of the learners did not communicate with them. Those who did not liaise with the trainers generally did not submit their research reports (P5). P5 asserted that research demands commitment from the learner as one needs to work on the discipline every day. Many learners, however, thought research would be easy. Learner research files indicate that learners did not affect changes to their reports when they received their feedback from the study leaders, either when they requested guidance or after assessment of their reports. Up to 40% of learners stopped their research after receiving their first feedback on their report assessments (Schwartz & Human 2012). Learners' lack of engagement with research had already started at the Academy when they opted not to read their textbooks or the additional research handouts. At the end of the first six courses from 2010 to June 2011, only 74% of learners submitted their reports, but only 25% of them had done enough to pass the earlier, perhaps

lower standard, form of assessment (Schwartz & Human 2012). However, much of the learners' inability to submit research reports had to do with conditions in the workplace which will be discussed under par. 5.5.6.

(v) Communities of practice and newcomers

The actors, who worked at the executive centre, where the research module was presented, learned to work together as a team. P8 explained how difficult it was at the beginning because nobody really knew what the research module would entail and how it would change in future. The initial research module did not require much administration other than making sure that learners were keeping their portfolios of evidence up to date. But as the changes were affected, the trainers had to ensure that the administrative personnel were kept informed as changes would influence the way in which results are recorded and processed on the SAPS training administration system. Regular meetings and open communication drew people together. P8 explained that the trainers and administrators ended up working as a team, but other trainers outside the executive centre could not participate in all the activities of the research and, as the years passed, their excitement for the EDLP research faded. In the end, only the four of people - being the two trainers (P4 & P8) and two administrative clerks (P6 & P7) - worked on the research module on a permanent basis. The HRD research committee, consisting of the EDLP and research custodians and several other senior ranking police officers, convened on average four times per year to assess and approve EDLP research proposals. Participants P1, P2, P3, P4 and P8 formed part of the committee, but either P4 or P8 attended as representatives of the learners. Two other role players were assigned to serve on the research panels, which convened about five times a year (P8:28). In essence, there were three small groups of actors in the teaching of research. The first group was the research trainers and administrators who were involved with the learners from day one until the certification of the successful learners. The second group, as identified by P8, was the HRD research committee who dealt with the approval of research topics and proposals, and the third group comprised the research panels consisting of three permanent members and various ad hoc members. The research panels consisted of between three and five members, depending on the availability of the learners' immediate commanders. P8 explains that each of these three groups had its own way of working. The groups functioned as follows:

Teaching and administration. The trainers had established a unique mentoring relationship. While P8 was responsible for developing P4 as researcher and research teacher, P4 assumed the mentor role in terms of the administrative processes. The combination of the strengths of the trainers made them a very strong team. Whereas P8 had the technical knowledge, he was also a strategist who anticipated the future of the research module. P4 had the networking skills to negotiate resources and establish good rapport with the learners and other role players. Each filled the other's skills gaps. P4 elaborated that research was a big challenge for her and that she had felt that she was "*thrown into the deep end*", but she was part of a research team that could pick her up before she drowned. P8 had exposed P4 to various sources of information such as research books and articles, shared his knowledge and experience, and guided her through the whole process step-by-step. P4 concluded that it was a good experience (P4:170). P8 created a learning environment in which everyone could be part of the learning process. For P4, it was also good to know that she could rely on P8's intelligence, experience and judgement. The climate in the research team was of such a nature that P4 never felt ashamed to ask any questions. She always received much more information than she expected (P4:172). P4 and P8 were responsible for teaching the research module in such a way that the lectures and activities of two concurrent classes were synchronised. The lesson plans were identical at first, but it was reconsidered and amended after the first day of teaching, because by then, the learners' fears and challenges were known. Any specific health issues or trauma that could have an influence on learning were discussed in a meeting between the trainers, administrators and other role players at the executive centre.

The administrators learned to work together, even though they actually worked for two different subsections. P7 was dealing with training provisioning administration and P6 worked in the learner support section. It was P7's responsibility to capture the learners' assessment results and write course reports at the end of a contact session. P6 had to assist with travel arrangements and any other specific training needs. Research was not the administrators' core responsibilities, but they were committed to do the work. In P7's words:

... We were a team, but X and I did not really work directly with the students. X explained the do's and don'ts of the research to me, like not to do the typing for the learners in office hours, not even to correct their typing errors during the day (P7:10)... I never had any problems with the coordinator and he always guided

me and gave me advice. We never had any differences. Our focus was only on the research. We did well. We worked as a team and everyone did his part to achieve success. We were successful only when a learner was declared competent for the research (P7:14)... We ended up being a closed little group of workers at the Executive Centre. We felt separated from the Academy (P7:18)... We had our own way of working because it suited us better. It was not like at the main campus. We all sat together and talked about our work and we decided how to do the job. We set our own rules and daily routine and it worked for us (P7:20).

For P7, working as a team was something new. She asserted that she had never before been part of something like that. Personnel had meetings in the mornings, but there was no friction between members and it kept everyone part of the team. All personnel were kept informed of new happenings at the SAPS Academy; they could give feedback on work done and share their opinions. Even the cleaners were part of the meeting which is unusual (P7:24) P6 explained that she had learned a lot during morning meetings held by the trainers. The meetings were held to inform all role players of the activities and expectations for the day, the week and month. All role players could say and ask anything and the contributions carried the same weight, because the trainers' point of view was that everyone was equal in that meeting, regardless of rank or salary level. P6 explained that the meetings empowered her to make contributions or suggestions to improve the research administration process. Both P6 and P7 could, as they learned the research process and its many documents and steps, use more initiative to assist the learners themselves. P6 confirmed that in the last few years, they did not have to escalate the enquiries to the trainers anymore, because they trusted the administration personnel with that (P6:07).

However, the personnel who later joined the executive centre personnel were different. The new personnel did not want to get involved with the training administration function because it was not in their job description. P7 and P6 had explained everything to them (new receptionists) because they already knew how to do it and the trainers were too busy with the research activities. P7 had given them some sort of induction by showing the premises and offices of who does what in the research process but to no avail (P7:21). The new personnel remained outside of the team and did not attend the morning meetings. When they were given research related tasks to do, they made such a mess of it that the trainers asked the administrators not to involve the receptionists in the research process. P8 explained that this

decision upset P7 to such an extent that she started making mistakes in her work. P8 posited that he and P4 devised a strategy to address the research data integrity without alienating the administration personnel. P8 explained:

...Later on we started doubting the reliability of one of the clerks' work. So we ended up doing everything ourselves. Even the training administration done by that clerk was not up to date. However, we could not address the matter straight forward because it would make her colleague negative. We still needed everyone on board. So we just assigned more routine work to the clerk whose work was unreliable (P8:28).

HRD research committee. The research committee only convened when the EDLP learners' proposals needed to be assessed. It was clear that the assessment of proposals was an additional task given to the members of the committee. While the committee members were quite eager and available to participate in the research committee activities during the initial stages, they soon realised that the research proposals demanded more of their time than anticipated. In the end, the number of committee members present at the meetings declined from eighteen to eight due to official duties elsewhere. P8 explained that committee members usually asked to be excused from the meetings once they had been given feedback on the two or three proposals they had assessed. Each member had his or her own format of giving feedback. Some members made slideshow presentations, while others only scribbled on the proposals. Assessments were marked very strictly, with very little empathy or research guidance to the learners. However, two of the committee members really took the learners' situation into consideration when they made the final decision. The custodian for research, much as he demanded better quality products and successful returns for the organisation, came to the rescue of the learners more than once. P8, who only represented the learners at the committee, made notes of the comments and from time to time challenged the research committee members' opinions. However, regardless of not knowing exactly what the role of the HRD research committee really was, its members carved out a process for dealing with the proposals which included receiving them electronically from the SAPS academy, distributing them amongst the members, convening the meeting, taking the minutes and disseminating the minutes. P8 and P4 both confirmed that they were welcomed at the committee as part of the team and respected for what they did, even though P8 commented

that at times it felt as if the committee assessed the trainers' work rather than the learners' work.

The research panels. The research panels assessed the quality of the research projects and the reliability or truthfulness of the research findings. It also evaluated the plausibility and practicality of the proposed solutions for the workplace problems. Consistency was important in the research panels. To this end, the chairperson and at least two other members had to be the same in all the panels. The only changes to the panels resulted from the learners' environment, which dictated the learners' immediate commander, provincial commissioner or divisional commissioner be represented (P8). The panel therefore had to consist of research experts and police experts in the field of the study, and the provincial or divisional commander of the learner. This panel would then assess the value of the study in terms of addressing the problem in the workplace. One of the research trainers had to draft a programme for the duration of the panel sitting, which ranged from one to three days. In addition, the trainer had to coordinate the functioning of the panel by confirming that the learners' were available and ready for their presentations, regulating the presentation and question sessions, recording and consolidating the panellists' assessment ratings, and taking minutes of the proceedings (P8). P4 explained that the panel was convened by the research custodian's office, which was responsible for arranging the venue, obtaining the stationery and organising the distribution of the research reports that were to be presented to the panel. This task was done by various people, but not frequently enough for them to become part of the panel presentation team. The panels were moved from the provinces to the SAPS Academy due to the change in the research model which required learners to return to the Academy for the assessment and presentation of their reports. This change has resulted in panel members' loss of interest, according to P4.

P8, supported by various minutes of the research panels, explained that the administration and processes followed by the panels changed and improved over time. The first presentations were done without an agenda, but the latest panel meetings had programmes or agendas, briefing and debriefing sessions and written minutes of the panel proceedings. P5, who became part of the panels by complying with an instruction from her seniors, alluded how difficult it was to comprehend how everything worked in the panels. She was not inducted into the activities and had to rely on her own previous panel presentation experience to get an idea of what she was supposed to do. P5 explained that there were briefing sessions

before the presentations during which the programme of the day and the assessment process was explained, but she needed more time for debriefing afterwards.

P5 did not know neither how to listen and assess simultaneously, nor whether her assessment was on par with the rest of the panel. She wanted to confirm whether what she was doing was correct. However, P8 indicated that he had always planned for debriefing of the panels when he was the administrator, but the panel members were usually in such a hurry to get to their offices that they had nothing to say in the debriefing session. More detailed feedback was also provided to the learners in the later programmes. P8 recalls that he and P4 had improved the process and appearance of the documentation after each panel meeting, based on the feedback of the panel members. P8 and P4 expressed both excitement and fear for the panel presentations, the latter because it put the spotlight on their ability as trainers rather than on the product. While the trainers celebrated the success of their learners, they also made mental notes of the concerns of the panellists. Thereafter, these concerns were used to improve future presentations. Although little instruction was given to the panel administrators (i.e. the trainers) they knew that they had to continually improve the research process as it only revealed its effectiveness in the panel presentations (P8).

(vi) Workplaces and police identities

While the learners experienced learning when they attended the six-week contact session at the SAPS Academy (phase 1 of the EDLP), their real workplace, where they learned while working (phase 2 of the EDLP), was where they performed their daily tasks. The SAPS Academy thus became part of the learners' workplace for the duration of the contact sessions. The SAPS Academy also became the permanent workplace of the research trainers when they attended meetings or panel presentations, although they did spend time in the provinces or at the Division: HRD in Pretoria. Learners and trainers had different experiences of learning at the Academy.

For P1, learning at the Academy depended upon whether or not it was the individual's choice to learn. He argues that while research is much needed and important, it's success depends on whether participation in the research project is enforced, by the SAPS for the EDLP. If the latter, it is a futile exercise (P1:167). P8 realised that those in leadership positions had no idea of what they were doing when they insisted on including actual research projects in the EDLP.

They expected people who barely had time to manage their stations or offices, to work on research projects as well - an almost impossible task (P8:18) No one seemed to understand the peculiar position that EDLP learners found themselves in. P1 reiterates the fact that learners were part of senior management, and as a result, they were not readily available to do research work. Moreover, the demands of the workplace were not only superseding the learning initiative, but the custodian of the project showed no understanding of this (P1:198). The learners' main issue was performance and meeting the targets of fighting crime (P1:205). The first thing for EDLP learners to do was to learn how to learn while continuing their everyday jobs, because in most cases, they would not have time in the workplace to finalise the research project (P1:181).

The learners were, as a result, exposed to several other non-research activities of the EDLP while they were learning about research. For instance, several learners had to learn how to use a computer. Some were grateful whilst others appeared to be embarrassed for not knowing how to operate a computer, especially in view of the fact that they all received state issued laptops. Many of the learners admitted that they had given the laptops to their children or grandchildren to play games on, because they had not been taught how to use them (P8:19). These learners had to attend evening classes while other learners were busy with research activities. Thus they had to try and manage their time so as to include time for research. Learners also spent less time at the Academy due to their 4-day excursion to do the "Team Excellence" module which they completed away from the Academy. This definitely affected the quality of their research work. They then had to simultaneously attend after hours contact sessions and do course and research work when they returned from the excursion (SAPS Academy Paarl 2011i). Quite a lot of after hour work was spent on firearm competency classes, which intruded on other EDLP activities including not being able to attend one-on-one research guidance sessions with the trainers. Learners were generally tired in class following the firearm training from the previous night (P8 EDLP trainers meeting notes 2010-09-06). The learners were also expected to read extensively about research methodology as well as on their specific topics to draft their research proposals. P8 argues that the approach of letting learners do several concurrent tasks or activities did not fit well with the older and slower learners, as they struggled to cope with the amount of work, the complexity of research and the pace at which they had to learn. Most learners barely survived the pressure and a few had to visit doctors to treat anxiety and high blood pressure. All they had learned was to manage time and to survive the demands of the EDLP institution phase. To this end, many of

the learners openly stated that they would not do the research project, but preferred to pay back the cost of the course.

It seemed as if the learners' challenges started with the selection of research topics. Many learners struggled to get their research topics approved by their provinces, to such an extent that a letter had to be drafted to all provinces and divisions pertaining to research in SAPS, just to explain the process and the purpose of the research (P8). When learners' research topics were not approved before they reported to the EDLP, it delayed their ability to draft a research proposal, as they did not have a topic to focus on. An internal letter read:

Learners still experienced unnecessary stress while waiting for their research topics to be approved by their commanders. Learners from Gauteng only received their approvals on Friday 30 September 2011. One learner from Gauteng, Brig X, has not received approval yet. No reason was provided. Yet another learner, Col Y, has received approval to conduct research in the field, but the topic had to be changed. Col Y only received his feedback on Friday 30 September 2011 and was therefore not in a position to submit his proposal with the rest of the class (SAPS Academy Paarl 2011i).

P9 had a different opinion:

... I am of the opinion that the practise of choosing a topic before the course commences is premature. The information provided during the module changed the view of what I thought would be a good topic for the research... it then becomes problematic to find a new suitable topic to research to complete the EDLP (P9:55).

Despite the agony of the intense first phase of the EDLP, there was ample support for the learners. They did not have to do anything other than learn whilst at the Academy. The Academy had provided several resources to the learners such as a chaplain, psychologists, technical computer support, computer literacy trainers, librarians, research trainers, internet and printing facilities, a vehicle for transport, a gymnasium, etc. Even the administrative personnel at the executive centre were capable of assisting the learners during phase 1. P6 explained how she would search for good examples of proposals on her computer to guide

learners. They also assisted learners with the typing of their proposals after work (P6:11). The research trainers managed their activities and time in such a way as to allow them to teach the learners in phase 1 of the EDLP as well as to guide those who were in phase 2 or 3. Phase 2 learners required guidance and review of chapters and learners in phase 3 needed guidance on the final corrections and preparations for their presentations.

The second phase of the EDLP proved more challenging for both learners and trainers. EDLP learners faced problems such as being transferred during the study. Changes to the composition or leadership also impacted on the outcome of the study (Schwartz & Human 2012). P5 (115) and P4 pointed out that SAPS is not supportive when it comes to the pressures of learning including exploring workplace problems through research projects. In SAPS, people do not learn to think for themselves and never learn to speak critically because of the disciplined environment in which they work. Tasks are mainly done upon instruction and researching something requires a different mind-set to following instructions. Whilst research requires learners to read, to compare, to think and to reason about things as well as to understand and solve problems, SAPS supervisors merely require learners to follow their instructions in order to solve problems, and this should be done in the way that their supervisors deem appropriate and adequate. Police officers are prohibited from being critical in their working environment and this is where difficulties arise (P5:115). P1 asserts that in a para-militaristic environment, one complies first and learns from those experiences (P1:157).

The lack of support for learners became evident in the protectionist approach of commanders who forbade learners to research certain topics. Some learners received instructions during the programme that they were to change their topics as these topics were too sensitive or not a priority in the province (P4:69). However, P5 posited that things went well where there was understanding and support for learners who conducted research in the workplace (P5). P8 agrees with this statement, as almost all learners who worked in a legal office were able to complete their studies and contribute meaningfully to the organisation because their work was office-bound and they had support from their divisional commissioner. P9 explained that when learners were sent back to their place of work to do the research on their approved topics, they received letters to indicate that they may use official time to complete the research. However when they got back at their workplaces, there was no time to do the research.

After several attempts by P9 discuss her research proposal and to obtain approval and buy-in from senior managers (deputy provincial commissioners) the answer was always the same, that work is more important and that the research could be looked at in the future. This tendency to prioritise work over learning discouraged learners and deprived them of the opportunity to complete the research. P9 argues that she had tried different avenues to collect data, for example to go to the station where the research needed to be conducted during evenings or weekends, but not all information could be obtained in that way (P9:96). Learners were unable to discuss research with other colleagues as the latter did not understand the academic language used (P5:120). Learners' lack of support in the work place was also evident in their reports and presentations (P5:120).

P8 shared a positive experience. His manager at work allowed him to "*work on my research*" during office hours when his work for the day was done. The manager frequently visited P8 in the office to talk about the achievement it would be for the unit, a training section, if P8 could complete his study. P8 tried to make his manager proud (P8:8). P5 experienced (in the phase 3 panels) that a few learners thanked their commanders for allowing them to spend time on research. In most cases, those studies had good reports. The learners sometimes even presented the study to their commanders before they presented it to the research panels, but other commanders were not interested in what their personnel were doing (P5:103). Taking a broader perspective, P3 argues that although the learners were allowed time in the workplace to complete assignments, use official resources and engage with colleagues to complete their other tasks, they were not really understood as adult learners. Once in the workplace, they were usually left to complete learning tasks without the necessary supervision (P3:169). The management and leadership styles present in the workplace might also influence the support that the learner gets in the workplace (P4:221). P4 speculated that the support in the workplace might be affected by the way in which the learner explained the task to the management, or the way in which the importance of the study was emphasised. Even the developmental climate or culture at the workplace might play a role in the learners' ability to complete the research project (P4:221).

After reflecting on the desperate situation of the learners, P8 drafted an email to his section head to explain how much time learners would need to do the research project of the SSED (the accredited version of the EDLP). P8 calculated that attaining the required number of credits for the research project required learners to spend 240 notional hours on their research

projects. In practice, learners would have to spend 12 hours per week from 14 November 2014 to 1 April 2015 in order to complete the research project. Taking into consideration the demands of the senior managers of the SAPS and the intensity of the SSEDP, P8 argued that learners would find it extremely challenging to conduct their research if they were not afforded official time to engage in fieldwork (P8 to HRD in email). As a result, it was approved that 8 of the 12 hours needed per week for research could be taken during office hours, but learners had to account for their time spent on research in a specially designed logbook. Unfortunately, the granting of notional hours only served as a noble gesture for some learners. One respondent in an earlier study explained:

...did not complete research due to time constrains, meetings and demands as station commander... (Respondent 9 in Schwartz & Human 2012).

When learners returned to their workplaces after having done the course, activities and tasks continued as normal. Learners, in general, did not have time to complete the research project as other duties took preference (P3:162). People working in an operational environment do not spend much time in their offices. P5 elaborates that station commanders and operational commanders, when there is an operation or when there is something going on in their precincts, have to be there personally until late. They find it very difficult to give proper attention to the research (P5:100). Learners were penalised for late submissions and threatened with paying back the cost of the course if they did not complete the programme (i.e. did not submit a report). Other accounts of learners in the study of Schwartz and Human (2012) were both negative and positive, highlighting the differences in workplaces:

... it is a challenge to conduct research and work with all the threats from head office while one is accountable for crime in so many stations which are about 170 km apart with serious issues and disasters occurring (Respondent 3).

... I completed my study due to my station commander who encouraged me; he took some of my tasks and delegated it to other commanders in my component (Respondent 4).

It appears as if hard work does not pay in the SAPS. The better you are at what you do the less your chances of attending courses or being promoted because managers cannot afford

to let you go. Hard workers normally get more work done than others do. Many learners were in such positions and subsequently could not engage in the research project (P8:23). However, P3 argued that the supervision of learners' projects while in the workplace does not get the necessary attention it deserves (P3:162). Some learners differ:

...no support or guidance was in place. Study leaders committed themselves to assist us, but there is no time to seek for their assistance. There is no time to be with your family because even weekends one have to spend some time in the office due to unstructured way of working, I did not quitted yet, I am finalising my research although it's very late, I do not know if its correct... (Respondent 13 in Schwartz & Human 2012).

Conditions were not favourable for the trainers. The two trainers had to deal with all the research on their own, and when they requested assistance from their commander, this was ignored with the explanation that nobody else could do research training (P8:22). A memorandum in which the trainers expressed their dissatisfaction was sent to the commander, but there was no response (P8:28). P4 explained that she had to use her own cellular telephone and internet at her own cost to support the learners (P4:200). Initially, the trainers could only assist learners telephonically, because none of them had official laptops. P4 and P8 could not communicate after hours with the learners. P8 explained that he had to use his personal email address for official purposes. P8 later received an official cellular telephone and a 3G modem for after hour use, but still had to use his own laptop.

The trainers were issued with laptops in 2014, but the research module had been initiated in 2010 (P8:25). Research guidance had to be completed in writing, then scanned and emailed (or faxed) to the learners, mostly as result of the bulk of the learners being computer illiterate. However, the other reason was that the trainers did not have computers in the location that learners' work could be assessed or reviewed confidentially. Later, when the trainers received official laptops, they used technology more. Learners could submit their work via email to the trainers' official or private email addresses. Comments on their work were given electronically in email texts or in the 'review mode' of Microsoft Office Word, although only a few had knowledge of the review function of MS Word. This was a good approach as the trainers could keep electronic records of all the correspondence between the learners and the study leaders (P4:205).

Even after so many years of struggling to get the necessary resources, P 5 admitted that it is impossible to assess research - or supervise research - if one does not have access to proper technology (P5:85). Similarly, the trainers could not use the known anti-plagiarism software. The Executive Centre Commander could not expedite the procurement process and, rather than including the trainers in the testing of the plagiarism software, he involved officers from other training centres (P8:20). The procurement of the anti-plagiarism software had begun as part of the library upgrading project (SAPS Academy Paarl 2014). Instead, P8 had to download a free plagiarism scanner onto his personal laptop if he wanted to scan anything (P8:20). The trainers experienced the SAPS Academy and the custodians of the EDLP and research as being extremely unsupportive. There was also very little recognition or reward, but P8 insisted that the trainers' progress in the design and delivery of the module was underestimated because other role players only saw the learners' final products during the panels, but the administration and documentation done in panels or in the research committee went unnoticed (P8:31).

The few learners that did complete their research could very often implement the findings in their work environments (P2:144). Yet, the organisation has no idea of what happened to the implementation plans that were proposed to the research panels. P2 elucidated that a learning based organisation would more likely allow research to take place, as it understands the value of research in addressing organisational needs. However, the SAPS is not a learning organisation and is inherently built upon the principles of command and control, and this does not necessarily lend itself to new ideas and opinions created from the research process (P2:150). P5 agreed that sometimes people really have good research reports that could be implemented, but due to the lack of support from top management, very few of these reports are. P5 asserted that she found some reports very informative and very useful. She keeps some of them in her office (P5:43).

(vii) Experiential learning and guidance

Participants shared different opinions of what they regarded as the purpose of the research project. P2 explains that a research report needed to be produced after the end of the six weeks in Paarl as evidence of the individual's learning in the workplace (P2:93). However, P2 also explained that the report did not show other learning that the learner has constructed in

the workplace, referring to how learners had to devise alternative ways and means to execute their research projects. P2 asserted that the organisation's culture of command and control, the very nature of its standing as a police organisation, does not allow for growth and experiential learning in a direction different from that dictated by the organisation (P2:154). Nevertheless, learners were supposed to learn by practically applying theory in the workplace and incorporating that as part of their jobs (P3:186). P8 regard the practical experience as important for learning, but felt that the foundational knowledge of research was not adequately mastered by the bulk of the learners, which made the experiential learning a futile exercise. P8 recalled how learners, who had not really grasped the concept of research, reported to the trainers that they *had* implemented the findings of their studies. Many of these learners' reports could not be described as research, but the learners were confident that they had applied research methodology sufficiently correctly to utilise their new discoveries in the workplace. P4 shared her concern for the lack of implementation of the research solutions and implementation plans.

P4 explained that the trainers had started early in the programme to build realistic examples and scenarios into the lectures in order to prepare learners for the reality of the workplace. This was done to improve transference of learning into the workplace. Examples of this approach were found in lesson plans and communication to the HRD Research Committee. Learners' experience of conducting electronic searches on the internet, SAPS Intranet databases and the library to help them find relevant literature for their topics were aimed at building on their ability to find literature when they were in their regular workplaces (SAPS 2013d). The presenters conducted one-on-one sessions with each learner to ensure that they would have a clear understanding of their research topics when they left the SAPS Academy (P4:65). P4 explicated that even the learners' workbooks that were used to develop their research proposals prompted them to reflect on their real work situations. Learners were further guided on methodological errors they may have made in the research proposals by the HRD Research Committee who made suggestions for alternative approaches (P2:135). The guidance was, however, influenced by the evaluator's academic qualification and preference for a specific research approach (or school of thought) (P1:183). The trainers at Paarl provided their learners' comments regarding their proposals to them (P2:128). There was no relationship between assessor and learner, other than feedback given via the supervisor on the research proposal (P3:120). P9 articulated the usefulness of the research teaching at the SAPS Academy:

... I am of the opinion that the design was done through planning of the content that needs to be carried over to the learners, research of what learners need to know to conduct research and consultation of the content of the module. The content of the module flow from identifying a topic, doing a research proposal and after approval conducting the approved research. The flow gives an indication that the content of the module was well thought-through and tested (P9:58)... sharing experience and views assisted in learning. Identifying situations that could have been dealt with differently assisted in learners identifying their own strengths and weaknesses, which is important for all Management positions in SAPS and any organisation. Practical role play assisted in making learners understand certain topics or situations. This again created a positive learning environment where every learner was involved and no-one left on his/her own (P9:82).

Research guidance was used to stimulate transference of theory into practical application during all three phases of the EDLP (P4:94). P2 referred to the need for collaborative understanding by all the role players that while learners were being guided by study leaders, they should be allowed to discover research in their workplaces (P2:126). P1 (52) mentioned that he was approached by learners who had been referred to him for advice and clarity, but P8 cautioned against too many advisors in a person's study, especially if that individual did not understand research. The learner only gets more confused, as has happened. A person needs to have at least some experience in the field before he or she is recognised as a subject matter expert (P4:150). For P5, research guidance is a matter of giving learners more information and directing them to explore alternative sources or designs of research. By doing that, one might stimulate good studies and uncover something to work on in future (P5:18). The relationship and trust between the learners and study leaders is of utmost importance and the feedback to the learners needs to be clear, concise and encouraging. In other words, the learners need to understand exactly what is expected of them (P4:138).

P9 argues that the organisation's culture needs addressing to enable effective learning experiences for learners. P1 mentioned that most learners use their experiential learning for career advancement and not for the betterment of policing in general (P1:217), but P9 disagreed:

...I would say that it does have an impact when the learner would like to bring to practise what they have learned and in the workplace it is not always accepted in a positive way by the seniors.... However, I also think that the knowledge gained during the course that could be implemented back at the workplace yield great results... Slowly but surely, things will change for the better (P9:99).

While learners find it challenging to execute their research projects, other participants' actions revealed how their engagement with the research teaching developed into new knowledge and how that knowledge translated into their work. P2 had learned to rely on his previous experience and continuous reinforcement of research knowledge to explain difficult concepts to learners, but he reserved that for when asked to assist. He has also learned new research approaches, which he could apply at work. P3 was challenged by one or two research proposals and as a result, had learned to read more about specific methodologies even though she had the opportunities to attend research workshops. P3 can now utilise that knowledge to assess research proposals with greater confidence. P4 has excelled in her development and comprehension of research due to her constant exposure to research literature, research supervision and informal interaction at work where research was discussed and through further tertiary studies. P4 has also been systematically mentored over 6 years.

P4 has had the opportunity to apply everything that she has learned to her daily tasks as research supervisor. P8 had learned to take charge of the research module because of the pressure of justifying his doctorate degree and to overcome his fear of teaching to experts. P4 and P8 have learned to coordinate their activities and include the research administrators in their communication strategies to keep everybody informed of the amendments to the research module. P6 and P7 have learned through their interaction with learners and experience of the training administration processes to provide additional support to learners, to find relevant examples to share with learners and to work in a unified team. P5 joined the team very late and had to learn through trial and error how to assess and guide learners effectively during research panels. P5 keeps relevant research reports in her office and uses them to learn from in her daily practice. Remarkably, none of these participants had any guidelines or operating procedures when they engaged in the research teaching (P8).

(viii) Integration of learning into practice

The integration of learning into the workplace was not well planned for in the initial EDLP research model as it only involved the drafting of an abridged research proposal. It was only the later models that had a strong focus on the implementation of research solutions; hence the inclusion of implementation plans in the research report and the presentation to the research panels. The learners' implementation plans were evaluated to determine the practical value of the study in solving workplace problems (P8).

P4 explained that the research module was given a very practical, real life approach in order to keep the research project as close to the workplace reality as possible. The learners were required to devise their own research topics, define their own research problem statements and set objectives that could assist them solve an existing problem in their own workplace (P4:65). The learners were guided to reflect on the reality of their workplaces when they drafted their research proposals. Everything was done to prepare learners to execute their research projects in their own workplace (P8). Even the HRD Research Committee suggested alternative topics where necessary to improve the learners' chances of reaching plausible solutions that could enable them to draft realistic implementation plans (P2). A participant in an earlier study explained how his research topic had affected his study:

I realised I chose a topic which could not take me far... about decrease of collisions in SAPS... I could not complete my study despite any effort... topic chosen was too broad, the loss management unit at a time was falling under legal services but due to structural changes, loss management now falls under finance... so it become difficult (Respondent 8 in Schwartz & Human 2012).

P8 posited that the quality of the reports and the practicality of their implementation plans were scrutinised by the trainers during the assessment of reports at the end of phase two. This return-on-investment approach was taken further in phase three of the EDLP. Several learners' research files contained feedback from the research panels in which it was recommended that the candidates affect corrections and submit the report for quality evaluation by the HRD Research Committee before being considered for placement in SAPS libraries.

The participants understood the concept of integrating learning into practice. From a learning point of view, workplace learning plays a very important role in a research project, as it is there that the integration of theory and practice takes place. The workplace provides the right environment to test or implement theories and compare existing literature when doing research (P3:105). A scientific process of collecting and analysing data will bring about much better decision making in the organisation. Learners were taught to think critically about the research problem and the information obtained during the study, and to reflect on the value of this study for the organisation. This was done to inculcate a more scientific approach to solving problems in the workplace. To this end, the assessors reflected on the study and asked the question “*was the problem solved through this research?*” (P4:98). The learners, as researchers, were knowledgeable about their research problems, which placed them in a favourable position to implement their proposed solutions. Learners were also urged to take responsibility for implementing the findings of their studies (P4:114).

However, integration of learning into the workplace is dependent on support in the workplace. P4 argued that the successful candidates needed a platform to share their studies with the rest of the organisation as similar problems in the workplace could be solved by sharing the findings (P4:148). The fact that the SAPS promotes research learning but fails to support learners efforts to implement their proposed solutions seems as if the organisation does not really expect them to implement what they have learned or to share their knowledge in the workplace. P4 explained that learners were expected to conduct their studies in true workplace contexts, on real problems, and to propose solutions to address those problems, but the organisation did not provide the necessary support to implement the new knowledge in the workplace (P4:230).

According to P5, learners experienced a lack of support in the workplace throughout their research project. This lack of support ranged from struggling to get the research topic approved to getting time to actually do the research. When commanders sat in the panels, they listened to the practical part of the research. They did not necessarily understand the research process. So, when they assess that person, they assess him or her on the work part and what needs to be done about the workplace problem (P5:7). P5 recalled that she really struggled with her research project, but the supervisors were working at her office and they could assist whenever needed (P5:120). P8 indicated that while P5 conducted her study successfully, she failed to implement the proposed model that addressed the research

capacity of personnel (SAPS Academy Paarl 2011j). P5 had mentioned earlier that she had to obtain permission from her immediate commander to implement her proposed solution.

The SAPS demanded better returns on its investment (SAPS 2011b). The custodians of the research module introduced a system of penalising learners for late submissions or non-submissions (SAPS 2012j), because courses are expensive (SAPS Academy Paarl 2011k). While such concerns about low return on investment were raised frequently (SAPS 2011j), the pressure to complete their studies and the additional expectations of developing implementation plans were met with dissatisfaction by learners. P4 alluded to this matter and explicated that learners experienced a challenge to balance their different life roles (P4:69), but for P5 and P9 it is not that simple. They argue that when the learners return to their workplaces after completing phase one of the research module, they find it hard to communicate with their colleagues on an academic level. P9 explicated that people do not understand research and one cannot seek assistance at work (P5:120). Moreover, the demands of the workplace tend to prevent learners from completing their research within the required timeframe. As soon as learners return to the workplace from Paarl the norm is that they must resume their work duties, and this leaves no time for research (P9:148).

Although it was not the intention of the EDLP research module to promote the development of those role players who did not form part of the learner group, there was enough evidence to suggest that the actors at the Executive Centre have incorporated their informal learning into their practice. While P5 has learned to read letters and reports more critically, she also applies the skills of assessing research presentations to write her reports in a more focused and direct way. P5 has learned to debrief after panels and now uses the skill to summarise important decisions during meetings in her workplace. P6 and P7 have, through their observations and interactions with trainers and learners, gained a good understanding of the research process and when it's various documents, instruments and products are used. P6 and P7 utilised their exposure and experience to guide learners on the format of the research proposal and research reports.

With the trainers assistance they have put together an administrative process, which was later refined by the trainers. This enabled P8 to map out the activities of the research module and to indicate which administrative functions were part of the research process. P7 and P6 have learned to make decisions and to trust their own judgement. They became members of the

research team. P4 and P8 have learned to rely on the administrative personnel and to trust their judgement. They have learned to cope with the workload of supervising unrealistically large numbers of learners while attending to the additional tasks of the SAPS academy. They have integrated reflection as part of the research module, to measure their progress and to incorporate it into their management practice during their morning meetings. P8 has become a research mentor and P4 developed into a researcher. P8 and P4 developed graphical models of the research module to enlighten the other EDLP trainers and the custodians of the research teaching process, as to the challenges of the process and to map out the progress made towards solving those challenges. P4 has steered a process of critically analysing all research documents to professionalise the appearance and presentation of such documents. P8 has created the platform for such discussions by using short brainstorming sessions during which the trainers reflected and decided how to improve the documents for their intended purpose and outcome. P4, P6, P7 and P8 have learned to rely on each other's expertise and to place trust in one another that each one would do their work when and how it was supposed to be done and hence to improve the learning experience and competence rate of the learners (P8).

5.5 SUMMARY

In this chapter, I presented the data that I obtained from interviews, observations and police documents during fieldwork at the SAPS Academy Paarl's Executive Centre. Since my research strategy falls within the ethnographic tradition, I have offered elaborate excerpts from interview transcripts and official unsolicited correspondence. The discussion of the data is offered in the following chapter to reduce the volume of data and its discussion in a single bulky chapter.

CHAPTER: 6 DISCUSSION OF EMPIRICAL FINDINGS

6.1 INTRODUCTION

In Chapter 1, I offered the findings of the data collection process. However, data without meaning attached remains raw and unsuitable as a basis for drawing conclusions. In this chapter then, I discuss the data of the study in relation to relevant literature and in context of the setting where the data were collected. I approach the discussion in sequence of the research questions of the study.

6.2 DATA INTERPRETATION

The research questions represent the agenda for my discussion of the data.

6.2.1 How has the SAPS Research Methodology *module content* evolved since its inception?

To answer this question, one has to look at both the initial design considerations of the research methodology module and the evolution of the module itself.

6.2.1.1 Initial considerations

An outsourced EDP, a predecessor of the EDLP, was presented from 2006 to 2008. It was based on the needs of some of the SAPS' most senior officers. Provincial and Divisional Commissioners and a few Station Commanders were interviewed as part of an organisational needs analysis to determine what competencies executives in the organisation should have. The programme was presented by retired university professors, but SAPS trainers eventually took over this responsibility. When the EDP was replaced by the new SAPS EDLP in 2009, no new needs analysis was done and the reliability or validity of the needs analysis prior to 2006 (for the EDP) was not tested. The SAPS therefore designed its new EDLP to address

a needs analysis that might have been outdated. The priorities in the organisation might also have changed in the meantime.

Organisations need to understand which competencies they should develop. This can be achieved by engaging with the social worlds where senior police officers perform their life roles, both at work and at home, before designing interventions. SAPS would be able to stimulate the police executives' need to know and put them in a better position to perform well at work (Coetzee 2013:210). When the design is sound, the learning intervention will not only result in improving individuals' performance, it will also take into account the needs of all stakeholders and incorporate organisational priorities into the learning programme (Bushnell 1990 in Coetzee 2013:187). To this end, Osman and Castle (2006:518) argue that institutions that offer adult learning programmes should adapt to students and not the other way.

P1 argued that the reason for not doing the needs analysis was due to the EDLP being an organisational initiative and the learning programme was designed to be rank-based. The learning programme was designed for the senior management of SAPS holding ranks of Brigadier or Major Generals. When officers are appointed on these levels, they have to attend a specific course, but not necessarily because they lack executive skills. There is nothing uncommon about this approach. Many employees are, for instance, compelled to up-skill or learn new skills that are needed in the workplace. However, unwilling employees may show resistance to learning due to an expectation of change placed on them by their supervisors. Resistance to change and learning new skills often result from adults' own selective perceptions and biased views of the situation. These perceptions are based on adults' own interpretations of the 'real' world in which they are living and working (Mullins 1999:824). There is thus no guarantee that all adults want to learn, but all adult learners, whether or not they want to learn, will experience some degree of fear for the unknown elements in the new learning programme or intervention (Mullins 1999:824).

Even when organisational needs dictate the development of a learning programme they should still take cognisance of the characteristics of adult learners. The design of the SAPS research module was not learner centred, or perhaps not even learning driven, when one considers the disregard for adult learning principles or non-consideration of learners' past learning encounters that are likely to impact on their ability to construct new knowledge. These factors are important as they could serve as barriers to adult learning. These barriers

fall into three categories. Firstly, they could be situational barriers resulting from senior police officers' life situations or, secondly, they could be institutional barriers that result from the physical location of the learning, the course entry requirements, the time frames of the programme and even teaching practices. Thirdly, there might also be dispositional barriers resulting from self-esteem, opinion of other learners, past experiences and negative attitudes that make learning difficult for police officers (Cross 1981:97-108 in Osman & Castle 2006:517). As discussed earlier in this chapter, adult learners prefer to learn when the new learning is related to their work or real life situations and they want to see the benefit of the learning. This need of adult learners relates to the principle of fidelity. The tasks contained in the learning programme must be identical or similar to those the learners encounters in the workplace. Werner and DeSimone (2009 in Coetzee 2013:223) argue that when physical fidelity in the training tasks mirrors the physical features of the work situation, it increases the benefits of training on job performance.

However, the course material for the new EDLP was developed with the assistance of trainers who were involved in the delivery of the old EDP. The developer and trainers met on several occasions to validate the content and the context of the modules. The trainers, who held at least Master's Degrees, were considered knowledgeable and after two years of development, mentoring and presenting the EDP modules under the Professors' supervision, were deemed capable of presenting the modules themselves. The learning content was aligned to the police context, and in some cases it consisted of accounts of what was practiced in the workplace, regardless of whether or not such practice was technically or procedurally correct. This was unfortunate, as the trainers were primarily experts in their field of work specialisation and not educators. The real needs of the target group did not include research skills, but rather problem-solving and computer skills.

The target group consisted of older police officers that generally did not know how to use technology. Many of the senior police officers requested other people to type their work for them (P5:85). The research module was developed by trainers who did not know how to present research methodology. P8 alluded to his fear of teaching research because he did not have confidence in his knowledge, yet he formed part of the module development. Schulze (2009:995), like Schober et al. (2006:74), explicates how features of adult learning can be incorporated into the teaching of research methods. They propose a constructivist approach when designing a research module. Constructivist principles would have to be

addressed in the goals of the module, which should ensure that learners gain factual knowledge by studying textbooks and journal articles and that they gain competence through self-regulated learning activities like forethought, performance and self-reflection. Learners should develop collaborative learning abilities by working together in teams and, through their social integration, success and autonomy, they will gain intrinsic motivation. In addition, the learners should gain e-competence since they will be working on electronic platforms throughout their studies. It is clear that the design of the learning programme had created challenges for teaching research to police officers.

Firstly, the custodians of the EDLP never anticipated that the success of the entire EDLP would rest on the success of the research module. Learners can successfully complete all the other EDLP modules, but if they fail to complete the research module, they fail the whole EDLP. An alarming discovery was that the developers and custodians knew that most senior police officers who form part of the target group had never been exposed to research methodology before and that research is an inherently difficult subject to grasp for first time researchers. A first reaction could be that this is an unfair expectation, especially since the senior officers are seasoned adult learners, but McCormack et al. (2010:41) argue that in these modern times of rapid changes in all spheres of life, knowledge and learning approaches need to undergo fundamental changes to align themselves to these 'liquid times'.

Adult learners will increasingly have to rely on practical judgement when dealing with undefined, indefinite and emergent habits in their life-worlds, rather than relying on the application of known concepts in internalised procedures and on traditional expertise. SAPS' approach to teaching research could be a perfect method of preparing these older learners for the rapidly changing workplace. To this end, Fourie & ten Kroonden (1999) argue that the appropriate introduction of learning modules that are closely associated with the learners' work environment could help to reduce learner fear and resistance. Educators therefore have to focus on five elements to facilitate learning. They have to ensure that learners solve real-world problems and use existing knowledge as foundation for new knowledge. New knowledge has to be demonstrated to the learner and learners have to apply their new knowledge to solve problems. Finally, learners should be urged to integrate their new knowledge into their workplaces (Bichelmeyer 2006:513).

Secondly, by not considering the level of qualifications of EDLP delegates, the design only focused on complete novice researchers. The design had, in fact, not catered for those learners who had been exposed to research methodology prior to attending the EDLP. Some learners with Doctorate and Master's Degrees were not exempted from the research module. In other words, no recognition for prior learning was given. This position, that recognition of prior learning is not applicable to EDLP learners, was officially communicated within the organisation (SAPS 2011c). This appears to be a wise decision as some learners who indicated that they were on a higher level and that the research presentation was at too low a level, could not demonstrate their knowledge or experience in their research reports. They either they did not submit a report, or the submitted reports were not on the expected level (P4:77). The result was that the learners with qualifications and research experience lost interest in the learning intervention because it was pitched at too low a level and they did not see the need to do the research again.

The trainers were left with the challenge of teaching research methodology to learners with different levels of competence in the same module, but Laher (2007:385) indicated that educators have to be adaptable. Being adaptable to the needs of adult learners also means that educators should re-examine their use of traditional learning theories. Their approaches should move from 'instructional design' to 'learning design'. The redesign of learning experiences requires educators to acknowledge that the learning space has changed. The traditional classroom has now expanded to the workplace, to offices and to virtually any space where a learner can access the learning institution or content electronically (Massyn & Wilkinson 2014:100). Different methods of teaching could assist trainers to accommodate all levels of learners in the research module.

Thirdly, the first version of the EDLP made provision for a two-day research teaching session in which time complete novices were expected to develop specific knowledge, skills and attitudes. The research module unrealistically aimed at developing adequate knowledge of research methodology and referencing techniques. Learners had to develop research skills like proposal writing, report writing, analytical thinking and data collection. This learning was supported by values of ethical data collection, reporting and authenticity (Lesson Plan 2011-06-27). Only basic research methodologies were taught, and, as support, learners were provided with a basic textbook for introductory level research (EDLP Work Session 2011-03-10). The critical issue was whether the time was adequate for learners to construct explicit

research knowledge. To do this requires deliberate and conscious thought and effort, which necessitates adequate time during which learners must be assisted with their thinking about the meaning of things, how to remember information and how to solve problems.

Educators need to note that explicit learning centres on memorising, understanding and problem solving (Stevenson & Palmer 1994). Understanding builds on the use of one's short-term memory and requires the ability to think about the matter in hand and deliberately control knowledge and thought processes. While the 'thinking' part is described as a cognitive activity, the 'understanding' part is a deliberate action that seeks links between old and new knowledge. Existing knowledge explains the new knowledge and the new knowledge changes the existing knowledge. This is a critical aspect for adult learners who need to use their existing knowledge in order for them to master the new learning (Coetzee 2013:218). Problem solving has to do with achieving a goal that is initially outside the reach of a person due to lack of resources or information (Stevenson & Palmer 1994). The process of solving a problem helps the individual gain new knowledge of how to solve such problems and how to solve similar problems in other contexts. Problem solving, therefore, stimulates learning, but learners do not have to have prior knowledge to solve problems or to learn from them. Learners can rely on problem solving and memory to learn, but if they do so, they do not fully understand what they are learning (Stevenson & Palmer 1994).

Learning therefore requires adequate time to master effectively the skills needed to do research. Jonassen and Rohrer-Murphy (1999: 70-71) postulate that in practical terms, learning environments need to accommodate several interdependent components, such as problem-solving, understanding and memory, during the teaching of research methodology. Learning programmes should have problem-solving activities that challenge learners to solve interesting and poorly structured problems that are relevant to their work environments. Learners should be exposed to related experiences through case studies to obtain information and to learn from the variety in these case studies. There should be enough information sources such as information banks that learners can access to support problem-solving. However, the learning programme needs to include cognitive tools like observational, conversational and interpretational skills, to develop or further develop learners' problem solving techniques. Finally, learners need to develop conversational and collaboration tools to enable them to learn in communities, teams and groups to solve problems together (Jonassen & Rohrer-Murphy 1999: 70-71).

Fourth, while knowing that the module content and available time were not enough to enable learners to get a full picture of research, their progress towards competence was measured on several levels. Learners seemed to have misunderstood the purpose of assessments, because these seemed to escalate their fears of not being able to grasp the new content. This relates to an underestimated characteristic of adult learners. Adult learners are confronted by their own self-assessment of whether or not they are ready to learn new knowledge and skills. Learners formulate a subjective opinion about their ability to learn the new material when they reflect on their mental ability, goal orientation and level of experience (Blanchard & Thacker 2007). This means that police officers draw from their subjective beliefs before they decide to participate in learning opportunities. It is thus critical to facilitate a clear understanding of what the learning intervention demands in terms of commitment and effort and what learners can expect to achieve. Adult learners need to develop the skill of self-reflection to counter their fears. This process of reflecting is a way of enriching their understanding of themselves and their perspectives of the world (Frick et al. 2010:81).

Adult learners therefore derive their knowledge from meaning and structures of their own frame of reference, including their previous social and cultural experiences. It seems as if learners in the SAPS research module use reflection as a way of measuring their own performance against that expected by the trainers, which results in unnecessary fear. Nduna (2012:234) and FitzSimons (2000) explain that effective assessment strategies and explicit articulation of learning outcomes and assessment criteria are critical information for adult learners. Such information will keep the learners informed of what the new learning content entails and what it expects of them. In research methodology courses, this information will help the learner identify real problems worthy of further research. The formative assessments to determine learner progress towards their research proposals, and the subsequent summative assessment were realistic in terms of the module content in the initial module design. The summative assessment required learners to use their proposals to conduct their research projects in the workplace. It was evident in the very low-level criteria of the marking rubric of the research report that the initial design required learners to conduct only elementary research projects (EDLP Version 1/2009).

Fifth, the development of the first version of the EDLP left an astonishing amount of practical challenges in the hands of the trainers. The research module required extraordinary effort on

the part of both trainers and learners. Trainers had to have contact with learners on a continuous basis to monitor progress and to give individual advice (P1:126). In fact, the trainers were overloaded with the volumes of research projects at any given moment, and the management responsible for the successful implementation were not interested in addressing the real challenges (P1:173). The developers of the EDLP did not consider the demands of the research module on the EDLP trainers. As a result, only two trainers were assigned to teach the research module. These trainers had to take on several roles in the process. Drawing on the work of Boud & Griffin (1987) and Brookfield (1986), Engelbrecht (2000:38) posits that when educators interact with learners, they become presenters of expertise, learner-centred guides, providers of access to resources, supporters and encouragers, critics, stimulators of critical reflections and challengers of assumptions. The Division: HRD realised later that more trainers were needed. By then it was too late as other trainers had witnessed the amount of work involved with research and when certain trainers of the SAPS Academy were invited to become part of the research team, they indicated that they had no intention of getting involved with research.

Sixth, the custodians were not open to new ideas for improving the research module and helpful suggestions were not even considered. Those who had instructed the inclusion of research methodology in the EDLP had not been exposed to the subject content themselves and had no idea what the impact of their instructions would be (P1:61). For instance, when the assessment instrument for the research panel presentations was developed, all EDLP trainers had to brainstorm and develop the criteria of the instrument, but they inadvertently duplicated what was contained in the research report assessment. When the research trainers identified the duplications, their concern was disregarded and the instrument developed. Later when uncertainty arose about the purpose of the third phase assessment instrument, the research trainers had to explain and solve the problems. The other trainers were highly critical of this instrument.

Billett (1996:2) provides clarity for the inability to consider alternative strategies to improve the research module. According to Billet (1996:2) there are two types of knowledge that are delineated in cognitive literature. Firstly, propositional knowledge that comprises facts and the understanding of the relationships between concepts (Novak 1990 in Billet 1996:2) and secondly, procedural knowledge that comprise skilful action and techniques to secure goals (Stevenson 1991 in Billet 1996:2). While both propositional and procedural knowledge is

drawn upon and constructed in all of our activities, it is mostly the higher order procedural knowledge that addresses the challenges of non-routine problems such as those experienced in research. Procedural knowledge has three levels: the first level is used to achieve specific goals, the second, which comprises cognitive activities such as monitoring, evaluating and strategy selection, is used when first order procedures are not enough to achieve goals; for instance when tasks are ill defined and need to be broken up into sub-goals (Green & Simon 1988 in Billett 1996:3) and lastly, the third level, or higher-order procedural knowledge which acts on lower order knowledge and comprises monitoring and organising activities (Stevenson 1991 in Billet 1996:3). To address research related challenges in the research module would thus require the decision makers to utilise third level procedural knowledge. However, it seems as if the lack of research experience influenced the utilisation of procedural knowledge to such an extent that the custodians had to resort to propositional knowledge that relies on known facts.

Seventh, because the initial considerations did not consider how difficult it would be for managers in the workplace to understand the multi-phase approach of the EDLP the result was a lack of organisational support. The experiential part of the research was thus left to learners who had to manage both the demands of the workplace and their research projects. This burden did not work in favour of the programme's outcomes. However, this is often the case with adult learners. Police officers have to share their learning time with other life roles such as being an employee that reports to a supervisor and having parental responsibilities at home. Adult learners, like the EDLP learners, find it hard to balance learning time with their other responsibilities. This is, according to Walters and Koetsier (2006:99) part of the reason why adult learners drop out or fail to complete courses successfully. To this end, the research trainers had to step in to assist the learners. Billett (1996:51) highlighted that the lack of support is indicative of a need for extended educator support for learners in the workplace.

The major concern is that if learners are placed in a workplace where learning opportunities are insufficient, if they are not well supervised, or not afforded the time to construct new learning, they run the risk of constructing inappropriate knowledge and skills. What the EDLP research learners are experiencing in the workplace is a common feature in today's work environment. McCormack et al. (2010:45) argue that workplace learning is more successful in conditions where workers not only learn to do the job, but also learn how to learn while working (McCormack et al. 2010:46). Supervisors' understanding of the learning programme

makes learning easier, but it is not the determining factor for learning. Learners have to learn to learn in tumultuous working environments, because this is where the generic and soft skills that are needed for survival in the workplace are developed. Torraco (1999:259) asserts that educators ought to take note of this since employees nowadays draw from workplace learning not only to develop generic or presently-needed skills, but also to develop future-needed skills that are not taught in controlled classrooms.

Eighth, the design of the programme did not allocate time to discuss the operationalisation of research proposals in the workplace (Schwartz & Human 2012). Learners therefore entered their research projects unprepared without knowing how to solicit support, but Torraco (1999:262) explained that the role of skilled colleagues in the workplace is more significant than in traditional pre-planned programmes. This includes fellow learners in the EDLP. Torraco's argument is that there is a focus on developing a collective consciousness among learners who interact meaningfully during the learning process, as well as providing clarity about the resources that are available for learner support during the learning programme. The sharing of information among learners and the support of colleagues may reduce learners' fears and render them ready to take on the new learning required in the research module.

Ninth, the most critical aspect was the administrative process of the research module, but it was never considered. There was no system or process in place to receive and record reports. The research administration process was developed and continually improved by the training administrators and the research trainers. Unknowingly, these role players applied reflection and problem-solving skills in developing administrative support for learners. To this end, one is reminded by the literature that reflection has several interpretations. Dewey (1933 in Coryell 2013:302) explicates reflection in learning as a process that starts with a problem and then progress through a set of steps, in which action and thinking are viewed as separate steps. Dewey's (1933) steps involve reflection, thinking without action, a feeling of unease, development of a working hypothesis, data gathering, a proposed solution connected with reasoning and situational context, hypothesis testing and refinement and post-reflection. Dewey (1933) further argues that reflection on past experiences guides a person's future behaviour and decision making. Dyke (2009:304) argues that the elements of the reflective process are doing (practice, primary experience, experimentation, application, creativity and/or expression), knowing (formal theory, research or practice knowledge, and secondary

experience), reflecting (reflection, thinking and contemplation) and finally, interacting (engaging with others in different social contexts, situated learning and communities of learning).

6.2.1.2 The evolution of the module

The research module has gone through several stages in its development. As indicated earlier in this chapter, the EDLP was preceded by the EDP, which was an outsourced programme that was presented from 2006 to 2008. The EDP was reworked and aligned to fit the police context and in 2009 became the EDLP. The EDLP was presented at SAPS Academy Paarl and contained a limited research element. A two-day lecture on research was offered and learners had to develop skeleton research proposals. In 2010, the research model consisted of three phases. Phase 1 entailed the research module that was presented over two and a half days and learners had to develop a research proposal. Phases 2 required learners to conduct the research in the workplace. Learners had to produce a 40-page research report and if found competent, present such research to a panel of experts in their provinces in phase 3. By 2011, the research model still had three phases. The module presentation days were increased to five days and the research proposals had to be approved by the HRD Research Committee, while the research report increased to an 80-page report. The learners still presented their research to a research panel in the provinces, but their presentations had to include implementation plans for their recommended solutions. At the end of 2012 however, the research model was changed again. This time the three phases were structured differently. Phase 1 had five days teaching and the development of a research proposal that had to be approved by the HRD Research Committee. Phase 2 entailed the research project in the workplace, but phase 3 required learners to return the SAPS Academy for the assessment of their research reports and the panel presentations. The return part of the latest model was to improve the submission rate of research reports and to undergo training in a service delivery improvement programme. The EDLP was aligned to a university partner's EDP, accredited and rolled out in 2014. It was called the Safety and Security Executive Development Programme (SSEDP). This SSEDP will in future be presented alongside the SAPS EDLP.

The development was not planned like this, but rather became the product of continuous improvements. The evolution of the EDLP research module stemmed from three

considerations, namely, an adaptation to learner needs, a response to changing organisational needs, and a desire to protect the credibility of the programme and trainers. I discuss these next.

(i) Adapting to learner needs

The research trainers are experienced in teaching and facilitating learning to adult police officers. They have been in the SAPS for approximately 30 years and therefore understand the police culture of rules and military ranks. However, when they enter the classroom, they break down the formal military culture and treat the delegates as adult learners, use first names and facilitate open discussions while still respecting the dignity and seniority of the learners when they are not busy with learning activities.

With the research module being the first module of the EDLP, learners are welcomed by the custodian for leadership development. Learners normally return to class in a state of disbelief and shock due to the explanation that they would face harsh consequences if they did not complete the EDLP successfully. The trainers therefore used the first teaching opportunity to reflect on the learners' fears and concerns to let them vent their frustration. The learners were confronted by a very serious threat to their careers should they not be able to comprehend or complete research methodology (P8). It surfaced in later programmes that some learners only completed their study because they expected promotion, others feared embarrassment if they did not complete the studies and a larger group succumbed to the pressure of their commanders, Head Office threats and continuous study leader enquiries. The negative responses of the learners triggered the development of an opening presentation that provided an overview of the EDLP and all the outcomes of the EDLP, particularly the research module.

The presentation did not form part of the module content, but rather an addition that was used to address some of the learners' initial objections to the research module. The overview of the EDLP and the research module served to convince the police executives that they should engage in the learning process. This is an important step in the programme. Kolb (1984:31) asserted that teaching new content should start with the experience of learners, as this could become a crucial point in whether or not adult learners will see the need for learning new skills. The slideshow was the trainers' own initiative that helped to reduce learner anxiety, but at the same time, it reduced the research lecture time considerably (P8). Addressing learner needs took priority over teaching on day one.

P8 incorporated adult learning principles into the research model. In the trainers' approach, they created research building blocks that could facilitate understanding of research principles and process. Building onto existing knowledge is vital according to Bloom's taxonomy of learning (1959) and it requires educators to ensure a proper foundational knowledge from which to progress (Schwartz & Human 2012). Moreover, an introductory modular approach to learning would also help address the fears experienced by many previously marginalised South Africans in the sense that their 'epistemological access' is influenced by the knowledge that they have acquired at school and their experience of education in an apartheid-driven political era (Osman & Castle 2006:517).

The first building blocks included the initial introduction of research as a science, what it is, and what it is not. This initial discussion is particularly important for the older learner who had left school at an early stage, gained experience at work and developed through informal and non-formal learning. Entering into further development might be overwhelming and intimidating, and not being in possession of a particular qualification could seriously affect an adult learner's confidence. Introductory modules to learning programmes can thus play an emancipating role in many adult learners' lives and careers (Osman & Castle 2006:518).

An introductory module is an important motivator for learning, especially in view of the fact that many adult learners have no choice but to attend training programmes (Fourie & ten Kroonden 1999:1), but the introductory module should be put in the context of the learners' field of work or interest and should be relevant to the 'real' world and time of the adult learner (Fourie & ten Kroonden 1999:6). However, Torraco (1999:262) argues that such introductory programmes are not necessary when learners are participating in the design of the learning programme. This, however, was not the case in SAPS, as learners had no input in the design of the module. To introduce research, the trainers started using an icebreaker that covered the research process. This allowed learners to use their logic to assess the validity of the claims made in the presentation. The debate that was sparked by the icebreaker created the opportunity to create learner interest in research and to allay fears of not being able to grasp basic research concepts.

The trainers could then explain to the learners how the different phases in the research process form the research cycle (Lesson Plan 2011-06-27). Apart from easing the nerves of

learners in a humorous way, the ice-breaker played a dual role in the research module. Firstly, since the EDLP did not provide for a pre-course preparatory research workshop, the ice-breaker had to fulfil the role of introducing the concept of research in such a way that it would entice learners to use their logic and implicit knowledge to comment on the research presented in the ice-breaker. Secondly, the ice-breaker assisted learners to discover the need for research to address work-related problems.

The second step was to assist learners to learn at their own pace. The trainers' experience of the first two courses made them realise that some learners fell behind and were unable to catch up due to the pace of the EDLP. The pace of learning seemed to be related to the learners' prior level of exposure to research and the ability to learn. Cleary (2011:39) explained that adult learners are developed by building on what they know and expanding their understanding. Cleary (2011:36) argued that adult learners become more successful in their learning programmes when they start negotiating ways of addressing their barriers to learning. The trainers developed a research workbook to assist learners to understand research methodology. Based on their experience of learners' challenges to grasp research concepts during the 2010 programmes, the trainers piloted several versions of the workbook in 2011 before introducing the final version in January 2012. The workbook guided learners' responses by asking specific questions about their topics, research problems and from where they originated. Learners could use this workbook to learn at their own pace.

The trainers had to keep the learning experience realistic. Learners were asked to work on their own research topics and to reflect on their workplace to keep the research project real and authentic. The task of reflecting on their own workplaces assisted learners to identify those problem-solving methods that they normally used when they were confronted by a situation at work. This personalised reflection also assisted learners to deal with change by looking at the problem differently, learning from their experience and acting with a new critical stance (OECD 2005:5). It is this change in established ways of thinking that should result in critical thinking. It is also a skill that prospective researchers should master, although many adult learners struggle with critical thinking (Frick et al. 2010:83). The trainers used reflection as a learning strategy because they confronted learners with problems that could not immediately be explained or solved within their field of work. Relating learning challenges to real life situations prompted learners to realise that they must seek additional information to formulate properly their identified research problems. This is in line with the argument of

(Frick et al. 2010:81). Conversely, the inability of the EDLP learners to reflect and think critically, relationally and conceptually could leave them in a state of 'underpreparedness' for learning more complex content (Bradbury & Miller 2011:1-8).

This third building block was the learners' responsibility. The research methodology chapter of the EDLP required diligence from learners to read and practice self-study on aspects of research that were not covered during lectures. Learners received an additional file with reading matter for self-study on relevant literature on research methodology (SAPS 2012d). Yet, after each course, they realised that learners never referred to the reading matter and also did not read the prescribed textbook. It was evident that the learners relied on their memory and short notes that they made during the lectures, but this was not favourable for their learning. Ezeokoli (2014:75) explicates that adults remember older events better and struggle to remember recently learned materials. Memorisation of work should thus not be considered when teaching older adults.

Stevenson and Palmer (1994) also argued that learners who rely on memorising detail to recall such detail later will have a shallow understanding of their learning and, as a result, will have limited ability to critically analyse and interrogate complex content. The fact that learners resisted reading was the most difficult aspect of the research module. Realising this, the trainers stopped handing out the additional reading material and focused more on the learners' self-exploration of ideas and concepts. Frick et al. (2010) explains that reading critically is a skill that novice researchers develop much later in the learning process. In order for learners to make that ontological shift towards becoming critical thinkers they need to develop that skill consciously. Frick et al. (2010) argue that novice researchers, for instance, move from dualism to relativism and finally, to reflective thinking. At first then, they are dualistic thinkers who are often unable to develop balanced, reasoned and well-thought out arguments (dualism). They find it hard to address the complexities of the issue or topic initially, but later on they learn to read and think about them. In the process they start contextualising knowledge and understanding the complexities of having an intellectual stance towards a topic (relativism).

In the second stage, learners start to think differently about things by approaching them from different angles or perspectives. Their frame of reference is changed, and as a result

their perceptions and interpretations change. Learners transform their initial understanding or knowledge (Frick et al. 2010:85)

In the third and final stage (reflective thinking), learners become reflective thinkers that realise that their opinion is one of many and that some opinions are better than others are. Yet, they evaluate and commit to their opinions for their own particular reasons (Frick et al. 2010: 85). In order to prepare learners to make such ontological shifts, the trainers had to focus the learners' attention on other research-related skills. More time had to be spent on practical exercises on data collection and analysis, academic writing and referencing. Extra effort was made to assist learners master the Harvard referencing method to avoid plagiarism. Learners were also given opportunities to use the SAPS library during literature searches. Unfortunately, many learners were not computer literate and they had to be taught how to use the basic functions of the computer and later, to search for information on the internet.

The idea of another building block that could expose learners to debates and small group discussions was triggered by the trainers' reflection on their own research learning experiences. One of the trainers, P8, shared his experience of not being able to grasp research, because in his first encounter with research methodology, he had to learn research on his own by just completing multiple-choice questions for assignments. He just went through the motions without learning. This led to the realisation of the need for interaction with others as part of learning. In addition to debates and small group discussions, the trainers implemented a short-lived learning partner system to stimulate critical thinking. P8 became aware of learning partnerships in the Master's Degree in Adult Education that he enrolled for in order to become a better research teacher.

After some deliberation and reflection about its fit in a militaristic police culture, the trainers implemented the 'study buddy' system to get the learners to share their studies and ideas with a partner. Additional articles on study partnerships were handed out to learners to familiarise themselves with the concept. The study partner system could enable learners to help and motivate each other, but the concept was not received well and learners threatened to withdraw because they did not want to work with someone else who knew less than themselves (P8:15). Learners clearly did not grasp that the value of learning with others lay in the opportunity to explore alternative views to an argument. Marton and Trigwell (2000:391) argue that learning through variation is essential for learning. They argue that in classroom situations, the variation is typically introduced by helping students to experience how their

own understanding varies from that of their peers. The dimensions related to the object of learning in which variation could be experienced simultaneously therefore create a space for learning (Marton & Trigwell 2000:391). To this end, Marton (2006: 499) argues that although it helps if learners manage to do something in a particular situation because they have experienced something similar in the past, it is not enough. Learners must also be able to draw on their past experiences and do something different with them in new situations. In other words, more attention should be given to the transfer of what was learned in one situation to another.

The trainers introduced the concept of variation accidentally when they developed and introduced a research rollout lecture for the EDLP. Learners had to be prepared for the practical roll-out of their proposed research projects in the workplace. This aspect entailed a discussion on the role of the researcher in data collection and ethical research considerations. Learners were advised to meet with their commanders to discuss their studies and to negotiate support for their projects by marketing the benefit of the research for the workplace. During this session, learners were briefed on their responsibilities as well as on the support they could expect from the trainers during the study. Moreover, they were encouraged to apply their newly acquired research skills in the workplace as the principles stay the same even if the context changes.

To this end, when the efforts of the trainers and the limited research module content are considered, the research model for teaching research is relatively close to the constructivist learning model proposed by Schober et al. (2006:74). This constructivist model provides specific outcomes for learning which were achieved as follows:

- Learners should gain factual knowledge by studying textbooks and journal articles. This aspect was prominent and visible in the research programme in the use of a learner guide, a workbook, several articles and handouts of relevant reading matter;
- Learners should gain competence through self-regulated learning that involves forethought, performance and self-reflection. The use of the research workbook facilitated reflective thought about real situations at work to help learners develop research topics that were based on authentic problems;
- Learners should develop collaborative learning abilities where students work together in teams and through social integration, success and autonomy will gain intrinsic motivation. In the research module, small group discussions, debates, learning partners and one- on

–one interviews with learners were initiated to encourage collaborative learning through variation; and

- Learners should gain e-competence since they will be working on electronic platforms throughout their studies. The EDLP learners were taught computer skills, showed how to access literature at the SAPS Academy library and they were given time to practice internet data searches.

(ii) Responding to changing organisational needs

The first model that was presented in 2009, offered a day and a half lecture on research methodology and learners were not expected to conduct any research. The idea was to introduce research methodology to SAPS senior managers. The second version of the EDLP commenced in 2010. It built onto the short research lecture to include an experiential learning exercise, which made provision for a five-month research project in the learner's workplace. Although the learners' research output was of very low standard, the practice was in line with Casey's (2013:47) argument for extending of the notion of competence. Casey (2013:47) argued for learner participation, which takes learning beyond competence. In this regard, he explicates that participation should not be viewed as an activity that follows competence but rather the involvement of the learner during the teaching process. While Casey's (2013:47) theory might be relevant, learning still depends on both individual effort and conditions in the workplace. Corryell (2013: 303) provides clarity by explaining that significant learning (transformation) is both individual and social and dependent on the context of the environment.

By 2011, the Division: HRD demanded better returns from the research module. Instead of only introducing research to learners, the organisation suddenly expected the learners to solve real workplace problems by engaging in experiential learning in the workplace. This organisational requirement might have challenged the abilities of the police executives, who were generally older adult learners. Malan et al. (2014) explain that South African students have not learned to take ownership of their own learning due to the teacher centred approach followed at school. The authors argue that the traditional way of teaching did not encourage self-reflection and self-direction but rather strengthened learner dependency and superficial understanding. In response to this dilemma, the trainers used the new research expectations to negotiate more class time for the teaching of the module. Eventually, after the first two courses, they managed to get three days for research, and after one year, they could present

the module over five consecutive days (EDLP meeting 2011-03-10; EDLP Block Programme 1/2012). The new module structure did not make provision for one-on-one sessions with the learners, but the trainers initiated evening sessions with the learners for this purpose. This was a positive step for learning as participation forms an integral part of learning in problem-based learning approaches such as in research modules. In order to transform students from passive learners to active problem-solvers who can reflect on their own progress and learning, trainers need to shift their approach from covering learning content in class to problem engagement such as during the one-on-one research interviews in which the trainers became learning coaches (Malan et al. 2014:2).

The extension of teaching days also resulted in the initiation of an amended assessment process (P8:14). The new assessment strategy required learners to compile a well-structured and academically sound research proposal at the end of phase 1. Learners had approximately three weeks to acquire the necessary research knowledge and academic writing skills to develop such a research proposal (Schwartz & Human 2012). As a result of the amendments to the design of the EDLP, learners now had to submit a 4-page skeleton research proposal for formative assessment, a full research proposal for summative assessment in the first phase, a research report for summative assessment after phase two, and a presentation of their research findings during phase 3 as summative assessment (P8:17). As alluded to elsewhere, the systematic approach to building learner competence is not enough and more is needed for learning than just measuring competence or the achievement of skills and abilities. An alternative, an extension of the notion of competence, namely participation that takes learning beyond competence is needed (Casey 2013:47).

While reflecting on the risks of losing learners, the trainers identified key moments where learner 'dropout' is likely to occur. They identified the moments where learners had to draw on their emotional intelligence to deal with 'set-backs' in the research process. These moments were presented to the custodians of the research at an EDLP trainers meeting in Pretoria. Learners could lose interest in research at the start of the programme if learners struggle to get a research topic approved by their immediate commanders, when their proposals are not approved on their first submissions to the HRD Research Committee, during the initial rollout of the research project, when research reports are due for submission, when learners cannot deal with the feedback and comments on their research reports after assessment, when the feedback of being

declared 'not yet competent' on their research reaches their commanders, and before or after the panel presentations of phase 3.

In addition, the trainers feared that learners might lose interest when they had to wait for their research feedback, especially when there was nobody available to respond to their enquiries. It was also anticipated that learners would quit their studies in instances where they could not defend their research findings in the research panel presentations. The risk of learners 'dropping out' of the learning process during the workplace research project phase is a personal matter. Workplaces differ from formal education settings where learning takes the form of knowledge acquisition while workplaces require employees (learners) to become active participants in knowledge creation (Tynjälä 2008). The workplace therefore provides the context in which formal and informal learning occurs.

In the new strategy, learners' research proposals had to be submitted to the newly established HRD Research Committee. The first meeting was held at the Division: HRD offices in 2011 to clarify the roles and responsibilities of respective role players in the research module (HRD Research Committee 2011-06-13). The heavy research focus had a negative impact on the rest of the EDLP modules. Learners neglected their other EDLP modules to prepare their research proposals and did not adequately prepare for the other module assessments. Thus, several learners did not pass these assessments because of their focus on research. However, these assessments were important, because learners did not automatically advance to phase 2 of the EDLP.

In the new assessment strategy, learners also had to develop a research proposal at an acceptable standard before they were permitted to enter into Phase 2 of the EDLP (SAPS 2011e). Several learners colluded to not to do the research projects when they returned to their workplaces. This phenomenon is explained by Govender (2001:18) who argued that not all adults make use of learning opportunities in the workplace, because learning environments are personal and constrained by its history (Govender 2001:18). Lorschbach and Tobin (1995 in Govender 2001:18) explicate that the conception of a learning environment is a construction of individuals in a given social setting. The learning environment is also perceived to be a combination of an individual's socially mediated beliefs about the opportunities he or she has to develop and the extent to which the social and

physical milieu constrains such development. The meaning of a workplace for an employee is therefore derived from the personal experiences of the individual and its value determined by the nature of development opportunities, the frequency thereof and the contribution it makes towards career growth.

The workplace can therefore be either enabling or restraining for learning and learning transfer. This aspect is touched by Yamnill and McLean (2001:203) who argue that an organisational climate has an impact on learning in the workplace but it is overlooked during training interventions. The lack of access to expertise in the workplace, for instance, has a negative impact on the learner, which may result in the learner developing skills that are not in line with those the educator expects. Learners generally follow the norm of the rest of the workplace, however poor the practice may be. Even when well supported by educators or other employees, the learner determines who is considered to be the expert. Educators nevertheless have to ensure that learners do not fall victim to workplace learning activities that do not secure the depth of understanding that is needed to master complex work activities (Billett 1996:52).

The involvement of the HRD Research Committee advanced the organisation's agenda to solve workplace problems through scientific research. The new strategy, which entailed the implementation of amendments to phases 2 and 3 of the EDLP, was formed at an EDLP Work Session on 2011-04-12. The emphasis then moved away from the initial idea of developing a research proposal, to conducting a six-month research project in the workplace, and further to include a practical implementation plan to solve the researched workplace problem. In one year, the SAPS had managed to escalate the research module from a skinny introduction to research to a full version of research with practical application and return on investment evaluations by a panel of experts (P8:17).

In order to enable this aggressive growth in the research quality, the SAPS had to understand the intricacies of the workplace and the balancing act needed to maintain productivity and provide employee development. The custodians would also have to understand the contextual factors influencing development opportunities if they wanted to promote better collaboration with the workplace, because the work environment also has to deal with power plays that affect workplace learning (Järvensivu & Koski 2012). The custodians also needed

to take note of situated gendered learning (Tanggaard 2006; Garson 2012) and understand the boundaries of workplace learning (Illeris 2004).

The HRD Research Committee made learners nervous. The feedback of the HRD Research Committee on their proposals would only reach the learners in the last week of the first phase of the EDLP, i.e. in week six. By this time, learners had become very anxious about the outcome of their research proposals. The reason for this anxiety was that there was insufficient time to develop a new proposal on a different topic or to affect the recommended changes to the original proposal as learners were about to return to their workplaces. However, the HRD Research Committee played an important role in the SAPS research module by guiding learners and prompting them to think differently about their research topics. McCormack et al. (2010:42) support this strategy of the HRD Research Committee. They posit that workplace learning programmes should encourage and develop learners to exercise their own practical judgement in the workplace as that is where learners are exposed to situated understanding of work demands. More than ever before, workers (adult learners) will be linked with the following features of the workplace: participatory practices, flow of circumstances, awareness of the diversity of role players, activities, tensions, goals and tasks in very complex situations. For adult learners to excel in their careers they will have to know how to play the game and how to go on in 'circumstances of conflicting complexity' (McCormack et al. 2010:42).

By 2012, the custodians granted permission for learners to be provided with a textbook by Babbie and Mouton (2001). Learners could keep the textbook and use it during their fieldwork. In the past, they had to hand back the textbooks at the end of phase 1. While several changes have been affected in the design, assessment instruments and assessment strategy, the guiding documents have not kept up to date with the reality (SAPS HRD Research Committee Meeting 2012-03-01). By then, the research reports had escalated in volume from being a 40-page report to an 80-page research report (Lesson Plan 2013-01-28). The organisation's intentions were clear. The SAPS needed its research output lifted to academic level while keeping the research empirically focussed on workplace problems.

The Division: HRD was equally concerned about the quality and impact of the EDLP Research module. An impact study was conducted on the EDLP, which involved interviews with learners who attended either the EDP or the EDLP between 2008 and 2010. The results

were presented to EDLP trainers as motivation to improve learners' experiences and their learning (EDLP Evaluation Presentation 2012-02-23).

The presentation, dated 2013-02-04, indicated that research did not feature as a skill or practice that was transferred into the workplace, but the findings of the report could have overlooked important factors that impact on learning transference. Yamnill and McLean (2001:196) for instance, drew from Holton's (1996) model to explicate that motivation, transfer climate and transfer design act as enablers for learning transference. Each of these factors is supported by a number of theories that should be understood and relatively applied to learning environments. The challenge is that many trainers or facilitators of adult learning may not be conversant with the application of the many learning theories available for transference of learning.

Later, during 2012, it surfaced that the level of research of the EDLP had improved to such an extent that the Division: HRD could enter into discussions with tertiary institutions to collaborate with and to find ways of getting accreditation for its learning programmes. P8 recalls that he had to calculate the notional hours spent on research as tertiary institutions were interested in that. Several 'good examples' of completed studies also had to be submitted to the Division for viewing by the tertiary institutions. Billett et al. (2008:3) provides clarity for SAPS' quest for the recognition of the EDLP research programme. Billett et al. (2008:3) explains that despite the growing interest in workplace learning and the accompanying acknowledgement of the important role it could play in economic emancipation, it is still seen as 'inferior and subordinate to learning processes and outcomes provided by educational institutions. This view of the workplace as an inferior site for learning and the result of fewer opportunities being given for workplace learning, emphasised the need for better understanding of such learning and for the advancement of workplaces as legitimate environments in which to learn (Billett et al. 2008:4).

On return from an EDLP trainers meeting in 2012, the trainers held another whiteboard-reflection meeting to discuss issues in the research module and to establish what had been addressed. The challenges that had been address by then remained risky moments for learners to withdraw from the programme. They refined their earlier research model (Figure 5.3 on p.224) by using red circles to show the instances where the trainers have no control over the process. They used green ellipses to reflect the steps taken to address the

challenges and the pink 'stored data' shapes to indicate the administrative reporting function. As in the previous models, the formative and summative assessment activities were shown in yellow heptagons. The red circles indicated that the trainers had no control over the development process of the research module and even though they had added learning material to the module, the content in the learner guide had remained unchanged since the first version.

The assessment strategy had changed though. The second red circle reflects the trainers' inability to change or control the panel presentation outcomes. The presentation panellists were appointed by the Divisional Commissioner: HRD and the competence or suitability of the assessors could not be guaranteed by the trainers. In addition, the training administrators could not keep the learner records up to date as the development of new course codes for the different assessment models of the EDLP proved to be problematic. Many of these challenges resulted from a lack of cooperation between role players in the teaching of the research module. Yamnill and McLean (2001:206) argue that collaboration with key stakeholders in the workplace is necessary to link new learning to strategic goals, reinforce organisational priorities and support related factors of the workplace. Educators therefore have to engage with managers to provide clear performance objectives so that learners are motivated to learn because they know exactly what is expected of them. Managers on the other hand, will have to be encouraged to provide the necessary resources to enable transference of learning during the research project and the implementation of solutions generated in the research.

The EDLP research module indicates that a learner has completed the programme when he or she has completed the research module by successfully defending the research findings at the phase 3 panel presentation. This was however not the case, because the organisation then took over the research responsibility. The research report had to be corrected, scanned for plagiarism again and quality checked, before submitting an electronic version to the Division: HRD. The report was then discussed with the Divisional Commissioner: HRD for consideration of its merits for escalation to top management of the police. Most learners, whether or not they completed the research projects successfully, expressed their desire just to get the EDLP over and done with. The majority of learners did not have a pleasant learning experience and might have learned skills that are undesirable for the organisation. Rossiter (1999:64) argues for the minimising of 'wounding learning practices' where learners suffer

'injuries' at the hand of lecturers. Rossiter (1999:64) explains that in such instances, as in SAPS' case, the lecturer and curricula always featured at the centre of the learning intervention instead of the student's life-worlds, aspirations and experiences. Learners who suffered through wounding learning practices found it hard to complete their studies. Educators therefore have to have a thorough understanding of the philosophies underpinning their teaching methods.

In the meantime, the SAPS had entered into a partnership with a prominent public university in South Africa to align the EDLP with its own EDP, to add a research methodology module to the curriculum, and to accredit the newly developed Safety and Security Executive Development Programme (SSEDP) as a level eight short learning programme. The first SSEDP rolled out in July 2014. Unfortunately, the lessons learned in the EDLP were not considered and the same challenges and risks are still prevalent.

(iii) Protecting credibility

To a noticeable extent, the trainers tried to protect their own credibility when it seemed as if their learners' achievements reflected negatively on their research and teaching capabilities. Since the second EDLP of 2011, learners' research proposals have been submitted for scrutiny by and approval of the newly established SAPS HRD Research Committee that operates under the auspices of the Divisional Commissioner: HRD (SAPS HRD Research Committee Meeting, dated 2011-06-13). Several letters from the SAPS Academy to the HRD Research Committee illustrated the efforts of the trainers and the learners to reach the stage where the proposals could be submitted. The structure of the letters always revealed how much effort the trainers made to get the learners to produce research proposals, rather than stating which proposals have been submitted. The content seemed to protect the integrity of the trainers by alluding to their research knowledge, teaching skills and committed attitude. When the trainers regarded the research textbook as too basic, they supplemented it with additional reading matter such as articles on research methods. Their recommended new textbook was approved after two years. The trainers regarded the issue of a textbook as an achievement on their part, because they had been struggling to get that done since 2010. They adapted their presentations, lectures, and lesson plans to incorporate the content of the new textbook during their vacation leave before the start of the 2012 programmes. They hoped that the new research textbook would assist learners to develop better quality research

proposals since the quality of these proposals, they believed, reflected the trainers teaching ability.

The use of a new research textbook and the newly developed workbook which supplemented the research presentation was reported to the HRD Research Committee to show the progress made in the quality of the teaching methods and also illustrated the capability of the research trainers (SAPS 2012d). The trainers' behaviour can be explained by looking at the experience of Solomon et al. (2001:280) who experienced discomfort when they, as seasoned researchers, had to speak openly with other collaborators about their research processes while working on a joint research project. This discomfort was present even though they had good knowledge of workplace learning and had relevant learning theories readily available. However, Solomon et al. (2001:280) had to revert to reflective processes to understand their position in the project and to legitimise their own learning. Similarly, the trainers felt that their ability, expertise and knowledge should be evident when they collaborated with gatekeepers and other stakeholders in the workplace, such as the HRD Research Committee.

The trainers not only pronounced their capability as researchers, but they also negotiated ways of improving their ability to help learners become more successful in their research projects. The second phase of the EDLP comprised the experiential part of the research. This part entailed the trainers guiding and encouraging learners with their research projects, but in the first few programmes the trainers were not allowed to speak directly to the learners. Communication had to follow the official channels of communication, meaning that the trainers had to write letters that had to be signed by the Academy Commander before sending it to the learner. This initial constraint in the trainer-learner relationship with regard to communication was caused by the militaristic culture of the SAPS. The trainers' complaint that they could not supervise studies if they could not communicate directly with learners was an attempt to protect their image as research supervisors, but it had a positive outcome when they eventually received permission to communicate directly with the learners and the response time of feedback and the quality of research reports improved.

Realising that the research reports were subjected to scrutiny and quality checks, the research trainers made sure that learners got more time to practice how to conduct electronic

searches on the internet, use SAPS Intranet databases and visit the SAPS Academy library. This was done to help them find relevant literature for their topics before they compiled their research proposals and to ensure that they would have enough source material to write the literature reviews for their reports by the time they left the Academy (SAPS 2013d). Basic computer training sessions were scheduled during the first week of the EDLP to assist learners to store their work electronically as this could save them time when they compiled their proposals. These opportunities were created so learners could acquire the skills needed in the workplace while they were still at the SAPS Academy. The opportunity to utilise the learning that was gained in one environment in another environment is in line with what McCormack et al. (2010:47) advocate for effective workplace learning. They explain that employees learn from legitimate peripheral participation, by shadowing and observing experienced workers in the workplace (McCormack et al. 2010:47).

The trainers and administration clerks reflected on the challenges in the programme during their morning meetings as part of a learning process. The assertion of McCormack et al. (2010:47) that employees learn from legitimate peripheral participation, by shadowing and observing experienced workers in the workplace, is equally relevant here. When some learners questioned the correctness of the data, which had been provided to the Division: HRD regarding their progress, the trainers and administrators realised that they needed to file everything they did as evidence to protect themselves and the integrity of the EDLP. Two files were opened. One file was used for standardising all the presentations, handouts, assessment instruments, marking rubrics, feedback letters, and learners guidance correspondence. The second file was a research communication file, in which communication between the researchers and assessors, the training manager, the Commander of the Academy, the HRD Research Committee and the Divisional Commissioner: HRD, were filed. All the changes made to the assessment strategy of the research module were filed so the trainers had quick access to the latest instruction. It was thus important for the research team to be informed about changes in the research process. Keeping everyone informed enabled the training administrators to learn the training process and when specific documents were needed, they knew where they were, and they were able to see when documents were missing from a learner's file. The administration clerks learned what research proposal format looked like and could assist learners in drafting their proposals. By reflecting in meetings, the learners aimed to protect their integrity, but in the

process managed to create opportunities for the administrative personnel to learn work that fell outside their scope of responsibility.

The way in which the research team learned to put more mechanisms in place to improve the administration of the research attests to Torraco's (1999:256) argument that new models of learning are needed. Torraco (1999:256) argued as follows: Firstly, successful work strategies are reliant on multiple factors and expressed through pragmatic behaviour in which employees are confronted with novel and poorly defined problems that cannot be anticipated in advance. Successful performance therefore needs employees to solve problems in innovative ways as the prescribed procedures often do not solve problems in the workplace. Secondly, traditional or conservative models tend to view the employee as an individual learner who has to develop competence for the workplace, but the distributed nature of expertise in the workplace positions the individual employee as a member of a group whose expertise collectively solves problems in the workplace.

The individual learner concept is expanded to view the learner as an aggregate. In the group context, learning is a collective activity in which members of a group construct their actions as part of a system that interrelates their actions. The author also argues that high performance is not dependant on groups being fully developed. Educators therefore do not need to facilitate a process of developing groups before introducing the task. Thirdly, the distinction between work and learning has eroded significantly in today's workplace. To this end, one can argue that the research training team, consisting of trainers and administrators, were both learning while working and working while learning.

Research trainers also had to keep a record of which specific programme a learner attended before giving guidance or, due to the many changes in the assessment strategy, assessing a report. In addition, they had to keep accurate learner records which entailed details of when a research report was submitted for assessment, when it was assessed, the assessment decision, the date of feedback to the learner, any subsequent submissions, reassessments and feedback, the date of the panel presentations, the assessment mark of the panel assessment and the final decision regarding the learners competence. Some learners insisted on being assessed up to four times, but this fell outside the scope of the EDLP assessment strategy. The requirement for accurate and up to date records led to the development of an electronic database with all the biographical data of the learners, their

topics and key words and their research assessment progress. The database was eventually broadened to record the research guidance to learners as a method of reflecting the trainers' credibility and commitment to assist learners in the research.

The research team developed various instruments or 'tools' to monitor the learning progress. These 'tools' were developed and used as a standard operating procedure when dealing with research. The reference to a specific document made the communication between the trainers and with administrators easier. When trainers discussed the progress of different learners, they could refer to the specific tools to indicate the learners' readiness to present their research to the research panel. Thus, this established a certain level of professionalism in the research team. The activities of the research module were also summarised in a mind map that could be used as roadmap for all research and administration to ensure that no aspect of research was missed in the administrative process.

Low submission rate of research reports created a problem for the custodians of the research module as the idea of research as a problem-solving method in the workplace was failing. To counter this low submission rate, learners had to return to the SAPS Academy for three weeks from 2014 onwards. Learners were instructed to do their research in the workplace and finalise their reports in the workplace, under guidance of the study leaders, and to submit their reports when they returned for the third phase of the EDLP. The amendment to the EDLP third phase has not improved the competence rate of the learners, but it has improved the submission rate of the research reports. P8 posited that learners submitted poorly written or plagiarised research reports just for the sake of submitting something and, in doing so, were able to sidestep the threat of having to repay the organisation for the fruitless expenditure incurred on them. Billett (1996:51) highlights that workplace learning needs extended educator support for learners in the workplace.

The major concern is that if learners are placed in a workplace where learning opportunities are inadequate, they are not well supervised, or not afforded the time to construct new learning, they run the risk of constructing inappropriate knowledge and skills. Interaction with learners and workplace supervisors will ensure that learners are exposed to suitable tasks in which they can access authentic problem-solving activities that will encourage the construction of new learning (Billett 1996:51). When the HRD Research Committee and the research panels expressed their concern for plagiarism in the research reports, a decision

was taken to protect the image of the SAPS by scrutinising all reports by means of an anti-plagiarism software used by universities, called Turnitin (21/1/2, s.a.). This software was meant to improve the quality checks done by research assessors who had to use 'Google Scholar' to determine plagiarism and rely on honesty statements provided by learners (Schwartz & Human 2012).

6.2.2 How has the delivery method of the module developed to its current form?

During the data collection process, I treated the transformation of the research module content and its delivery method as two separate constructs. However, the subsequent data analysis revealed that the two constructs are essentially interrelated or perhaps even integrated into one process. In this view, the module content, or the lack thereof, has influenced the delivery of the module, which in return has reshaped the module content and purpose. Several of the themes that emerged from the data when the delivery of the research module was explored also surfaced in the module transformation, which made the discussion on the delivery part of the module redundant. To this end, themes like incorporating adult learning principles and dealing with learner fear have been common in both instances.

The trainers' teaching efforts to create ontological shifts in the way that learners look at workplace problems were evident in the transformation of the research module. Its evolution had a lot to do with incorporating problem-solving techniques into the teaching methods. The trainers explained how they created building blocks to teach learners to take ownership of their own learning, and to develop the foundational skills needed for research. Even though the trainers realised that the learners were not really interested in research as such and that they needed to finalise the projects to be declared competent in order to meet the requirements for promotion (P1:181), they still followed through with the teaching methods that worked for them. The efforts not only helped to shape the module, but it became part of the teaching and delivery strategy of the trainers. When trainers referred to how they developed and presented a rollout lecture to the learners to prepare them for the workplace research project, they emphasised the study leader support for the learners in the workplace.

They explained how the workplace could become a challenge if learners do not negotiate support and buy-in for their research from their supervisors or commanders in the workplace. While the lecture became part of the trainers' 'teaching toolbox', the clarification of learners'

and study leaders' roles during the study became standard practice. Unfortunately, all the efforts of the trainers and key role players were hampered when the organisation implemented penalties for those learners who did not complete the module. Several learners were eager and capable of completing their research, but their working conditions did not support their efforts. They were met by operational demands and a police culture that did not favour prolonged experiential learning for senior police officers (P8).

The emerging themes of dealing with fear, incorporating adult learning principles, creating ontological shifts through problem-solving, empowerment for fieldwork, establishing learner support in the workplace and dealing with challenges to learning fairness have been prevalent in the transformation, or evolution, of the research module. However, the evolution of the research module, discussed in the preceding section, is a product of three broad factors, being the trainers' response to learner needs, responses to changes in organisational needs, and the efforts to protect the integrity of the trainers' ability, the programmes' integrity and the SAPS' reputation.

6.2.3 What were the experiences of those involved in shaping the Research Methodology Module of the SAPS?

This question considers the experiences of all role players in the development and teaching of the research module as well as the learners who attended the research methodology module of the EDLP. It portrays the lessons learned from an organisational stance by analysing the individual's experience in the context of the role of that individual in the research teaching process. These experiences have particular meaning in terms of learning in the workplace.

The participants' experiences centred on the following factors: workplaces as volatile learning environments, learning being negotiated in the disconnect between research expectations and trainer capacity, informal learning through work, development of research administration systems through problem-solving, the effect of police culture on learning, and developing critical thinking abilities. I discuss these themes next.

6.2.3.1 Workplaces as volatile learning environments

The SAPS has become a testimony of the changing nature of today's workplaces. Changes within the organisation may cause divergence among its leaders which impacts on workplace learning. Divergence in the Division: HRD had a visible impact on the learners' learning process and on the quality of the research products. The discrepancy is fuelled by the actors' experiences of who was responsible for learning and who controlled access to learning. Regardless of the degree of involvement, those involved in the research teaching had different opinions of who acted as the gatekeepers of learning. Participants strongly suggested that the HRD Research Committee was the gatekeeper for the research, because it controlled the quality of both the research proposals and the final product. The trainers insisted that the learners' commanders and the learners themselves were the real gatekeepers in the learning experience. The learners' commanders could enable or restrain workplace learning while the learners made the choice whether or not they wanted to learn, especially while they were at the SAPS Academy.

The experience and exposure of role players to the research module clearly influenced their view of who the gatekeepers for learning in the workplace were. However, Malloch and Cairns (2010:9) assert that learning is a process of change in an individual or group through activity. It is temporal as well as mindful and generally follows some agentic intent by the individual or group. Who the gatekeepers are, is thus irrelevant as learning is not about who controls learning, it is about taking part in activities that create opportunities to learn. It is a personal choice and one's own agenda determines whether one will learn. Billett's (2002b:56) argument is equally applicable here. He argues that learning is the product of participation in social practice through an individual's engagement in its activities and access to affordances. The real question is whether learners were afforded the time and opportunity to learn in the workplace. To this end, the gatekeepers' role becomes more apparent as it discloses the support for learning in the workplace.

The level of learner support fluctuated during the learners' research projects. Workplaces are unique and each present the learner with its own dynamics, but when the organisation is at odds about its own structures, it cannot be good for learning. For example, the uncertainty about the future of the final product was caused by the existence of three different research

structures within the SAPS. The existence of two research committees, the Research Committee of the research section within the Strategic Management component and the HRD Research Committee, created confusion in the provinces as to which Research Committee takes priority as this determines where the Provincial Commissioners must submit their EDLP research topics and proposals. The normal practice was for research proposals to be submitted to the Research Committee at Strategic Management Services. The EDLP research module was established for skills development purposes and this dictates that the proposals be submitted to the HRD Research Committee, but the provinces did not know this.

Moreover, the establishment of a Research Institute at the National Office added to the dilemma. Who is responsible for what? Not only is there an overlap of functions and responsibilities with regard to research among the research committees, there is also no clarity about the accountability of the HRD Research Committee, or how to deal with the product of the research once the ETD process is complete. The uncertainty of the provinces in knowing how to deal with research topic applications delayed the learners' learning process because they were unable to commit to a topic for their research project. It also happened that a topic was approved in the province, but then not approved by the HRD Research Committee. The learners suggested that the provinces identify the research topics upfront, which would enable learners just to select an approved topic. It sounded like a good idea, but when it was implemented in the new SSED, the learners could not work with such topics and reverted to simpler research problems.

While having the structures in place to manage the research projects in the SAPS, it is not helpful for learning when the organisation is not clear about the purpose of each research structure. The challenges facing workplace learning are mostly found in the workplaces where there are inadequate structures and supporting systems (CHE 2011:20). The role of the HRD Research Committee in the EDLP research module is therefore crucial to ensure that proposed studies take place in settings where learners are offered learning opportunities or work activities from which they can derive meaning. Unfortunately, the role of the HRD Research Committee was not clearly understood by all its members. While the members of the research committee saw themselves as assessors and moderators of the research proposals, the trainers really needed the HRD Research Committee to restrict its role to considering proposed topics and methodology for ethical clearance. Instead the committee

were assessing and moderating the research proposals and evaluating the anticipated value of the study for the police (P8:17) without offering real guidance.

P8 did not agree with the assessment function of the HRD Research Committee and asked them several times what the committee's role was, because the committee was not part of the teaching process. It was a separate structure that did not form part of the EDLP assessment strategy. P8's argument is validated by the fact that the HRD Research Committee also evaluated the research proposals of police officers who are students of public universities. To this end, the trainers started briefing the research committee members who assessed the proposals on all the learning activities or processes the learners went through to remind them that the applicants are novice researchers who needed guidance rather than criticism.

The uncertainty of why research forms part of the EDLP also surfaced in the decision making of the custodians. The custodians of the EDLP often disagreed with each other about the design and delivery of the research module. The divergence of direction surfaced during power plays between the custodians of the research at EDLP trainer meetings, even though both custodians had limited exposure to the teaching of research. Thus, they did not understand the impact of their decisions and instructions on the learners and trainers (P1:61). The learners experienced the impact of these research decisions when they were confronted by their commanders' lack of understanding about the intensity of the projects. Learners were not always afforded the opportunity to take the time they needed to conduct their research adequately (P2:147). Nevertheless, the custodians were acting in the interest of the SAPS by directing new ways of dealing with the learners during their research projects.

Billett (2002b:57) confirms that the workplace should offer individuals opportunities to engage in work that provides the type of task that they can participate in and where they can get guidance for their work. These are aspects needed by the SAPS to evaluate what and how employees learn at work. The findings of an earlier impact study in 2011, which revealed that research skills were not transferred into the workplace, triggered the more drastic approach to teaching research in the organisation. One of the decisions entailed the repayment of the cost of the training programme if learners do not successfully complete the EDLP. To this end, Billett (2011:15) argues that learners should be supported before, during and after their

learning experiences to enhance their quality of learning, rather than being confronted by antagonism.

The learners reacted in many different ways. Some learners submitted poorly written reports just to submit something, because they argued that a court of law would never hold a person responsible for course costs if they were not able to grasp or do the research. Others requested extensions for their research report submissions, which were approved by the custodians in order to increase the submission rates of learners and the overall success rate of the EDLP. To this end, the custodians attempted to create space for learning by adding more time for the research projects. This is an important decision for the senior police officers as the workplace often represents the only and most viable location for employees to learn and develop their vocational practice (Billett 2002b:57). However, such uninformed decisions culminated in tarnished relationships between trainers and the learners who failed to submit their reports after the extended time, because their circumstances in the workplace did not improve.

In addition, the granting of extensions of submission dates for reports caused several administrative problems, especially for the recording of the learner results on the Training Administration System and the closing of programmes. The practice of granting extensions created uncertainty about the status of learners and programmes. The trainers noticed this and used it to lever participation in future decisions regarding the programme. P8 discovered that the one who controls the research database has control over the information and can therefore dictate further decision-making.

The custodians' decision to integrate the Service Delivery Improvement Programme (SDIP) and to let all learners return to Paarl for the third phase created several practical problems for the EDLP administrators, coordinator, research panellists and the learners. The duration of this phase is three weeks. This step not only added an extra challenge to the administrative processes, it also put more pressure on the research assessors who had two weeks to assess approximately 25 reports of 80-100 pages each. Yet, one of the assessors also had to act as the course coordinator who had to deal with the course's administration. The down side of the custodians' decision was that the provincial commanders lost interest in being part of the research panels, perhaps because it was not convenient anymore. The experts who understood the problems in the workplace were not present to evaluate the value of the

studies anymore. Instead, they were replaced by inexperienced officers who were conveniently available on the day of the presentations. This was not fair towards the hard work and commitment of the learners. In addition, the new research panel lost credibility (P8) and the spike in assessment results indicated that the new panel was much more lenient in their assessments than the earlier panels had been.

The unclear roles of the HRD Research Committee and the uncertainty as to the real purpose of including the research module in the EDLP created unfavourable conditions of workplace learning as the organisation as a whole was not ready for research. The trainers could not deal with the volumes of research reports, its assessments and study guidance. The organisation did not understand what research is and as such could not provide support in the workplace to enable learning. The structures that were supposed to manage research in the organisation interfered with the teaching process by assessing research proposals rather than evaluating their ethical stance, research methods and value for the organisation.

. It is clear that the custodians tried to improve the return on the SAPS' investment with their recovering strategies, but more thought should have gone into the design and planning of the research module. Billett and Choy (2013:271) explain that the SAPS can consider at least five pedagogical practices to improve the quality of workplace learning:

- First, learners need to be orientated, before entering the workplace, on the requirements of effectively engaging in the workplace. They should be made aware of what they have to learn and the means of achieving that learning. In this regard, it would be wise for trainers to meet with EDLP learners before they report for the intervention in Paarl so that they can explain what is expected of them;
- Second, learners need to possess certain capacities to undertake the activities that could reasonably be expected of them to master, which in the EDLP learners' case may result in a very low number of qualifying learners. In addition, the police culture dictates that senior police officers must attend the EDLP, as the learning programme is rank-based and compulsory for them. Thus, this practice might not go off well in SAPS;
- Third, the expectations about the purpose of support during the learning process and the roles and responsibilities of other parties in the workplace should be clarified. This implies that the commanders of the learners should also attend some form of preparatory session to brief them on their role;

- Fourth, learners, being dependent and interdependent in the workplace, should understand their own roles and responsibilities, as their learning is self-directed. Their observations, engagements and interaction should contribute to their learning. Learners will have to become aware of the role that personal agency, groups, culture and boundaries can play in the success of their learning; and
- Fifth, learners need to be prepared for circumstances where their encounters are unpleasant or confrontational in order for them to manage these situations for their own well-being and sense of self (Billet & Choy 2013:272).

Divergence was also found in the developmental efforts of the Division: HRD to assist the trainers of the SAPS Academy become conversant with research methodology and to increase the research trainer pool. The trainers of the SAPS Academy were afforded several opportunities to attend courses and undertake formal education to improve their research skills, but they had never actively engaged in the teaching of research. In addition, the Academy has not held the trainers accountable for their failure to apply the skills they acquired in their development courses. Billett and Choy (2013:271) posit that when workplaces are too confrontational and challenging, or unsupportive of workplace learners, these learners fail to complete their development. Providing learning experiences is not enough. Learners should be able to gain adequate experience and support in the workplace and be given access to opportunities to integrate these with their educational programmes. From this position, the SAPS Academy has to ensure that the trainers who attended research courses engage actively in the teaching of research. The current efforts to develop additional research trainers did not benefit the EDLP learners at all. They still had to rely on the existing two overloaded research trainers who had to cope with an obvious lack of support from the SAPS Academy.

6.2.3.2 Negotiating learning in the disconnect between research expectations and trainer capacity

One might consider the expectations of the research module unrealistic and unfair for both learners and trainers and note the disjuncture between expectations and trainer capacity. However, when individuals negotiate learning and exercise personal agency, they can construct meaning from such conditions. The disjuncture is evident in several aspects of the research module.

Firstly, when one considers all the activities involved in research and the increasing pressure to deliver good quality research products, one would expect to find a larger trainer pool to present the module research. In reality, one finds that the bulk of the work was executed by two trainers and two administration clerks of which one is supposed to deal only with learner support issues. The trainers were overloaded with the volume of research projects (P1:173). The supervision of the learners in the workplace made the workload even worse as the learners' chain of command was often not acquainted with the subject itself and thus did not allow for structured learning in the workplace (P1:181). The trainers efforts could only yield good results if the learners committed to the learning and if they were afforded the time to do their research in the workplace.

Moreover, in the absence of support in the workplace, it seemed as if the learning experience of the EDLP research learners depended greatly on the quality of the research supervision provided by the trainers. This was not necessarily the case, as learning is a process in which the individual engages alone. However, one has to consider the mediating factors of situation, society and culture for learning in the workplace. These factors are central to understanding, learning and advancing the knowledge and skills needed for work (Billett & Choy 2013:270). For Billett and Choy (2013:270), two concepts that explain the relation between personal and social contributions to learning are relevant. These are the 'practice of communities' and 'bounded agency'. The concept of 'practice of communities' refers to practices of working communities where people's participation and the enactment of these practices are salient. This concept is less relevant to the EDLP research learners because they were alone in the workplace when they executed their research projects.

While the candidates' learning might be situated in a specific context and culture of their respective police environments, there is no evidence that suggests any form of community at work that supports the practice of research as a problem-solving mechanism. The aspect of 'bounded agency' refers to the means by which individuals use discretion to negotiate between what they are able to do and how they exercise agency in engaging with those boundaries as explained by Billett and Choy (2013:270). These means would be relevant if one views the boundary as being personally determined. Crossing such set boundaries, both personal and organisational, promotes the inevitability of learning. The concept of boundaries and boundary crossing in learning therefore not only refers to institutional facts but also to

personal facts. To this end, the argument arose that the research learners were crossing mental boundaries when they left the SAPS Academy with its academic inclination to work on their research in a work-orientated setting. Those that persisted in conducting their research might, therefore, have learned to apply research methods, learned to think critically about problems, and learned to construct knowledge amidst the influence of the situation, society and culture.

Secondly, the research trainers did not have any control over who was nominated to attend the EDLP. While workplaces could dictate what their employees should be able to do and what skills they should have in addition to those needed to perform the job that they have been hired to do (Billett & Choy 2013:266), they should refrain from skills development approaches where one size fits all (Pillay et al. 2003:437). Instead, the needs of older workers who regard development as taking formal courses and the needs of younger workers who should be taken cognisance of through observing and experiencing. Some learners who attended the programme had the skills and the ability to do the EDLP while others just did not have the skills or abilities to complete the research part of the program successfully (P5:109). The trainers' ability to teach research was challenged by most learners' lack of will to learn research. Instead of taking ownership for their development, they waited to be told what to write in their proposals. The trainers argued that they could force the learners to take ownership by prompting them to readdress the concerns in the proposal.

For some learners it helped, but most were unable to address the matter. They relied on the trainers to correct the proposals for them. By not having their work corrected for them, learners were able to think critically about the real problem in the workplace. They also learned to solve the problem themselves, which is a useful skill for solving poorly defined problems in the workplace. This approach of the trainers was in line with the general principles theory of Goldstein (1986 in Yamnill & McLean 2001:201) who proposed that learners equipped with general knowhow or principles, will be able to solve work problems by applying these in the workplace. In this view, educators do not necessarily have to build too many corresponding elements of the job into the learning intervention. Instead, much of the learning transference is left for the learner to construct during the process of problem solving in the workplace.

Surprisingly, the trainers did correct some learners' proposals themselves to protect their own image, because they were blamed by the HRD Research Committee for the learners' inability to draft proper research proposals. The trainers' experience was not unique though. Hutchins (2013:22) moved between roles during her teaching of aspiring researchers. At first, she provided technical feedback in terms of the quality and presentation of the class assignments and draft articles intended for publication. As the learners progressed and received more feedback and guidance from her, she noticed that her students became anxious about the feedback. Hutchins then changed her role from coach and advisor to 'ghost writer' who started correcting some of the students' work for them. This change in role assisted her to regain their confidence.

Thirdly, the trainers were overwhelmed by their responsibilities. Academy documents indicate the extent of the trainers' responsibilities at the SAPS Academy while teaching and supervising research. One document reflected P4 being involved in the assessment of more than a hundred research reports. These reports have due dates, cut-off dates, assessment periods and reporting periods scheduled. As part of the research team, P4 was therefore booked for research assessments for the whole year. She did not have the 'luxury' of being involved with anything else that the Academy had to offer (Motivation for best trainer 2011-11-08). Being involved in several simultaneous research activities at work is an indication that a worker's specific competence has been expanded to the stage where he or she can construct new knowledge in the workplace. While the trainers might not regard themselves as learners during the research teaching, they really are workplace learners who construct new learning from dealing with the challenges imposed on them by the research module that left the bulk of the research teaching undefined and undeveloped.

Learning to teach research was a major part of the trainers' first encounter with the EDLP research module. Casey (2013:48) posits that competence is a state of affairs whereas participation implies an activity that puts the learner in the centre of practicing what was learned. Moreover, Casey (2013:48) argues that learning in the workplace does not happen in isolation simply because the term itself implies that the learner is a party to the learning process. Participation, according to Lave and Wenger (1991:51), is based on negotiations and renegotiations of meaning in the world. It is a process in which understanding and experience are in constant interaction. While the focus of the research module was on teaching senior police officers, much of the learning was constructed by the trainers during

their interaction with these learners and the responses they received for their efforts. The trainers, therefore, were also learning while they were engaged in their responsibilities of guiding learners towards drafting research proposals, encouraging learners to read up on their topics, developing understanding of research methodology and academic writing, teaching computer skills, giving after-hour guidance and conducting one-on-one sessions to help clarify learners' understandings (EDLP Facilitator Meeting 2010-09-09).

The trainers' time to reflect on the learners' progress could not coincide with their lunch breaks because they did not have time to break for lunch. At one stage, they returned to the office for extra evening shifts for two consecutive weeks to assess research reports. This was a personal choice because the work could have been done at home, or it could have been dealt with later, since they were behind on assessments already. The workplace has therefore become a personal and negotiated location. Malloch and Cairns (2010:6) argued that work is intentional and it requires effort and purpose.

Fourthly, the trainers struggled to get assistance from their colleagues at the SAPS Academy. The capacity of research trainers was sufficient for the initial period (EDLP Work Session 2011-03-10) but the situation almost spun out of control with continuous extensions and supplementary submission opportunities. The capacity to present lectures, assist learners to develop proposals, assess proposals and research reports was not sufficient (Management meeting 2011-06-27). Some interest in assisting with the research was shown by other role players, but they could not be released from their jobs.

P3 pointed out that being involved as supervisors or assessors impacts negatively on their existing workload. However, the records indicate that other trainers had undergone development training to assist in the research module (SAPS 2012g). These trainers did not, however, get involved because they felt that they were not ready to teach research at the EDLP. However, even P8 struggled with the research teaching at first as he lacked the courage to walk into a class where it was not known whether or not there were any researchers who could expose his insecurity to the class (P8:11). However, in P1's experience, P8 was excellent in "breaking" the complex concepts into manageable chunks for understanding. It was thus a matter of learning through trial and error to build confidence and construct knowledge simultaneously.

In the end, the research teaching rested on the shoulders of one average researcher with appropriate credentials, and another trainer who was being mentored and developed into becoming a researcher. Advice on how new trainers should get involved in the research module is provided by Billett and Choy (2013:271). They explain that new entrants, while novices (in this case the researchers), should follow a structured workplace learning approach, in which experiences should be enriched (Billett & Choy 2013:271). Unfortunately, there is no guarantee that workers will learn what they have to learn, because learners construct knowledge based on what they know (cognitive experience) and what they have experienced (pre-mediate experience). Their learning is thus unpredictable (Billett 2011:13).

6.2.3.3 Informal learning through work

The most significant learning was that experienced by the trainers who had to learn to teach research, even though this was not the intention of the research module. Teaching research is not like facilitating other leadership modules of the EDLP. For P4 and P8, much of their learning had to do with finding ways of making learners realise that the learning was their own responsibility. They realised that that when EDLP learners were appointed into senior positions, they demonstrated their willingness to learn from a combination of sources (Schwartz & Human 2012), but they were reluctant to do that for research. The senior officers expected to be lectured and to write a follow-up test, because that was what they were used to. The trainers learned to develop building blocks for the research module to develop learners' research skills, but most learners expected to be spoon-fed during their drafting of research proposals.

In the early programmes, the trainers wanted all learners to master research methodology, but they later learned that not all learners could become competent in research as success depended on their readiness and willingness to learn, and not all learners demonstrated these qualities. Henceforth, the trainers accepted that learners had to do the learning themselves and that they could only help those who wanted to learn. To this end, the trainers developed checklists and other mechanisms to help learners check their own work for completeness. While learners were taught to check their own work, the trainers learned to let learners check their own work (Lesson Plan 2011-06-27). Activities that promote informal workplace learning include self-reflection in relation to the job, learning from mistakes, vision sharing, challenging group thinking, asking for feedback, experimenting, sharing knowledge

and being aware of employability (van Woerkom et al. 2002 in Lohman 2005:86). P8, on whose shoulders the research module rested, learned to seek assistance from sources outside the SAPS.

P8 elaborated on how he learned from experience, trial and error, and by seeking advice from fellow international students on his Master's degree programme. P8 explained how he struggled to get the learners to understand research methodology. In an effort to help them, P8 and P4 provided the learners with more and more reading material. From his discussions with fellow international students, P8 learned that he was actually drowning his learners with reading matter, to such an extent that they felt hopeless. The reading material was just too overwhelming for the learners. The trainers then adjusted their teaching methods to encourage self-exploration of concepts by the learners. Armson and Whiteley (2010:410; Klass & Whiteley 2003) assert that such interactive problem solving at work is indicative of workplace learning. In their efforts to retain the interest of other role players, the trainers maintained a practice of continually improving teaching material and methods. They learned that by keeping up professional appearances, they could make learners understand how important research had become for the SAPS.

When P8 became complacent with the format of research documents, P4 continued improving the appearance and practicality of the layout of documents such as the files used by research panel members. P4 explained that the trainers had to pay attention to detail because the other role players could think that they had lost interest in research or that they were not doing enough for their learners. P8 learned to trust P4's instinct regarding the perceptions that other role players might have about them. More than anything else, the trainers learned to cope with the pressure brought on by the research module by relying on each other's abilities and support.

All role players alluded to how they had to engage in further reading to broaden their understanding of research. P1 explained that his exposure and discussions with the trainers and assessors of the EDLP helped him to build knowledge of specific problems in the research module and how he could overcome them. P3 learned from the different research proposals that she had to mark for the HRD Research Committee by engaging in self-study on the concepts she came across in those proposals. She had to read up on research in general to provide feedback to the HRD Research Committee. Apart from being mentored by

P8, P4 learned informally from discussions between the learners and her colleague and supported the understanding she gained in class by later confirming it in relevant literature.

These experiences are good examples of how workplace learning was activated by activities that required the participants to handle novel and ambiguous problems (Doornbos et al. 2004 in Lohman 2005:86). Perhaps the greatest lesson for P4 was that she had to learn how to learn. While being mentored, P4 read several articles and textbooks before she would ask P8 to explain a concept. P8 ensured that P4 constructed knowledge that she could rely on and that would give her confidence to explain the concepts in class. Mentoring, like coaching, job rotation, job shadowing and workplace projects, is a structured or sanctioned effort to enable learning in the workplace (Marsick & Watkins 1997; Billett 2003). In Sambrook's (2005) argument, the idea of attending some sort of planned training intervention represents the act of learning at work. Learning in work refers to learning while working, or learning as a result of working. Activities such as observing others while they work, asking questions, solving problems, participating in discussions at work and mentoring others form part of the informal learning that takes place in work.

The active engagement in research activities led to the construction of new identities. Role players like P2, P5, P6, P7 and P8, found themselves constructing new identities. For P5, assuming another identity was something that just happened automatically when she got involved in the research panel presentations. The research panels originally consisted of the same members, each with their own specialities and unique contributions to the learning process. The research panel functioned like a community of practice in which the research reports and their presentation were assessed and evaluated in terms of their trustworthiness and usability for the organisation. The rituals and procedures within the panels were always the same and each panellist knew beforehand what they would focus on in the presentations. When P5 became involved in the research panels, she had to negotiate ways of participation and engagement. P5 challenged her police identity by becoming a critical thinker, an academic who learned to work in the police culture. For P5, learning to cope and maintain academic status in the research panels gave her the confidence to improve her feedback methods in the panel presentations.

P5 alluded to how she had to learn how to listen critically to the learners' presentations and, to put learners at ease in the presentation, to reflect on previous occasions when she had

been part of the research panels. P5 explained that the use of the assessment instruments was not a problem, but doing different things simultaneously was challenging. P5 also had to learn to overcome the effect of the police culture in the panel meetings in order to allow junior panel members to pose questions to their senior learners. Learning to play her part was not easy, because there was no guideline on how to prepare for panel presentations. P5 learned to act as chairperson of the research panels through trial and error, and by reflecting on previous experience. P5's experience attests to the methods employed by newcomers to gain access and acceptance in an existing community of practice.

Access into a community of practice rests on the newcomer's initiative and engagement with invitational qualities in the workplace. Newcomers' learning processes need to be considered in relation to their expectations and abilities, as it is these elements that determine to what extent they belong to and become successful at building relationships with established members of the community of practice. In addition, newcomers' pre-existing identities influence their construction of new professional identities so that the latter are always shaped in unique, individual ways (Blåka & Filstad 2007:72). P5's skill at debriefing the research panel eventually enabled her to act as chairperson of the panel. P4 and P8 started using P8's academic title to emphasise their professionalism as lecturers (Lesson Plan 2013-01-28). While P8 regarded himself as a researcher and an academic who could supervise research, P4 viewed herself as an academic only because she was still in the process of becoming a researcher.

Jacobs and Park (2009:141) argue that informal learning recognises that the acquisition of knowledge and skills in the work setting does not occur from organised programmes only. They assert that informal learning occurs in situations that are usually not intended for learning, especially in the workplace.

Individuals learn in the workplace because of their intellectual curiosity, self-directedness, and self-efficacy (Beckett & Hager 2002). To this end, P6 and P7 learned assume trainer roles by engaging with learning process through their own observations. P7 and P6 elaborated on how they could step outside their normal administrative roles to assist learners with their research proposals and reports. P7 explained how she could look at the format of a research proposal or a report by a learner and tell whether the standard would be acceptable to the trainers. P7 learned the correct proposal or report format by deriving them

from the marked reports that she had to scan and email to learners. When the trainers were not available to respond to learners' enquiries, P7 and P6 could use examples in older reports to respond to the learners without having to refer to the trainers. P7 and P6 also learned informally what learners normally struggle with by having short social discussions with learners during their learners' tea breaks.

P6 explained that the administrators could determine on the day of arrival which learners would suffer during the course. Their interaction with the trainers and the learners also enabled P7 and P6 to put the initial research administrative process in place. P6 was particularly conscious of the integrity of the assessment process and managed the flow of research reports in such a way that it protected the confidentiality of the learners' work. Two concepts that explain the relation between personal and social contributions to learning are the 'practice of communities' and 'bounded agency'. Like the research panels, the research team functioned as a community of practice by displaying the elements of such a community. Wenger (1998 in Dison 2007:71) explains the makeup of a community of practice as being a joint enterprise as understood and continually renegotiated by its members. Other defining features are the relationships of mutual engagement that bind the members together as a social entity, and the capabilities, such as routines and vocabulary that it produces over time³. The trainers have learned that if the panel members are not prepared, the learners were likely to be bombarded with unnecessary questions about nonessential issues in the reports.

The subject matter experts were included in the phase 3 panel presentations to assess the practical value of the studies, and if they were not included, the value of the study might be lost. The trainers realised that whether or not the police experts were part of the study, the panel still needed to be properly prepared to assess the reports. The subject experts were in a better position to assess the suitability of the learners' findings and recommendations regarding their identified workplace problems, and to evaluate the quality of the proposed implementation plans based on their research findings (SAPS Academy Paarl 2011g). P8 argued that it was possible that the value of the study might be overlooked or misinterpreted if the panel members were not prepared. For Torracco (1999) the qualified co-worker holds the expert knowledge that is distributed in the workplace. The newcomer needs to find and

³ While it was necessary to mention the fact here, the functioning of the research team as a community of practice will be discussed later in the chapter.

access this knowledge in order to learn from it and, in turn, to become one of the old-timers of the community of practice.

This argument in particular is relevant for the research panel, because it stopped functioning like a community of practice when the experts stopped participating in the panels and the experienced panellists were unable to attend the presentations. Billett (2011:12) agrees with this, but adds that affordances in social settings, such as the support offered by more experienced workers, may be welcomed by some learners, while others may find such support unhelpful. As explicated above, P5 did not get much guidance, but reflected on her own experience of such a panel to participate in the panel activities and to improve its practices. Active engagement in learning activities seems to play an equally important role in learning, both inside and outside communities of practice. In addition, Billett and Choy (2013:273) argue that there needs to be an inclusionary process where newcomer and old-timer, as mentor, enjoy equal affordances to learn and develop.

Not all learning benefitted the research module or the learners. The non-engagement of the trainers' colleagues is such an example. The trainers continually improved the module content and their teaching methods. As they were responsible for the whole module and their time was consumed by research activities, their participation in other Academy activities was limited. The other trainers in the Academy witnessed the amount of work involved with teaching research methodology and subsequently steered away from it even though they had been afforded several developmental opportunities to learn research in the form of external courses. The other trainers' awareness of the workload of the research trainers is indicative of the informal construction of tacit or unintentional knowledge as posited by Watkins and Marsick (1992:234). Informal learning is therefore constructed when trainers or role players actively engage in workplace or research activities, but learning can remain dormant if the affordances to apply learning are not utilised.

6.2.3.4 Development of research administration systems through problem-solving

The design of the module did not make provision for an administration system for the EDLP research. The course files, as prescribed by the ETD provisioning practice guidelines (2015-2017) of the SAPS, contained specific information about the finances and delegates of the

course, and general information like the course reports and communication with learners. It did not cover the personal communication between study leader and learners. Similarly, the portfolio of evidence contained specific evidence of the formative and summative assessments of EDLP modules. Information about the communication, guidance and reviewed chapters had to be filed in a separate learner research file, which did not form part of the learner's portfolio of evidence. The research administrative process developed over time according to the trainers and administrators' need to store learners' information or to account for the history of a learner's research journey.

The trainers became administrators while the training administrators got involved with training activities and learner guidance. Both trainers and administrators had one goal in mind; that was to get as many learners as possible to complete the EDLP successfully. That meant that the administrative process had to be accurate, efficient and reliable. Initially, the research team did not have this focus, but as the research module became more complicated, they worked more closely together and met frequently to discuss the status of the research model and its impact on the administrative process. The research trainers and administrators became a team that eventually functioned as a community of practice. The members of the community of practice learned to do various tasks through their interaction. While Jawitz (2009:613) argues for supportive relationships within communities of practice to enable understandings and negotiations around the distributed knowledge, the research team developed into a community of practice spontaneously. Roles were clarified in the process of becoming a community of practice.

Initially, very little thought was given to the administration of the research module so the administrative processes had to be reviewed and improved by the research team on a regular basis. Torraco (1999:256) explicates that workplace learning is characterised by solving poorly defined problems, the collectiveness of workplace expertise and the absence of boundaries between work and learning. The research team engaged in workplace learning by developing mechanisms and implementing strategies to provide administrative support for the research methodology module. All four members of the community contributed in their own way. While P8 provided knowledge of, and guidance in research methodology, P4 established a network of communication with the learners. P6 was able to address learners' enquiries and communicate feedback to them, and P7 verified and captured learners' progress.

While the research team were teaching research and addressing learner needs, they learned to rely on each other to improve the success rate of the learners. The research administration necessitated the acknowledgement of research reports, the registration of submitted reports on the database, the capturing of results, the feedback given to learners, and, if applicable, the application of penalties for late submissions (SAPS 3/1/3/1 2011-03-22). The manner of communication with learners had to be standardised in templates, and all communication, especially feedback after reviews or assessments, had to be done in writing and in such a way that learners were guided and encouraged to continue with their studies. This included the research panel feedback. Several documents such as learner feedback letters and the research logbook, were developed as the research module started to gain momentum.

The system of keeping learner records developed from an initial Excel spreadsheet to a well-developed research database, which could be verified against the Excel spreadsheet before it was captured on the official SAPS Training Administration System (TAS). The trainers also developed the database to keep informed of the learners' progress. Learners' research topics did not present challenges in the first two programmes, but later on the trainers realised that they needed to keep a record of all research topics to avoid duplication of studies. For Jawitz (2009), who focussed on the individual's habitus in the workplace, the context of new learning sites needs to be understood when creating opportunities for learning within communities of practice. Understanding the workplace and anticipating the future demands for information on the researched topics, prompted the trainers to develop a single database that could serve the purpose of both trainers and administrators.

From that moment on, the topics were registered on a newly developed EDLP research database, while hard copies of the learners' work were filed in their portfolios of evidence (EDLP trainer meeting notes 2010-09-06). However, the Training Administration System (TAS) presented numerous challenges because the system developers could not understand the different versions of the EDLP (P4:135). The different research models resulted in different course codes, which left P7 very frustrated as she had to keep the TAS up to date according to the different course codes (P7:27). The administrative personnel learned to make back-ups of the data in case their computer crashed. The experience of having to find and capture the lost data resulted in the use of a separate computer for the database, which was strictly controlled by the trainers (P7:26).

P4, P6, P7 and P8, reflected on the research activities of the learners and the research administrative activities to map out all the administrative tasks of the research module. The map, as depicted in figure 5.4 on p.232, is an indicator of the standard research and administration process and serve as training instrument to explain the process to newcomers. Li et al. (2009) argue that organisations can optimise the dissemination of knowledge by focussing on three elements of a community of practice. Firstly, the domain should create the common ground and outline the boundaries for employees to decide what is worth sharing and how to do that. Secondly, the community should create the social structure that should facilitate learning through interaction and relationships with others. Lastly, the practice should stipulate the shared repertoires of resources, which include documents, ideas, experiences, information, and ways of addressing recurring problems (Li et al. 2009).

In addition, the group needs to have a facilitator or supervisor to manage the day-to-day activities. All of the elements mentioned above were present and actively practiced by the research team. Team members were jointly responsible for the development of the research administration process. Documents were developed as the need arose and discussed in regular morning meetings where everyone had equal opportunity to contribute to the functioning of the community. Members of the community determined their own way of working and established their own sub-culture in the SAPS Academy.

6.2.3.5 The effect of police culture on learning

The SAPS controlled the research learning from the beginning to the end. The organisation wanted the learners to identify and solve workplace problems through research to ensure a return on its investment in providing development opportunities for senior police officers. To this end, the SAPS not only dictated the learning outcomes of research projects, it also controlled the conditions of work and learning by implementing the experiential learning phase in the workplace while expecting learners to also perform their normal responsibilities. It further dictated when the EDLP was over for a learner regardless of their state of competence (Schwartz & Human 20102). The custodians of the EDLP did not consider recognition of prior learning (RPL) for the learners who had already done research in formal education, because they needed learners to solve problems in the workplace while they were learning.

Hodkinson et al. (2004:21) proposed that when organisations embark on employee development, they must enhance workplace learning opportunities by creating more expansive learning environments that are in line with what learners' want, their needs and to what they respond. The learning opportunities that learners want should then be prioritised over that which management think they need should take into account power differentials and workplace inequalities. This approach was not considered by the SAPS who governed the design of the learning programme and, when doing so, disregarded, prior learning. This is typical of the police culture that dictates that police officers comply with an instruction first and complain about the unfairness when the job is done (P8). Learners responded to the organisation's instruction to do research by colluding not to roll out their research proposals. Learners stopped being learners when they left the SAPS Academy at the end of phase 1 of the EDLP. They became operational police officers who had to attend to their normal responsibilities regardless of their developmental path.

Hodkinson et al. (2004:21) asserts that the relationship between individual workers (learners), workplace and organisational practices and cultures is complex and significant. For them, "*...the learner is simultaneously part of their workplace and separate from it, and to ascribe agency to learners while the workplace provides the structure for working, is incorrect*". The EDLP learners can therefore not blame the SAPS if their respective workplaces do not support their learning, because, as senior officers, they contribute to the construction of norms and culture at their workplaces. Hodkinson et al. (2004:21) subsequently argued that individuals bring prior abilities and experience to the workplace, but their dispositions influence the nature and use of workplace learning affordances. It also shares the ways in which individuals contribute to the construction or reconstruction of workplace cultures and practices that influence learning. Finally, it shares the ways in which learning and participation in work contributes to the construction and development of learner identity (Hodkinson et al. 2004:21). Although the police culture impacts heavily on workplace learning, it merely contributes to the conditions for learning, as the learners engage with learning opportunities in terms of their existing abilities, personal agency, knowledge of the organisational culture and willingness to participate in learning affordances at work.

P1 argued that there is thinking in the SAPS that academically qualified officers cannot solve operational issues because they tend to use academic backing to explain the position of any

phenomena. In addition, the notion of classism manifests as soon as the learners start to do research (P1:210). The divide is between those that could and those that could not do research. Lower ranked research trainers were not taken seriously when they discussed the expectations of the EDLP. One learner argued that higher-ranking trainers would ensure that learning takes place in a disciplined manner. It could overcome the police culture of stereotyping members due to their ranks, but it will not necessarily ensure integrity among learners. Knowing that the trainers had no software available to scan for plagiarism in the research reports, the learners tried to take advantage by submitting work that had been copied straight from the internet. A few learners were disciplined for their blatant disregard for other's work (P8), but the organisation's level of leeway on originality issues was never determined. A strong correlation between cheating in research, or blatant plagiarism and corrupt activities in the workplace emerged when learners, who submitted heavily plagiarised reports, were arrested and suspended for corruption at their police stations a year later.

Learning research required a differed mind-set from that of the police culture, which requires police officers to act on instruction. Police officers operate in such a manner work in the system, taking instruction, until they reach a level where they have to become the decision makers and instruct their juniors to act in accordance with their decisions. However, those in a position to issue instructions, tended to delegate the reading work to juniors who were required to present an executive summary of what was read. To this end, P4 and P8 realised, during reflection, that EDLP learners were not fond of reading. Even when the trainers prompted the learners to read about concepts and research methods during their drafting of research proposals, they did not read the textbooks or additional literature. Learners subsequently submitted work without attempting to apply any referencing techniques. The majority of learners waited for the trainers to correct their work (P8). While other role players like the research panels pinned the reading and referencing problem on the method of research teaching, P5 argued that people do not learn to think for themselves in SAPS and they wait for somebody else to do the work for them. In research, one has to think and reason, and read and compare facts and concepts. Yet, according to P5, the learners were not allowed to do that in their working environment and therefore they never learnt how to think for themselves (P5:118).

One can find support for the social constructivist explanation for the inability of the EDLP learners to develop critical thinking skills as argued by P5, but then one would have to

question the leadership and management skills of the police officers who are in senior positions of the SAPS. Surely, their work, which entails developing crime combating strategies, necessitates critical thinking abilities. In addition, if employees are not able to do so, in the workplace, employees extend their knowledge much further than independently possible when they learn from more experienced colleagues or co-workers. This concept is argued in Vygotsky's Zone of Proximal Development. However, as argued by Billett and Choy (2013:268), this view emphasises the individual effort for learning as opposed to some Vygotskian views that suggest that learning is largely dependent on the learner's agency and not on a reliance on expert partners. To this end, two arguments emerge. First, that the EDLP learners can learn to think critically by learning from colleagues and second, that learners' personal agency plays a more significant role than police culture in their learning.

Organisational structures worked against each other. While the custodians of the EDLP research module insisted that the trainers improve the quality of the research output, the trainers experienced a fading interest from various role players. As time went on, the research panels were downgraded to be chaired by a Brigadier (P5:10). The EDLP also lost its prestige as an executive development programme when more and more middle managers started attending the programme. However, the learners were nominated for the programme and their inclusion in the learner cohort was approved by the custodians of the EDLP. It was not necessarily their own choice to attend the programme (P4:69). The inclusion of lower ranking officers in the executive development programmes highlighted an emerging dichotomy. One might emphasise the individual agency, or only approach workplace learning from an organisational and cultural point of view. By emphasising personal agency, one ascribes all the responsibility for learning to the learner, or to the learner and his or her supervisor. By emphasising the social and organisational approach to workplace learning, all employees will be viewed as groups of employees whose development will be similar across all members of the group. Individual differences will be marginalised as, for example, in the compulsory rank-based skills development approach to leadership development in the SAPS. The problem with SAPS' application of the social and organisational approach is that colonels do not fit the predetermined target group of the EDLP. By implication, the organisation views the required competencies of both executives and entry level senior managers as being identical, which does not account for the case due their different levels of decision making in the organisation.

When the SAPS' Language Services refused to assist EDLP learners in editing their reports, the responsibility fell on the two trainers to assure the quality of these reports (P4:52). Even if individual learners' experiential learning is successful, and has been documented or demonstrated, officers or colleagues will not necessarily use it. Moreover, the research reports may be kept in a knowledge management repository that, in reality, is merely a collection of reports. Most officers do not read a lot (P1:218) and there is currently no corporate climate that encourages employees to read and rewards researchers properly for what they have produced (P4:230). Pillay et al. (2003:437) explicate that formal courses like the EDLP are viewed by older workers as structured interventions that award learners certificates afterwards, as is practice in the SAPS. Rewarding learning is important in the workplace. The transfer climate framework theory of Rouiller & Goldstein (1993 in Yamnill & McLean 2001:203) presents two sets of workplace cues for operationalisation of transfer climate in the workplace. The first set entails situation cues such as goal cues, social cues, task cues and self-control cues that can be used to assess opportunities in the workplace where new learning can be applied. The second set, labelled consequence cues represent the feedback that learners receive after their application of the new learning in the workplace. These cues are found in the feedback given to learners, whether it is positive, negative, a form of punishment or no feedback at all.

6.2.3.6 Developing critical thinking skills

The learners were, in general, not able to think critically about their research problems because they were not able to read critically, if they read at all (P4, P8). The trainers encouraged the learners to think critically about their topic, to approach it from different angles and to follow the literary discourses about the topic. Such guidance, however, usually had the opposite effect on learners and many of them quit their studies after such feedback. P5 posits that learners need to use critical thinking skills when they reach conclusions, make recommendations and develop implementation plans for their proposed solutions. For P5, the research panels taught her to listen critically because the assessment feedback of the learner would be based on what he or she said. Without such critical thinking skills, one cannot debate an issue with a learner (P5).

The trainers explained that when senior police officers are doing the EDLP, they only approach their colleagues or fellow learners for assistance, especially when they are doing

their fieldwork in the workplace. P8 explains that the senior police officers feel embarrassed to ask the trainers who are their junior in rank, because it would expose their lack of understanding. Learners who struggled to understand the research module easily blamed their childhood schooling system that had prevented them from learning to understand research. For P8, this was just a way of avoiding further questions about reading and commitment to learn, because the work that the learners were doing in the workplace demanded much more thinking than research was demanding of them.

Gosling and Moon (2001 in CHE 2011:19) provide a model for effective workplace learning implementation, which SAPS can consider when the EDLP is revised. It holds that workplace learning opportunities must provide for concrete experiences in which learners actively take part. This requires more engagement from the learner than just observing activity at work. Learners must be exposed to reflective observation, which requires them to experience and observe particular elements of the activity, and to reflect on them later to consider what actually happened during the process. Learners must go through a process of abstract conceptualisation in which they use inductive reasoning to analyse and explain their observations and formulate theories about their conclusions. In the final step, learners should be allowed to actively experiment with what they have learned by testing their theories or conceptions of new learning in the workplace.

6.2.4 Which lessons have been learnt teaching Research Methodology?

Participants shared rich data that enabled the identification of several themes within the constructivist and socio-cultural perspectives of workplace learning.

6.2.4.1 Misconceptions and unrealistic expectations

There is a general misconception of research in the SAPS. The majority of senior police officers think of research as something that is only done in academic circles, and fail to understand that it is a mechanism to explore phenomena in the workplace. Billett (2002b:56) asserts that the needs of workplaces and educational institutions has evolved over time due to particular cultural needs. For the SAPS, this means that the organisation has to learn to fight crime in ways other than simply engaging in traditional formal education. The need within SAPS to develop research skills among senior police officers stems from the realisation that

the organisation has vast amounts of knowledge and experience within the organisation into which to tap into and to learn. The SAPS has therefore realised that it has become a learning organisation. It can learn from its own experience to anticipate change and to prepare for such change. Instead of just being a workplace, SAPS has become a place for learning.

The term workplace has gained a different interpretation than that of being an unchanging or stagnant space or location, to a space that is evolving, and where learning takes place. While the EDLP custodians valued research as the future problem-solving mechanism to explore and solve workplace problems, research skills were not seen as relevant to their executive development by senior police officers who attend the EDLP. However, the first research module only served as an introductory module, which attests to the fact that research was meant to be phased into the organisation over time. Unfortunately, the level of teaching and expectations soon escalated when the custodians wanted to secure returns for the money spent on teaching research. The new expectations were perceived as unrealistic by both trainers and learners. The less experienced learners could not cope with the content of the module or the duration of time in which it was presented. Learners were so overwhelmed by the content that they did not move further than just trying to cope with writing a proposal (P2:78).

It was also clear that senior police officers had trouble in participating in debates on topics that required learners to critically read literature and argue based on what they had read. Learners could not develop these critical skills and found it hard to formulate research problems, thus they showed very little commitment to persevering with understanding research. Nevertheless, the custodians of the EDLP did not adequately consider the trainers' capacity or the learners' abilities when the decision was taken that learners need to develop plans to implement their research findings in the workplace. Vaughn (2008:14) cautions that the structure of the workplace, its goals, immediate workplace conditions and workers should be considered before embarking on a specific workplace learning pedagogy. Vaughn (2008:14) argues that the socio-cognitive demands like task complexity and the skills needed to perform such tasks must be considered.

In the EDLP learners' case, the research module presented several challenges in terms of comprehension of the context of workplace problems and the development of the critical skills needed to define the problem as well as to engage with it and to interpret the findings.

Learners generally found it hard to apply basic research skills. Prior knowledge of this challenge to learning could have been taken into account during the planning of the research module. Another consideration, which entails socio-interactional requirements, focuses on whether or not there is a need to work and interact in teams during learning. EDLP learners were exposed to both individual learning and group interaction while they were at the SAPS Academy, but they had to learn on their own when they returned to their workplaces. The importance of the job, which centres on the impact of a task on the larger work processes, the organisation, and the prestige it bestows onto the worker, has to be considered.

To this end, when learners engaged in research, their colleagues at work were confrontational and unhelpful. Although research was not regarded as an important skill in the organisation, it still caused divide and classism between those that could do research and those who could not. Participants experienced remarks like ‘...the course made you clever’ (P12) or ‘...now you question everything’ (P10). Nevertheless, the impact of research and its contribution to the organisation was considered valuable enough to be included in the EDLP. Finally, the access characteristics of knowledge, i.e. where the knowledge is located, what the individual needs to understand, and whether or not that individual is permitted to have access to it, deserves attention (Vaughn 2008:14).

Almost half the learners did not have adequate computer skills to conduct literature searches, type their work or even store their work on computer, let alone master the essence of research projects in the field. Although their attitudes towards research was negative, the learners could not really be blamed for their failure to do research when the SAPS expected them to grasp in two to five days of lecturing what most adults learn in three to five years. Learners could not understand the research terminology when they were doing fieldwork and did not make the effort to understand it (Schwartz & Human 2012). Part of the reason is that the workplace did not allow time for the learners to prepare for fieldwork before they engaged in data collection.

Reading and writing reports were supposed to be conducted in learners’ private time, but when other life roles kicked in, they became the lowest priority. This phenomenon partly addresses Torraco’s (1999:256) questions about the boundaries between work and learning. EDLP learners, many of whom work operationally in the field, had trouble doing research while they were at work. Participants explained that they had to do their work and research

projects after hours when they were at home. For them, as senior police officers, there were no clear boundaries between work and learning. Learning in the workplace was transferred into the homes of learners when it could not be done during office or working hours (Järvensivu & Koski 2012). Many learners could not manage learning and working at both work and home and subsequently failed to submit research reports (P4:123). Antila (2005, in Järvensivu & Koski 2012) confirms that the borders of work are blurring and that working life extends to voluntary overtime at home. Working hours are not clearly separated from free time anymore. Senior police officers who attend the EDLP discovered that learning that is commissioned by their employer, would necessarily spill into their free time when they take their work home (Järvensivu & Koski 2012).

6.2.4.2 Developing coping mechanisms

The trainers, drawing from their own experiences with research during tertiary studies, realised that research could be a lonely journey in the absence of good communication between researcher and study leader. To this end, the trainers devised ways of strengthening the emotional intelligence of learners in case they did not communicate as regularly as anticipated during their research projects. It is obvious that the trainers applied reflective thinking to solve learning obstacles and anticipated that they would have to deal with similar problems in future. Conlan et al. (2003) explains that the trainers' knowledge resulted from experiential learning and is the result of generating their own understanding of what happened until, by using reflective reasoning, they finally uncovered the real meaning of the event being studied. Such learning builds on the experience of the individuals' real lives and allows for transfer of knowledge and skills, especially when the need for learning is internal (Conlan et al. 2003). The authors argue that experiential learning is a very effective and holistic adult learning approach as it draws on the cognitive, emotional and physical aspects of the adult learner.

The trainers learned what their previous experiences with research meant and could utilise such knowledge to help learners understand that research is difficult for everyone and that the feedback to the learner is not intended to criticise the individual. The trainers subsequently exposed learners to escalating levels of feedback in their formative assessments that required learners to reflect and deal with problems that had arisen. This was part of reinforcement required to cope with feedback of the reviewed chapters of their reports (notes

for EDLP trainers meeting 2010-09-06). Regardless of this effort, learners still struggled to regain momentum after the trainers' feedback, both during the development of their proposals and during the writing of the reports. The trainers had to deal with telephone conversations with crying and swearing learners who could not emotionally deal with their report reviews. The trainers posited that very few senior police officers had the emotional intelligence to deal with personal setbacks such as experiencing failure during research. As a result, they prepared learners for an unsympathetic workplace when the time came to conduct their fieldwork there. Colleagues in the workplace do not necessarily want researchers - who are also competition for future promotions - to finish their studies (P4:225). Learners had to be encouraged constantly. The research results indicate that those learners who communicated with trainers regularly were generally the ones that completed their studies (P5:85).

Learners tried to deal with research in their own ways. The initial lack of endeavour to understand research was regarded as a manifestation of the learners' fear of research. Learners who left the SAPS Academy without an approved research proposal never recovered and did not submit anything thereafter. Some learners conspired, before they left the SAPS Academy, not to do the research. This is indicative of the learners' resistance to the organisation's culture of using instruction to get things done. The learners' reaction highlighted their personal agendas and responses to learning affordances. Learners therefore do not automatically become learners. They exercise agentic intent in their interactions with the social environment - and with others - to learn (Bandura 2001 in Malloch & Cairns 2010:10). Learning and the extent to which individuals commit themselves to learning is thus a conscious decision based on subjective considerations.

The data revealed that those learners who did complete their research did so without concern for the results of the assessment, just to avoid paying back the course costs. The learners learned to follow the research process and submit a written product that could more or less resemble a research report. This is common, as many workers tend to acquire technical skills required by a task by blindly following the procedures and not learning for the sake of improving knowledge. Such learning becomes a means to an end, such as obtaining a certificate, getting a new job or proving readiness for higher positions (Pillay et al. 2003:437). However, this concept is in contrast with emergent new work practices in which learners learn to develop competence and skills that are transferrable into new environments. Learners also tried to cope with time constraints and the SAPS' expectation of better quality reports. Some

learners completed their studies because they expected a promotion, others feared embarrassment if they did not complete the study, and a larger group succumbed to the pressure of study leader enquiries and their commanders' and Head Office threats of compelling them to repay the course fees (Schwartz & Human 2012).

The fact that individuals exercise more control over their learning because of personal agency and the construction of their professional identities (Hodkinson et al. 2004:21), could signal warnings to the SAPS management when learners develop undesirable skills in the workplace (Billett 1995:25). Billett (1995:25) explicates that when workers construct undesirable knowledge, it could be due to a pervasive unhealthy culture in that workplace. Employees may develop inappropriate skills if such skills are present in the culture and practice of their workplace. Evidence of such undesirable behaviour emerged from the data. The seemingly unrealistic expectation of the organisation prompted learners to revert to extreme and unethical behaviour during their studies. A few learners tried to submit old research reports from their tertiary qualifications (P4:77). Other learners, who had been exposed to research in the past or could access articles on the internet, simply copied large parts of the text and passed that on as their own work (P8:19).

Trainers tried to cope with their workload by motivating each other during their coffee breaks, which also served as an opportunity to reflect on their progress. Both trainers and P7 shared their habit of reflecting on work problems at home so as to plan for the next day and save time for other tasks when at work. They withdrew from the SAPS Academy activities such as sports days, Academy meetings and parades. P8 expressed his disappointment for having not being recognised by the Academy. He vented his emotions in letters addressed to the commander, although these letters were never sent. They were a tool used to reflect upon his own position, emotions and to get clarity about his work. P8 has since scaled down his involvement in research.

6.2.4.3 Reflecting practices for teaching and learning

Reflection was an integral part of the various activities of the design and teaching of the research methodology module of the EDLP. The design of the EDLP research module could have provided for a better implementation strategy to implement research methodology as a problem-solving mechanism. Such a strategy should have taken the learner on a managed

journey through research methodology instead of overwhelming him/her (P2:84). The activities in the research process were developed by the trainers as a response to regular mentoring meetings during which they reflected on the research module. Many of these meetings involved the use of a whiteboard to notate the ideas that resulted from their brainstorming. These writings usually took the form of mind maps and illustrations of relationships between activities in the research-teaching model. Boud et al. (1985:19) explain that reflection was '...the intermediate' that allows the trainers to generate meaning from experience. The authors explicate that three major processes are at play during the reflective process, and these are based on the trainers' own experience, including their thoughts, feelings and actions before and after their teaching experience. These reflection processes represent a return to the experience, the re-attending to feelings and the re-evaluation of the experience.

These processes are evident in the training team's reflection on the research module. After each meeting between the research trainers and the administrators, P8 made notes and reflected on the impact of their suggested improvements on the research and administrative processes. P8 and P4 developed a process of monitoring their growth in the development of a 'good' research module (re-attending to feelings), while at the same time, determining what still needed to be done (re-evaluating the experience) to improve the research process. P5 reflected extensively on what she had experienced in the EDLP to know what to look for in the research panel assessments. The trainers could not change research module content, but they could influence the teaching model used to present research to senior police officers.

However, for learning to take place, there has to be a conscious evaluation of an experience with the intent to utilise such enlightenment in future situations Knipfer et al. (2013:38). The trainers' development of a schematic representation of the research activities served as a research model to reflect and identify problem areas in that model. The knowledge constructions were then used by the trainers to suggest ways of improving the teaching model by reflecting on their experiences and the feedback of learners. The trainers' teaching experience formed the basis of the model, as well as the administrators' encounters with learners, their administrative tasks and the feedback from learners. Reflection based on the other role players' experiences is possible. Knipfer et al. (2013:30) explicate that a learner's reflection might also be based on relevant peers or colleagues' experience when the learner makes sense of the experience in terms of his or her own practice at work. This reflective

process was also used to develop a research administration map as illustrated in Figure 5.4 (p.232), to capture the research activities and to identify gaps in the research administration process. These reflection-based instruments were used at EDLP trainer meetings to keep the custodians and fellow trainers informed of what was being done in the research module, how it was done and what the next steps would be. This reflection helped the other trainers to understand the impact of the research module on the other modules of the EDLP.

P8 used reflection to determine the effectiveness of his initial research training session. This reflection helped him to develop new training methods for the research module. The practice of reflecting on research activities continued after each course with the intention of establishing progress and shortcomings so as to raise the standard of the programme and find better ways of delivery that benefitted the learners (P4:82). When the trainers discovered the value of reflection in their own learning, they expanded its use to their teaching of the research module. Although the reflection process was used in class to help learners to monitor their own progress (P4:98), learning from reflection is not an automatic process. The success of incorporating reflection into teaching activities depends on the learners' ability to draw conclusions from their thoughts when they reflect on their experience. The ability to discern and reach conclusions is critical for learning to take place. There also has to be a certain willingness and readiness to reflect on practices to learn from and to share the learning (Knipfer et al. 2013:42).

In order to facilitate the reflection process, the trainers adjusted their teaching model to incorporate four one-on-one sessions with the learners during which learners could explain their studies and reflect on their progress towards their proposals (P8:16). The learners therefore had to set goals, think and plan their tasks, explore research concepts, make decisions and draft their proposals. They could then reflect on their processes of developing the research proposals and review the entire experience. To this end, learning takes place consequent to the reflection on their own experience of developing a research proposal - rather than being lectured on it (Conlan et al. 2003). Therefore, in workplaces, experiential learning results from generating one's own understanding of what happened, drawing from reflective reasoning and uncovering the real meaning of that event, happening or activity.

Reflective thoughts were used to summarise learner activities in the EDLP research module as a way of informing the HRD Research Committee of the trainers and learners' efforts to

develop research proposals. The HRD Research Committee had to take cognisance of the fact that the learners were novice researchers who needed guidance rather than criticism. In response, the HRD Research Committee suggested amendments to proposals that required learners to reflect on what they had proposed and to consider other options. The research proposals presented a learning curve for both learners and assessors who needed to reflect on their own roles in the training of the learners.

By regularly reflecting on the research progress when the administrators and other support personnel were present, the trainers established good cooperation in the research team. The role players developed an understanding of each other's way of operating, to such an extent that trainers could discuss their teaching approach while the administrators could clarify their understanding of the research module. P7 explained that she had never done research before, but she realised that she had gained a good idea of how to do it (P7:14). The administrators explained that they had learned from previous courses how to identify and support those learners who struggled with the whole course, but especially with the research component. Such learning from reflection depends on the degree to which individuals (in this case the EDLP learners) share their learning with others (the administration clerks), but contextual factors of the workplace such as the organisational climate, interpersonal relationships, and characteristics of the work itself, may influence the individual's willingness and opportunity to share their learning (Eraut 2004; Billett 2001b). The organisational climate at the Executive Centre was healthy and constructive. Role players trusted each other and they worked as a community of practice, which stimulated the sharing of experiences from which other parties could reflect on and learn.

In summary, collaborative reflection in teams advances workplace learning. The training team reflected on challenges collaboratively through sharing their individual experiences and learning from such reflections to face new challenges in the learning programme. Reflection therefore, as Kayes & Burnett (2006:10 in Knipfer et al. 2013:42) argue, has a social element when dialogue for reflection takes place in teams. Such reflection stimulated the uncovering of alternative ways of addressing the new challenges in the research module. Prior to this, these challenges had been beyond the individual's, especially the administration clerks', perception of how to solve such problems. The team learned from their shared reflectivity when they constructed unique contextual knowledge, such as how a person in a junior position

in a militaristic rank conscious environment could communicate with and teach senior police officers.

6.2.4.4 Affordances and active participation

Individuals learn when they actively take part in the learning opportunity. Affordances to learning opportunities do not necessarily result in learning even when the individual attends the afforded development intervention. However, it emerged from the data that individuals exercise agency when they decide whether to accept invitations to participate in learning activities that reside in groups or communities.

Learning therefore needs a wilful and deliberate effort to engage with the learning opportunity to construct new knowledge. Being declared competent at the end of a structured learning programme is not enough to secure solid grounding of new knowledge. The new knowledge has to be carried into the workplace and practiced in real work situations to internalise the newly developed knowledge and skills. The learner therefore has to be a participant in the learning process. From a socio-constructivist view, the learning will take place in a social work setting, where interaction with others forms a necessary part of the learning exercise. The learning can thus only take place if the learner is afforded the opportunity to apply the new skills in the workplace, and is supported while so doing. Both P3 and P4 attended formal or structured programmes to improve their research knowledge. They also engaged with the literature afterwards to embed that knowledge in their practice.

P3, a member of the HRD Research Committee, attended short courses to gain a better understanding of research. This participant also made a concerted effort to read more on the internet about research methodology and, when she considered learners' proposals, about certain designs and methods. P3 did not work in a community of practice, but participated in a social setting where interaction with colleagues regarding research was inevitable. P4 participated in two organisational research studies before getting involved with the EDLP research. She was also afforded an opportunity to join other trainers attending a short course on research that was offered by a university. She was declared competent at the end of the course but would not deliver a presentation in the research module due to a lack of confidence in her research knowledge and skills. The participant acknowledged this knowledge gap and subjected herself to mentoring over time. P4 was willing to learn and got involved with the

research module at every level. She attended the first lectures of the research module and supported her new knowledge by reading research literature and discussing her understanding of concepts with P8 on regular basis.

P8 played an extremely important role as the qualified co-worker in P4's development. For Torracco (1999) the qualified co-worker holds the expert knowledge that is distributed in the workplace, which the newcomer needs to find and access in order to learn and become one of the 'old-timers' that are part of the community of practice. P3 and P4 showed commitment to engage with learning opportunities by getting involved and taking the course competence into the workplace for grounding the skills. P4 has subsequently become an experienced 'old-timer'. In another example, P5 explained that research did not make sense to her initially, but once she made an effort to understand it, everything became clearer. P5 completed her EDLP research project, which gave her enough grounding for her Master's Degree. P5 realised that her effort to read about research methods and concepts during the EDLP paid off. She explained that she still uses that knowledge and skill when she reads others' reports in the workplace, or when she is drafting her own. Now that she has learned to read articles and other literature, she understands her workplace so much better. P5 also transferred her experience of the EDLP research panels to SDIP panel presentations, where she improved the debriefing of panellists after each presentation.

In terms of unstructured informal learning, the data revealed that when individuals work together in a community of practice, it is very difficult for other learners to join the community. Much of this difficulty stems from the way in which the invitational encounters are presented or extended, although personal agency influences the individual's decision to accept such invitations. Warhurst (2006:114) explicates that membership of a community is an intrinsic condition for learning and that belonging to such a community results in participation in its practices at work. He also mentions how some participants in his study expressed feelings of 'being isolated'. In other words, there was distance between the individual (learner), the social group (colleagues) and work (practice) which resulted in limited learning and development.

P7's experience testifies to positive engagement with learning affordances when P7 was transferred to the Executive Centre. P6 took her under her wing to explain the whole process before they got into the different steps. Once she had gained an overview, P6 explained every

step in detail. P7 gradually became part of the community of practice, i.e. the research team. Through her involvement in the research module and her interaction with trainers and learners, P7 learned enough to be able to assist learners when they had enquiries or even while they were attending the programme at the Academy. P7 engaged with learning opportunities that enabled her to step outside her administrative role into the trainer role to assist learners who struggled with their research proposals. She even worked over weekends to assist learners who were not computer literate. P7 explained that research does not tire the body, but it occupies the mind day and night. P7 has gained a good idea of the research process while handling the research administration.

From a socio-cultural perspective, new learning will develop when the culture, rules, and social interaction between members of the community of practice do not obstruct the invitational qualities of the community. Newcomers need to discern the invitational opportunities, evaluate the qualities of the culture and workings of the community of practice and exercise judgement over the benefit of accepting such invitation to join. Learning takes place when the newcomer engages in the activities of the community with the other members. Automatic inclusion in such community of practice does not automatically result in learning, as the individual will still exercise agency before taking part in the community practice.

The research team experienced the hesitation and unwillingness of the receptionists at the Executive Centre to get involved with research activities. The receptionists in the SAPS Academy were rotated after six months to work at all three campuses. The receptionists therefore did not want to commit to new workplace activities. Perhaps this is indicative of distance between the employee or learner and the workplace or space due to the emotional disconnects between the employee and the place of learning as Warhurst (2006:115) argued. P6 and P7 had different attitudes towards the workplace. Warhurst's (2006:115) study pointed out those employees who felt part of something, such as the research team, expressed their belongingness to the group and place. Such employees made a psychological connection with the workplace, as explained by Malloch and Cairns (2010:7). The receptionists' refusal to accept the invitations to become part of the research team could have been because they did not feel part of the team, or they did not connect with the workplace due to their frequent rotation. Their decisions prevented them from engaging with learning opportunities.

Not everyone who is afforded the opportunity to learn really engages with the practice. The learners found themselves in a workplace where no communities of practice had formed. It appears that the majority of learners struggled to engage in research, whilst others did not commit to learning research methodology at all. While the trainers continuously offered their assistance, both at the Academy and when learners were at their own workplaces, the bulk of the learners did not communicate with them. Those who did not liaise with the trainers did not submit their research reports. P5 asserted that research demands commitment from the learner. One needs to work on it every day, but learners thought research would be easy. Learner research files also indicated that learners did not commit to research. Many learners did not affect the necessary changes to their reports when they received their feedback from the study leaders, either when they had requested guidance or when their reports had been assessed. Learners, who engaged with the research literature, asked more questions in class, requested regular feedback and guidance from study leaders and generally did better in their research projects. The matter of readiness to learn, willingness to learn and engagement to learn rested on learner agency.

6.2.4.5 Communities of practice and newcomers

In essence, there were three small groups of actors teaching research. The first group was the research trainers and administrators who were involved with the learners from day one until the certification of the successful learners. The second group was the HRD Research Committee who dealt with the approval of research topics and proposals, and the third group constituted the research panels who consisted of three permanent members and one or two ad hoc members. Each of these three groups had its own way of working and learning to deal with research. Billett (2004:119) asserts that the thinking and acting of individuals who form part of these three groups are influenced by the practices in their workplaces. Most of what they learn in terms of how to deal with research in the workplace originates from informal learning experiences.

Group one: Teaching and administration. The participants, being the two trainers (P4 & P8) and two administrative clerks (P6 & P7) who worked at the Executive Centre, where the research module was presented, functioned as the research team. As alluded to in the previous sections, this research team operated as a community of practice. The trainers had to ensure that everyone, including the administrative personnel, were informed of changes in

the research module (changes to the specific teaching model) and how these changes would influence the way they would work going forward, including new ways that the results would be recorded and processed. The research team's adaptation to new processes indicates that their learning was relational (Lave & Wenger 1991; Wenger 1998c), as it changed over time and with the inception of every new research model. Regular meetings and open communication drew the actors in the setting together, to such extent that they developed their own way of doing things and their own processes and rules that were different to that of the main campus. A sub-culture, which was closer to an academic setting, developed so strongly that it challenged the militaristic culture practiced at the main campus. This is a strong indication that the development of a community of practice indeed creates an informal collective, defined by its members in their shared ways of working, their rules and ways of responding to research challenges resulting from their interpretation of events (Gherardi & Nikolini 2002).

Vygotsky's Zone of Proximal Development, explains that employees extend their knowledge much further than independently possible when they learn from more experienced colleagues in the social setting where the work is done (Billett & Choy 2013:268). The data revealed several examples of how the participants extended their own knowledge by learning from another team member. While P8 was responsible for developing P4 as researcher and research teacher, P4 assumed the mentor role for the administration clerks in terms of the administrative processes. The combination of strengths of the trainers made them a very strong team. Whereas P8 had the technical expertise, he was also a strategist who anticipated the future of the research module.

It is noteworthy to indicate that P4 had the networking skills to negotiate resources and establish good rapport with the learners and other role players. Together, they established a learning environment in which everyone could be part of the learning process. Yet, Vygotskian views suggest that learning is largely dependent on the learner's agency and not on a reliance on expert partners (Billett & Choy 2013:268). The trainers' willingness to learn from each other enabled their construction of knowledge. Learning – and what is learnt - is acquired through the individual's participation in activities, his or her intentional engagement in available learning opportunities; the guidance afforded him or her in the workplace and the invitational qualities (Billett 2001b). The conditions at the Executive Centre created the perfect context for individual learning.

There were several examples of team members participating together in order to help learners through their research modules. Participants explained how they participated willingly, even in their private time, and how they were guided by the manner in which the research module was presented and how the administrative process was aligned with new developments. Everyone who worked at the Executive Centre was included in the morning meetings, reflecting on the learners' progress and the support they would need from the Academy.

The administrators learned to work within the research team and to work together as administrative clerks even though they actually worked for two different subsections. P7 was dealing with training provisioning administration and P6 worked in the learner support section, which required her to report to her own supervisor. Research was not the administrators' core responsibility, but their commitment to the work saw them engaging in training activities. In this case, the learning originated from their crossing of personal and workplace boundaries when they engaged in training activities by assisting learners. Engestrøm (2001) refers to this as the 'multi-voicedness' of learning, as the learning occurred within activity systems and across boundaries where individuals face internal and external contradictions and tensions.

P6 and P7 confronted their responsibilities as administrative clerks and considered their experience and relations with the learners as crossing into trainer roles, which enabled them to further their own understanding of research in the SAPS. For P7, who had been transferred to the Executive Centre to provide administrative support for the EDLP, working as a team was something new. She asserted that she had never seen anything similar. Personnel had meetings in the mornings, but there was no friction between members and everyone felt part of the team. Even the cleaners were part of the meeting, which is something that usually never happens (P7:24). All personnel were kept informed of new happenings at the Academy and they could give feedback on their work and share their experiences. This practice enabled individual acquisition of skills and knowledge through reflective thinking and experience (Elkjaer 2004).

All role players could say and ask anything and all contributions carried the same weight, because the trainers' point of view was that everyone was equal in that meeting, regardless of rank or salary level. P6 explained that the meetings empowered her to make contributions

or suggestions to improve the research administration process. Learning in the workplace therefore is constructed by focusing on holism, judgement, action and context, rather than on 'standard learning' (Beckett & Hager 2000). While they were not offered any lectures or specific teaching, both P6 and P7 constructed adequate knowledge of the research process and its many documents and steps, to enable them to use more initiative to assist the learners. Learning was thus collective and social in nature. The experiences of these participants illustrate how *newcomers* in the research team developed to become *old-timers* (Lave & Wenger 1991; Wenger 1998c). P6 confirmed that in the last few years, they did not have to escalate enquiries to the trainers as before, because the trainers trusted the competence of the administration personnel (P6:07).

Theories of situated learning by Lave and Wenger (1991) and communities of practice by Wenger (1998a) argue that the individual will automatically move from legitimate peripheral participation towards a central competent position by means of a learning process in the workplace (Illeris 2011:38), but Blåka and Filstad (2007:72) oppose this view. They explicate that newcomers do not automatically become part of a community of practice. For them, a newcomers' learning process needs to be considered in relation to their expectations and abilities as these elements determine to what extent they belong and build relationships with established members of the community of practice (Blåka & Filstad 2007:72).

Two scenarios indicated that newcomers' abilities, expectations and belongingness do affect their response to invitational gestures of established communities of practice. In the first scenario, the receptionists who joined the Executive Centre after its opening were automatically included in the practices of the research team. However, they did not want to get involved with the training administration function because it was not in their job description. P7 and P6 had explained how the programme functioned to these new receptionists because they already had the knowledge and the trainers were too busy with research activities. P7 had given them an induction by showing the premises and offices, and explained the participants in the research process, but to no avail (P7:21). The new personnel remained outside the team and did not attend the morning meetings. When given research related tasks to do, they made such a mess of it that the trainers asked the administrators not to involve them again. It is clear that while the receptionists, who were regarded as members of the community of practice, did not commit to the practice of the research team and did not want to learn its practices. They controlled what and when they learnt due to

personal agency. Learners exercise agentic intent in their interactions with the social environment and with others to learn, or as in this scenario, not to learn (Bandura 2001 in Malloch & Cairns 2010:10).

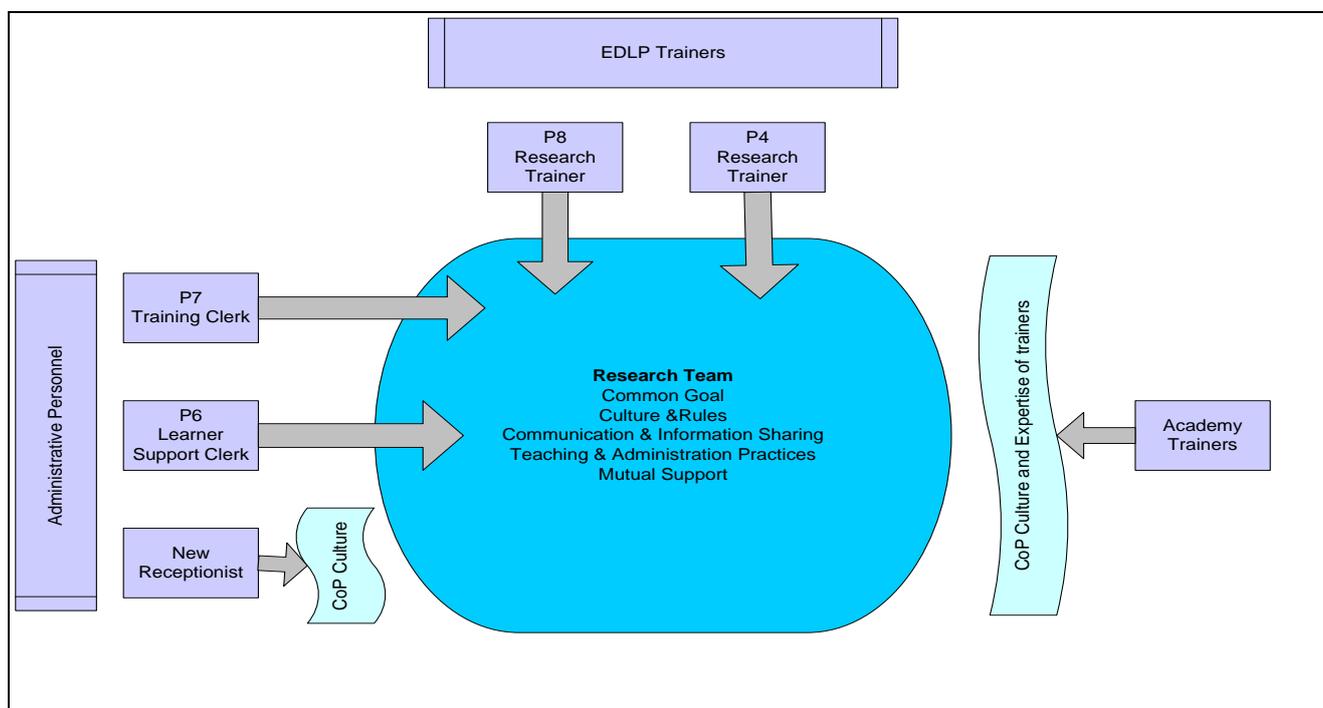
In the second scenario, P8 experienced how other trainers of the SAPS Academy, who were afforded three separate research methodology courses in a two-year period, refused to get involved with the research module of the EDLP. They claimed that P4 and P8 had made research their own domain. Every invitation to get involved with the EDLP research module was ignored. When a special workshop was organised for the Academy trainers to improve their research knowledge and confidence, the trainers did not attend P8's workshop. Later when these trainers were instructed to assess the research reports, they deliberately made such a poor effort that P4 and P8 had to assess the reports again. Malloch and Cairns (2010:6) explain this behaviour by arguing that work is intentional and that it requires effort and purpose. One can thus argue that the Academy trainers intentionally produced work of poor quality. It was clear that the Academy trainers had no intention of engaging with research, even though they were afforded the research courses.

The Academy trainers' stance reiterated Billett and Choy's (2013:268) argument that even though the trainers were afforded opportunities to learn from experienced research trainers, their workplace learning depended on their level of interest, motivation and ability to learn. The Academy trainers needed to engage with affordances to apply their research knowledge practically, but they did not. Their competence remained in the classroom, which now questions the quality of the learning programmes, the methods of teaching, and the trainers' desire to construct professional research identities. Blåka and Filstad (2007:72) explicate that newcomers' pre-existing identities influence their construction of new professional identities to such an extent that newcomers shape their respective identities in their own unique ways (Blåka & Filstad 2007:72). The Academy trainers' resistance to becoming researchers could be due to their dominant police identities, reinforced at the SAPS Academy at every opportunity.

Being declared competent at the end of a learning intervention does not equate to competence in the application of such skill in the workplace. There has to be a wilful engagement with opportunities in the workplace to practice the newly acquired knowledge and skill. Access into a community of practice rests on the newcomer's initiative and

engagement with invitational qualities in the workplace and not necessarily the other way around. The trainers struggled to accept invitations to become part of the research team. A possible reason for this is that the research team, which was functioning as a community of practice with its own ways of doing things, appeared to be exclusive in their practice. Hence the labelling of the Executive Centre, where the research team works, as an ‘old age home’ and an island on its own. Billett and Choy (2013:270) provide clarity. They explicate that the mediating factors of situation, society and culture are central to understanding, learning and advancing the knowledge and skills needed for work, even though learning is a process in which the individual engages on his or her own agency. The research team, as a community of practice, may have been the victim of its own success. In the process of negotiating its existence and ways of being and doing, it moved so far away from the known police culture of the SAPS Academy that the other trainers could not associate themselves with the training team’s academic identities and culture. The researchers’ community of practice, as illustrated in Figure 6.1, became exclusive.

Figure 6.1: Research Team as Community of Practice



Group two: HRD Research Committee. The research committee only convened when the EDLP learners’ proposals needed assessment. The assessment of proposals was an additional task for the members of the committee. While the committee members were quite

eager and available to participate in the research committee activities during the initial stages, they soon realised that the research proposals demanded more of their time than initially anticipated. In the end, the number of committee members present at the meetings declined from an initial eighteen to eight during some meetings, mostly due to official duties elsewhere. Each member had his or her own format of giving feedback. Some members made slideshow presentations, whilst others only scribbled brief notes on the proposals. Assessments were marked very strictly, with very little empathy or research guidance to the learners in general. The custodian for research, as much as he demanded better quality products and return for the organisation, came to the rescue of the learners more than once.

The HRD Research Committee members did not display the same level of engagement with the research committee activities, or share the same methods of assessments and learner feedback or guidance. They nevertheless carved out a process of dealing with the proposals which included (1) receiving them electronically from the SAPS Academy, (2) distributing them among the members, (3) convening the meeting, (4) taking the minutes and (5) disseminating the minutes. The HRD Research Committee members developed and refined their assessment practices and processes over time, but as a committee meeting very occasionally it could not establish itself as a community of practice. This was due to the lack of clear roles, culture and the overall uncertainty about the purpose of the EDLP research. The fact that the committee functioned as a group of assessors is evident in the degree of guidance and empathy shown to the learners' development.

An overall unifying goal or purpose was lacking in the HRD Research Committee. It was also obvious how easily a new person was accepted into the HRD Research Committee purely by virtue of having a Master's or Doctorate degree. It is thus very difficult to define the HRD Research Committee as a community of practice, even though its members expressed their research identity in terms of being a member of this committee. In this case, I would argue that learning in the group, in the social workplace setting, took place in similar fashion as in a community of practice by using Warhurst's (2006:114) argument. Warhurst (2006:114) argues that membership ('research committee group member' as identity) of a community (the HRD Research Committee as 'group') is an intrinsic condition for learning and that learning will be both incidental and inevitable due to participation in the distinctive practice (assessment and evaluation of research proposals) of a specific community. This is consistent with Lave and

Wenger's (1991:93) argument that individuals learn in relation to other individuals of a community.

The research committee members started to refine their own assessment and presentation of the feedback by comparing their method of presenting the learner's proposal to the research committee. In such situated learning conditions, it is possible to derive meaning-making through the shared language of the workplace (Warhurst 2006:115). However, Lave and Wenger (1991:93) further assert that belonging to a practice community enables learners to construct the meaning that underpins practice. This is where the HRD Research Committee differs from a community of practice. It serves as a group of interest because it does not develop its own practice. It merely complies with draft guidelines, which is the product of a few individuals and not the HRD Research Committee. A community of practice, according to Wenger (2006) is different to a group of interest.

To this end, Billett's (2002b:56) assertion that workplace learning is the product of participation in a social practice through the individuals' engagement in its activities and access to affordances, is an accurate description of the learning in the HRD Research Committee. This committee merely functions as a group of interest that meets from time to time. The functioning of the HRD Research Committee rather emphasises Torraco's (1999:256) point of the distributed nature of expertise in the workplace, which positions the individual employee as a member of a group whose expertise collectively solve problems in the workplace.

Group three: The research panels. Consistency was important in the research panels, even though they convened on a needs-based principle. It was thus possible for the research panel to convene anything from twice a year to seven times a year, depending on the number of learners who were ready to present their research. To this end, the chairperson and at least two other members had to remain constant in all the panels. The only changes resulted from the presence of the learners' immediate commander who had to evaluate the plausibility of the research findings and the possibility of implementing the learner's proposed plan to solve the identified workplace problem. The panel therefore consisted of research experts and police experts in the field of the study, the Provincial or Divisional Commander of the learner, and the panel administrator.

One of the research trainers acted as administrator to draft a programme for the duration of the panel sitting, which ranged from one to three days. The trainer had to coordinate the functioning of the panel by confirming that the learners' were available and ready for their presentations, regulating the presentation and question sessions, recording and consolidating the panellists' assessment ratings, and taking minutes of the proceedings (P8). With regard to learning in the panels, Malloch and Cairns (2010:9) assert that learning is a process of change in an individual or group through its activities. It is temporal as well as mindful and generally follows some agentic intent by the individuals or group.

Much of the initial learning centred on the way in which the panel presentation would order its activities, and the subsequent development of appropriate documentation. The process improved over time, eventually comprising the refinement of documents for planning the presentations programme, the recording of the panel proceedings, the processing of results and providing feedback to the learners afterwards. The administrators (the trainers) expressed their excitement and fear of the panel presentations as it put the spotlight on their ability as trainers rather than focusing on the research product. These concerns drove the trainers to better prepare the next presenters. Later constructions of knowledge in the research panels developed due to the consistency of panel members. Because the panels involved only a few high-ranking police officers, they bonded as a team that developed its own culture of assessment and feedback to the learners. A large part of the culture was shaped by the discussions of the research product after the presentation.

The panel members showed professional respect and courtesy to their fellow panellists. During the questioning of the learners, panellists would refer to the expertise of fellow panel members to emphasise their argument, which was a way of drawing panellists into homogeneity. Panel members focused on protecting the reputation of the SAPS when they decided on the value of a study. The research panel formed a little brotherhood, consisting mostly of males, except when the ad hoc member (commander of the learner) was a woman. In general, the research panel acted as a community of practice with the aim of assessing and evaluating the quality and value of research, and protecting the reputation and image of the organisation. In this case, the conclusion that the research panels formed of a community of practice is based on a few aspects posited by Wenger et al. (2002). Firstly, the domain should create the common ground and outline the boundaries for employees to decide what is worth sharing and how to do that.

The functioning and repertoires of the 'brotherhood' kept their activities and discussions of research presentations to themselves. A further community of practice requirement is that the community should create the social structure that should facilitate learning through interaction and relationships with others. The discussion of research methods and the research output of learners pulled the assessors together. They learned from each other and created situations for homogeneity in which they respected and trusted each other. Panellists also learned over time what type of questions were asked by whom and learned to concentrate on other aspects of the research. A final CoP requirement is that the practice should stipulate the shared repertoires of resources, which include documents, ideas, experiences, information, and ways of addressing recurring problems. These forms, including panel programmes, assessment feedback and minutes of panel sittings, serve as examples in respect of the research panels. In addition, Li et al. (2009) argue that the group needs to have a facilitator or supervisor to manage the day-to-day activities, which in the research panels was performed by the panel administrator.

Newcomers found it difficult to participate meaningfully in such research panels. P5, who became part of the panels by complying with an instruction from her seniors, alluded to how difficult it was to gain acceptance and to comprehend how everything worked in the panels. She was not given an induction to the activities, and had to rely on her own previous panel presentation experience to formulate what she was supposed to do. P5's experience was not unique. Chappell et al. (2000:6), for instance found evidence that new teachers relied on previous experience rather than theoretical knowledge to perform better in their new environments. They preferred applied knowledge to academic knowledge and experiential knowledge to disciplinary knowledge. P5 explained that there were briefing sessions before the presentations, but these were limited to an explanation of the programme for the day and procedural arrangements such as presentation times and the instruments used during the assessment. P5 did not know how to listen and assess simultaneously, or whether her assessment was on par with the rest of the panel.

Eraut (2004:248) explains the situation by stating that performance in the workplace involves the integration of several forms of knowledge that do not always allow time for analytical and deliberative approaches as in higher education settings. Individuals therefore learn to perform their duties from their interaction with other people and from personal experience. In

reflection, the difficulty in being accepted as member of the community could result from P5's level of exposure to research and the fact that she did not have a Master's Degree at the time. Her inclusion in the research panels resulted from an instruction to join, rather than by the invitation of the research panel. P5 was viewed as an 'intruder' that could threaten the workings and culture of the research panel, rather than a being a potential team member of the community. If this was the case, then the research panels could have become a clique.

6.2.4.6 Workplace learning and police identities

It could argued that workplace learning and police identities have a symbiotic relationship. The workplace has several locations for the EDLP learners. They are called away from their normal place of work to attend the six-week contact session at the SAPS Academy (phase 1 of the EDLP), before they return to their normal workplace where they learn while working (phase 2 of the EDLP). The SAPS Academy is thus part of the learners' workplace for the duration of their contact sessions. Depending on where the research panels of the third phase of the EDLP take place, their research learning may extend to a third and temporary workplace that is removed from their everyday workplace. The learners will, as a result, experience different levels of support for their learning at each of these settings. While the research trainers' workplace is mainly at the Executive Centre, they do visit other locations where the HRD Research Committee meets, or where the research panels convene. The members of the HRD Research Committee convene in their normal workplace. When considering the effect of change in the work environment on learners, one realises that the focus should not be on the environment of learning, but on the process of learning. Billett (2002b:56) explains that when it comes to learning, educational settings and workplaces are seen as places of learning because they merely represent different instances of social practices in which learning occurs through participation.

In Sambrook's (2005) argument, the idea of attending some sort of planned training intervention represents the act of learning at work, as in the learners' case when they attend the first phase of the EDLP research at the SAPS Academy. Learning at the SAPS Academy depended on the individual's will to learn. The first thing for EDLP learners to do was to learn how to learn when their time was occupied by several concurrent tasks, because they would have to face similar conditions when they conducted their research projects while continuing their everyday jobs in the workplace. They were expected to learn at work as a result of

working (Sambrook 2005). Learners were exposed to several learning activities at the same time as they had to work on their research proposals while doing an overnight assignment of another module of the EDLP. The effect was that learners were generally tired in class following the training activities of the previous night (EDLP trainers meeting notes 2010-09-06).

The practice of requiring learners do several concurrent tasks or activities did not fit well with the older and slower learners as they struggled to cope with the amount of work, the complexity of research and the pace at which they had to learn. Most learners barely survived the pressure and a few had to visit doctors to treat their anxiety and high blood pressure. All they had learned was to manage time and to survive the motions of the EDLP institutional phase. To this end, many of the learners openly stated that they would not do the research project, but rather pay back the cost of the course. However, despite the agony of the intense first phase of the EDLP, there was ample support for the learners. They did not have to do anything but learn while at the Academy, not even make their beds in the morning. The Academy made a number of resources available to the learners such as a Chaplain, psychologists, technical computer support, computer literacy trainers, librarians, research trainers, internet and printing facilities, a vehicle for transport and a well-equipped gymnasium. The research trainers managed their time and activities in such a way that they had enough time to teach the learners in phase 1 of the EDLP as well as guiding those who were in phase 2 or 3. Phase 2 learners required guidance and review of chapters and those learners in phase 3 needed guidance on the final corrections and preparations for their presentations.

The police identity of learners dictates the prioritisation of police work over that of learning. The design of the learning programme did not provide enough time for learning research methodology before sending the learners into a workplace where their police roles took over. Those in leadership roles overestimated the capability of the senior police officers to develop research skills when they insisted on including actual research projects in the EDLP. They expected miracles from people who barely had time to manage their stations or offices (P8:18). There was very little understanding of the peculiar position that EDLP learners found themselves in. The demand of the workplace to meet crime-fighting targets was substantially superseding the learning initiative. People working in an operational environment do not spend much time in their offices. P5 posited that Station Commanders and Operational Commanders have to be present during crime prevention operations or when there is

something requiring attention in their precincts. They find it very difficult to give proper attention to research under such conditions (P5:100). The learners' minds might not have been focussed on research at all, because the mind is the place where we think and solve problems (Malloch & Cairns 2010:7). From a psychological perspective, the term place can refer to where the learners found themselves in their minds at any given time. The workplace may thus be 'trapped in the minds' of the learners when they are still pondering about work-related matters when they are not at work. Time for research was therefore very limited for most senior police officers.

Developing research skills challenges the profile of a police officer. An underlying problem with the police identity is that police officers are recruited and selected to join the SAPS because they fit a specific profile. Police officers are selected and trained in a culture where the emphasis is on compliance to instruction, rather than exercising discretion. Further, work is strictly supervised, which leaves little room for debate or exploration of alternative methods of problem solving. The police culture is based on standing orders, procedures and rules. In SAPS, people never learn to think for themselves or argue about facts, because SAPS is such a disciplined environment. Work is done upon instruction. Researching something is different to following instructions. While research requires learners to read and compare, to think and reason about things to understand and solve a problem, their supervisors merely require the learners to follow their instruction in order to solve a problem in the way that their supervisors deem appropriate and adequate. Police officers are simply not allowed to be critical in their working environment and that is where it becomes difficult for the learners (P5:115).

Thus, mastering the process of critical thinking can be difficult for police officers. However, while this argument may be true for most of the EDLP learners who advanced through the police ranks to executive level; it is not valid for the professionals like legal experts working in the SAPS, because formulating arguments is what they do. Learners from these professional environments were among the top achievers in the programme and solved real workplace problems for the SAPS through their research. To this end, Ritola (2012:661) provides a brief overview of how a critical thinking strategy can be applied and what it consists of. The strategy involves the gathering of arguments and evidence available on an issue, assessing them from all sides and forming an overall impression. A belief is formed based on the overall impression. If there is no impression, there is no judgement. In addition, it is in the learner's control to learn the skill because of personal agency and efforts to construct

professional identities (Hodkinson et al. 2004:21). Should learners not exercise agency to develop critical thinking skills because of the police culture they work in, they are indeed reinforcing their police identities at the cost of developing research skills that require alternative thinking patterns to those that police officers normally apply.

Yet, even though learning is a process, in which the individual exercises agency to engage or not engage there are other factors that influence learning. The situation within the workplace, its society and culture are mediating factors for the learners' understanding and learning. These factors influence the construction of knowledge and skills that individuals need to do their work (Billett & Choy 2013:270). For the EDLP learners, this meant that the police culture could influence them when they practice research skills in their work environments. Participants indicated that the police culture does not support the development of research skills. The better you are at what you do, the less your chances of attending courses because managers cannot afford to let you go. The culture is that those that work hard get more work than others do.

Many learners were in such positions and could subsequently not engage in the research project. On average, learners had to spend twelve hours per week to complete the research project of the SSEDP (the accredited version of the EDLP), but only eight of the twelve hours could be taken during office hours, provided that learners account in a specially designed logbook for the time spent on research. Learners returned to their places of work with copies of a letter authorising use official time to complete the research, but when they got back to their workplaces, there was no time to do the research. The SAPS, like most workplaces, control their employees' exposure to work activities and by prioritising work over learning, they discouraged learners and deprived them of the opportunity to complete the research.

While workplaces offer opportunities to engage in work, they also control the type of tasks that individuals are allowed to undertake and regulate where workers can get guidance from (Billett 2002b:57). Individuals' reaction to this control may result in unintended learning that does not correspond with the intended learning of the workplace. This is why Billett (2002b:57) argues that knowledge of culture and work conditions is needed to evaluate what and how employees learn at work. The police culture has its own police 'language' that consists of its own jargon and way of saying things. Police officers use that language in their daily practice. As can be expected then, the learners could also not discuss research with their colleagues

in the workplace, as the latter could not understand 'academic language' with its own terminology.

Finlay (2008:86) posited that when individuals cross boundaries and work in another activity system, they 'pick up' the language, culture and technical knowledge of the other workplace to use later when they return to their own workplace or activity system (Finlay 2008:86). The data revealed how learners tried to use the research language in their own workplaces, but the workplace could not respond to it as the police culture and the academic culture in which research is generally practiced, could not find common ground. The two cultures are just too diverse and the police officers in the workplace too set in their ways to be moved by a single researcher's use of academic terminology.

The support in the workplace was poor in general. The learners were given laptops to manage their work better, but they proved useless when many of the learners could not use them because they had not been taught how. The learners arrived with their laptops without knowing where to switch the power on. Regardless of these circumstances, the organisation demanded a good return on its investment. In other words, the SAPS expected senior police officers to develop research skills in four weeks, to return to their demanding workplaces, to conduct research on a workplace problem and to develop a plan that could solve problems. The learners' challenges with the workplace start with the selection of research topics, because those learners who have not been exposed to research before could not identify researchable topics and those who could identify a topic, struggled to get it approved. This delayed the learners' drafting of a research proposal. To avoid such problems in future, the custodians of the EDLP research wrote a letter to all provinces and divisions of SAPS pertaining to explain the process and the purpose of the EDLP research.

The second phase of the EDLP proved more challenging, for both learners and trainers as the learners were to learn in work as Sambrook (2005) argued. Activities such as observing others as they work, asking questions, solving problems, participating in discussions and mentoring others form part of the informal learning taking place at work (Sambrook 2005). Yet, learning to solve problems through research in work proved challenging. EDLP learners faced various problems such as being transferred during the study. Changes to the composition or leadership in the division or component also influenced the outcome of the study (Schwartz & Human 2012). The lack of support for learners was evident in the

protectionist approach of commanders who forbade learners to research certain topics. Some learners received instruction during the programme that they needed to change their topics, as the topics were too sensitive or not a priority in the province. P5, in the phase 3 panels, observed that very few learners thanked their commanders for allowing them to spend time on research. In most of these, the resultant studies proved useful. Those learners who were allowed time in the workplace to complete assignments, could use official resources and engage with colleagues to complete their other tasks, were not really understood as adult learners. Once in the workplace, they were mostly left to complete their projects without necessary support or supervision as the other employees did not care about the research projects. A few learners who completed their research could very often implement the findings in their work environments, but later, the organisation had no idea of what happened to the implementation plans that were proposed to the research panels.

The SAPS is not a learning organisation and is inherently built on the principles of command and control, which does not necessarily lend itself to the new ideas and opinions created from the research process (P2:150). To this end, Billett (2002b:57) reminds the SAPS that the workplace is an important site for learning as it represents the only and most viable location for many workers to learn and develop their vocational practice. This aspect is of particular importance for SAPS as most South Africans were marginalised in the apartheid schooling system. The older police officers may very well be victims of the discriminatory school system that left them with little possibility of gaining access to a tertiary education. These police officers have to rely on opportunities at work from which to learn. Understanding workplaces therefore remains an urgent matter as it forms the centre of lifelong learning practices.

Conditions were not favourable for the trainers. The two trainers had to deal with all the research on their own and when they requested assistance from their commander, it was shrugged off with the excuse that there was nobody available who could do research. The commander was sent a memorandum in which the trainers expressed their dissatisfaction, but there was no response. P4 explained that she had to use her own cellular telephone, or she could not communicate with the learners after work. P8 explained that he had to use his personal email address for official purposes. P8 later received an official cellular telephone and a 3G modem for after-hours use, but still had to use his own laptop and personal email address. The trainers were finally issued with laptops in 2014, but the research module had been initiated in 2010. Ironically, after so many years of struggling to get the necessary

resources, the SAPS Academy commander admitted that it is impossible to assess research or supervise research without access to proper technology. The trainers had to download a free plagiarism scanner onto their personal laptops because the software programme could not be installed on police computers and the organisation had not procured plagiarism software. To this end, the trainers' progress in the design and delivery of the module was underestimated, because other role players could only see the learners' final products during the panel meetings. However, the administrative documentation they worked with in the panels or in the research committee passed unnoticed.

6.2.4.7 Experiential learning and guidance

The custodians' persistence in including the research methodology module in the EDLP was not clearly understood. Participants shared different opinions as to what they regarded as the purpose of the research project, because the reports did not reflect other learning that the learner had constructed in the workplace. The intention might have been to teach police officers how to conduct research in the workplace, but in view of the low competence rate of the EDLP research module, learners might have constructed other unintentional knowledge. For instance, learners had to devise alternative ways and means to execute their research projects through which they learned. The construction of unintended learning results from ineffective experiential learning opportunities in the workplace. For experiential learning to be effective, the learner has to be in the centre of the approach. The learner has to get directly and actively involved with the material being studied (Conlan et al. 2003).

The EDLP learners needed time to set their research goals and to think and plan for the data collection and writing of their reports. They also needed time to experiment and make decisions about the best ways of researching problems in the workplace. Moreover, they needed practical experience in doing research, because they would later reflect on the product and process of the entire experience and when they learn (Conlan et al. 2003). It is this construction of knowledge and developing of research skills that will enable the learners to incorporate the learning into their everyday management practice. However, the knowledge and skills developed at the SAPS Academy, was not really transferred to the workplace. Very little evidence was found that research skills have been applied in the workplace or even that the findings that were made in the research projects were implemented in the workplace. A few learners (P5, P11, and P12 & P13) indicated that they

used some research principles in their workplace, but this mainly involved reading and listening more critically. The reason could be that the nature of the SAPS as a police organisation, does not promote growth and experiential learning in a direction different from the one it dictates. The transference of research skills is very unlikely because the practical application of theory in the workplace and incorporation of research in the learners' daily business depends on the foundational knowledge of research, which was not adequately mastered by the bulk of the learners.

Some feedback on the use of research in the workplace came from learners who could not do the research and who failed their research projects. It is cause for concern for the SAPS when learners who have not really grasped the concept of research, report that they have implemented the findings of their studies in the workplace. Especially so when they boast that they have applied research methodology sufficiently correctly to confidently utilise their new discoveries in the workplace. Another concern for the SAPS is the learners' difficulty in engaging in critical thinking to debate issues based on facts, to formulate problems clearly and for avoiding plagiarism in their work. It is very possible that these learners may have developed skills that are not desirable in the organisation. Billett (2011:13) argues that learning is unpredictable because learners construct knowledge from what they know (cognitive experience) and what they experience (pre-mediate experience). There is thus no guarantee that workers will learn what they have to learn.

Nevertheless, the trainers have tried to give effect to the organisation's intention of developing research skills to solve problems more scientifically in the workplace. The research teaching was built on realistic examples and scenarios to prepare the learners for the reality of the workplace and to improve transference of learning into the workplace. They made sure that the learners understood the essence of their identified problems in the context of their workplaces. They conducted one-on-one sessions with each learner to ensure that they would have a clear understanding of their research topics when they left the SAPS Academy. The HRD Research Committee further guided learners on methodological errors they may have made, and they were given suggested alternatives. However, all these efforts were in vain because the learning transfer was hampered by a lack of collaboration and understanding in the workplace. Learners needed access to expertise in the workplace to support them in their interpretations and meaning-making during learning, but a person needs to have at least some experience in the field before he or she can be regarded as a subject matter expert.

The guidance, as argued by Billett (1995:21) could be either proximal resulting from direct interpersonal guidance given by an expert or supervisor, or indirect from following social norms and practices in the workplace. To this end, the tasks of the job link the learner with the expert knowledge of supervisors or mentors in the workplace, but supervisors or mentors need to refrain from steering the learning process as the learner has to be actively involved him or herself in order to construct knowledge. The learner exercises agency to learn and if the learner decides to learn, the work activities will transform into learning. The lack of collaboration attests to the fact that workplace learning needs understanding from commanders and collaboration by all role players to allow learners to practice research.

Even though employees learn of their own accord when they observe, imitate and initiate in their engagement with work activities and interactions, it is not enough to make informed judgements in the workplace (Billett & Choy 2013:267). EDLP learners therefore need guidance from experts to mentor them through the research process in order for them to construct knowledge that they can transfer to other situations where they have to solve problems through research. Unfortunately, learners do not necessarily rely on others' opinions or advice. To this end, they have to rely on their relationship with and trust in their study leaders, but as Billett (2011:12) argues, some learners may welcome such support offered by more experienced workers, whilst others may find such support unhelpful. Nevertheless, the EDLP learners needed to rely on the study leader's feedback for guidance, and this had to be clear, concise and encouraging.

As pointed out in the previous section, the organisation's culture needs to be addressed to enable an effective learning experience for learners. The emphasis has to be on learning and the development of competence as well as fair recognition for competence and performance. Unfortunately, because learners do not obtain this reward for learning in the workplace, they use their experiential learning for career advancement and not for the betterment of policing in general. While the EDLP learners found it challenging to execute their research projects, other participants' actions revealed how their engagement with the research teaching developed into new knowledge and how that knowledge translated into their work. The evidence of such transfer of learning was found in P2's reinforcement of research knowledge following from assessment of proposals, and P3's learning that resulted from reading more about the specific methodologies that she encountered in proposals that needed assessment.

P3 now uses this knowledge to assess research proposals with greater confidence. P4, due to her constant exposure to research literature, research supervision, informal interaction at work where research was discussed, could further her tertiary studies.

P8 learned to take charge of the transformation of the research module, because he learned to deal with the pressure and to rely on others' expertise as a result of becoming part of a dedicated research team that functioned as a community of practice. P7 learned through their interaction with learners and experience of the training administration processes to provide additional support to learners, and P5 learned through trial and error how to assess and guide learners effectively and to negotiate ways of becoming part of the research panel community of practice.

Specific ways in which participants constructed new learning by getting involved with the research activities were uncovered in the data. The intentional knowledge transfer is not that clear when considering the learners' actions and the difficulties of negotiating time and space for learning in the workplace. Conversely, one finds various examples how other role players construct learning informally. The learning was unintentional and at times accidental, yet very effective in addressing practical problems in the workplace. The construction of unintentional knowledge as a form of informal learning finds support from Watkins and Marsick (1992:234) and Tynjälä (2008:133) who drew from the work of Hager (1998) and Resnick (1987). Using the term informal learning to describe workplace learning is not supported by Billett (2002b:59). He argues that norms, values and practices sustain interactions in the workplace. These practices and experiences are structured and inherently pedagogical in a way that directs participation towards continuity within and of the practice. Learning is thus structured in nature, although obscured by the norms, cultures and practices in the workplace. However, this does not change the fact that the learning was constructed unintentionally.

6.2.4.8 Integration of learning into practice

Workplace learning needs a deliberate and structured approach in order to address organisational needs. The workplace needs to be prepared for such an intervention when a part of the structured learning has to take place. All managers, or commanders in SAPS' case, have to understand the learning intervention model and purpose in order to provide legitimate learning experiences. The offering of a research module as part of executive

development does not sit well within the militaristic culture of the SAPS. The integration of learning into the workplace was not well planned for, because the initial design indicated that the research module was initiated in order to introduce the concept of research as a problem-solving mechanism in SAPS. It was not intended to become a prioritised skill to address workplace problems. This need emerged much later, but the decision left quite a number of practical difficulties for implementing the design in the hands of the trainers. The later models entailed the implementation of research solutions.

The research module was amended and developed into a very practical, real life approach that aimed to keep the research project close to the workplace reality with its own blend of individual cultures and languages. In this teaching model, learners identified real problems in the workplace, developed their own research problem statements and set their own objectives according to their respective workplaces. They were prompted to reflect on the reality of their workplaces when they drafted their research proposals and before embarking on their research projects. The participants understood the concept of integrating learning into practice when they left the SAPS Academy and also understood that the workplace provides the right environment to test theories or to explore phenomena. The workplace is where the integration of theory and practice takes place, but learners have experienced the SAPS Academy and their own workplace as entirely different types of workplaces.

At the SAPS Academy, they had developed new terminology and skills that they had to carry into their own workplaces. Learners had to change their mind-set to enable integration of theory that was learned in a particular learning environment with its own unique organisational culture, its unique language and communication challenges, and social – cultural perspective into the workplace where they face different socio-cultural dynamics. Crossing such boundaries, both personal and organisational, promotes the inevitability of learning. The concept of boundaries and boundary crossing in learning do not, therefore, refer only to institutional facts but also contain personal facts. Billett and Choy (2013:270) refer to this crossing of boundaries as ‘bounded agency’, a term that explains the relationship between personal and social contributions to learning. ‘Bounded agency’ explains the means by which individuals use discretion to negotiate between what they are able to do and how they exercise agency in engaging with those boundaries. While the SAPS Academy prepared learners to integrate their knowledge of research into their normal everyday practice at work - even though SAPS as workplace was not prepared for it - it was up to the learners to

integrate this learning into their practice. Learners therefore not only had to apply their research skills, but they also had to draw from their socio-cultural experience of how they learned in the training environment context to apply their newly developed skills in the work context.

Integration of learning into the workplace is, however, not as simple as it seems, as there are a few pitfalls to be aware of (Billett & Choy 2013:272). The trainers addressed these pitfalls unknowingly. First, before entering the workplace, learners need to be aware of the requirements needed to engage effectively in the workplace (Billett & Choy 2013:272). The trainers did this initially, during the EDLP, and at the end, by explaining the expected outcomes of the research module, the research process and the different steps in the SAPS research model. This was important as learners needed to know what they were required to learn, and the means of that learning.

Second, learners also needed to possess certain capacities to undertake activities that they could reasonably be expected to master (Billett & Choy 2013:272) including conducting research in the workplace. In this regard, not all learners could master the research activities. Third, expectations concerning the purpose of support during the learning process and the roles and responsibilities of other parties in the workplace should be clarified (Billett & Choy 2013:272). All role players knew of the EDLP and its requirements, but the commanders of the learners did not fully understand it and prioritised police activities over learning. The role of the HRD Research Committee was also unclear, but this did not hamper the learners' progress or learning.

Fourth, learners, being dependent and interdependent in the workplace, should understand their own roles and responsibilities, as their learning is self-directed. Their observations, engagements and interaction should therefore contribute to their learning (Billett & Choy 2013:272). Unfortunately, learners blamed the workplace for not affording them the time to do their research, but many of the EDLP learners underestimated the time and effort it would need to complete their research projects. They subsequently left projects until the last possible moment and then requested extensions of time. Their own effort was insignificant. This notion of not taking responsibility for own learning poses uncertainty about the utilisation of research skills in future, especially when one considers the impact that research can make in the fight against crime, in guiding intelligence gathering and cross-border operations.

Fifth, learners needed to be prepared for circumstances where their encounters were unpleasant or confrontational in order for them to manage these situations for their own well-being and sense of self (Billett & Choy 2013:272). To address this matter, the trainers deliberately developed and reinforced the learners' emotional intelligence to deal with setbacks in the research process and at work. Learners were also prepared for an unsupportive workplace just before they left the SAPS Academy.

The reviews of reports were done by scrutinising the quality of reports and the practicality of implementation plans to ensure a better return-on-investment. Learners were guided to reflect on the value of their study for the organisation to keep them focused on solving real problems in the workplace. The learners, as researchers, were in the most favourable position to implement their proposed solutions. If their proposed solutions were effective in solving the problem in the workplace, the organisation could be in a position to solve similar problems elsewhere just by sharing the findings. However, not much is known about the implementation of plans resulting from EDLP research and none of the reports has been placed in the SAPS libraries yet. These reports are important, however flawed in methodology, as it highlights the practical challenges that police officers experience in their workplaces. Others may still find the information in such reports useful, albeit for further exploration.

The fact that the SAPS developed learners in research and then left them on their own to implement their proposed solutions, gives the impression that the organisation does not really expect them to implement what they have learned, or to share the knowledge in the workplace. However, this is exactly why the learners' commanders formed part the research panels. They were required to determine the practical value of the research and authorise the implementation of plans that could address the research problem in the workplace. Workplaces, therefore, have to empower employees through participation in decision-making by obtaining their suggestions and commitment to goals, and by reducing the management levels in the organisation structure. In return, these workplaces can enjoy faster decision-making processes, a creative innovative employee capacity, committed and involved employees who feel a sense of achievement (Mullins 1999:653).

This is not a process in which workplaces automatically 'gain' creative employees and innovation. Such creativity relies on expertise, creative thinking skills and motivation from both

employee and employer (Howard et al. 2015:135). Both commanders and learners need to contribute to the workplace learning process if learners are to solve problems through research. Learners and their commanders have to identify the researchable problems in the workplace and commit to solving them. That way, the learners will contribute their newly constructed research knowledge while their commanders will provide the support to enable learning. In such an arrangement, SAPS would be able to solve its workplace problems while the learners gain research experience in solving problems through research. It would also solve the issues of access to expertise and support in the workplace.

The SAPS demanded better returns on its investment and put pressure on learners to complete their studies. The additional expectation that the learners develop implementation plans was met with dissatisfaction. The learners argued that when they returned to their workplaces after completing phase one of the research module, they found it hard to communicate with their colleagues on an academic level because their colleagues do not understand research. The learners cannot, therefore, seek assistance at work, as there is no empathy for their learning. To this end, Billett (1995:25) posits that learners will experience more challenges than just the difficulty of getting research support in the workplace. Firstly, not all learners will construct learning that is desirable for the workplace. Learners may develop inappropriate skills if such skills constitute part of the culture in the workplace.

Secondly, the effectiveness of learning in communities of practice depends on access to the authentic activities of the community. Without access to authentic activities, there might not be appropriate or desired learning. Thirdly, the reluctance of experts to provide advice, mentoring or support to learners hinders them from achieving the outcomes of the learning programme. Situations where there is a lack of expertise or access to such expertise may cause employees to seek expertise outside the workplace, which in turn may challenge the existing culture or practice. Lastly, and perhaps crucially, learners may not be capable of developing conceptual knowledge through workplace learning (Billett 1995:25). In SAPS, the norm was that learners had to continue with their job responsibilities, which left no time for research. In the end very little learning was integrated into the workplace, except for the informal learning that the actors at the Executive Centre had integrated into their practice, the application of the research building blocks like critical reading, and exploring more options to solve matters during management meetings in the workplace.

6.3 SUMMARY

In this chapter, I have discussed the data presented in Chapter 5. By using the research questions as an agenda, I have tried to bring the data closer to research teaching practices and workplace learning perspectives and themes. The first research question posed was: How has the SAPS Research Methodology *module content* evolved since its inception? In answering this question, I discussed the initial design considerations of the research methodology module and the evolution of the module itself. The transformation of the research modules resulted from adapting the module to learner needs, from the organisation's response to changing organisational needs and from the trainers and other role players' efforts to protect the credibility of the EDLP, the trainers and the reputation of the SAPS. The discussion of the data on the first research question also addressed the question of how the *delivery method* of the module developed to its current form.

The questions addressing workplace learning in the organisation were dealt with separately. Firstly, I discussed responses to the question 'what were the experiences of those involved in the shaping of the research methodology module of the SAPS?' This included the responses of learners who attended the research module to get an account of how the learning was transferred into the workplace. The emerging themes included the following: experiences that indicated that workplaces are volatile learning environments; role players negotiating learning in the disconnect between research expectations and learner capacity; informal learning constructed through work; the development of research administration systems through problem-solving; the effect of police culture on learning; and the developing of critical thinking skills.

Finally, issues surrounding the themes related to the question 'which lessons have been learnt in the process of teaching research methodology to senior police officers' were discussed. The lessons centred on the following themes: misconceptions and unrealistic expectations; developing coping mechanisms; reflecting practices for teaching and learning; communities of practice and newcomers; affordances and active participation; workplace learning and police identities; experiential learning and guidance, and integration of learning into practice. Again, these lessons include those learned by the learners during the execution of their research projects.

6.4 TOWARDS A NEW THREE-STEP RESEARCH MODEL

McCormack et al. (2010:41) argue that “times of rapid changes, knowledge and learning approaches need to undergo fundamental changes to align itself to these ‘liquid times’”. For SAPS, this means to adapt its ETD processes to acknowledge the importance of workplace learning in the development of its employees, in particular when the organisation acknowledges the impact that research can make in the fight against crime, improving crime intelligence gathering and informed strategy formulation. The literature further proposed constructivist pedagogy for designing these research learning programmes. In addition, during the discussion of the data, it became clear that this data is a useful instrument to improve the SAPS research model depicted in figures 2, 3 and 4 in the previous chapter.

The model, which I introduce next, will be suitable as part of a learning programme or as a stand-alone training intervention. The model will, depending on the structures within government departments or other organisations, be useful to introduce research methodology as a problem-solving mechanism in the workplace. However, as indicated in earlier discussions in this chapter, the model on its own will not stimulate the construction of anticipated knowledge if not all role players in the organisation are collaborating to enable learning in the workplace. The data revealed that the SAPS would have to work on its readiness to support research as a form of workplace learning. The model therefore consists of three distinct phases namely, the research pre-course phase, the research delivery phase and the research post-delivery phase. The model also highlights the importance of pedagogy, andragogy and didactics when training adult learners. I now turn to the new model and its implications for SAPS.

6.4.1. The research Pre-Course phase

This phase is based on the themes found in the literature that argues for an introductory module for research. Fourie and ten Kroonden (1999) argued that the appropriate introduction of learning modules that are closely associated with the learners’ work environment could help to reduce learner fear and resistance. The data indicated the presence of misconceptions about research in the workplace and the unrealistic expectations from learners. The way in which learners tried to cope with research when they arrive at the SAPS Academy and the use of reflective practices for teaching and learning, further relate to

the need for a separate preparatory workshop before the commencement of the EDLP. Learners formulate a subjective opinion about their ability to learn new material when they reflect on their mental ability, goal orientation and level of experience (Blanchard & Thacker 2007).

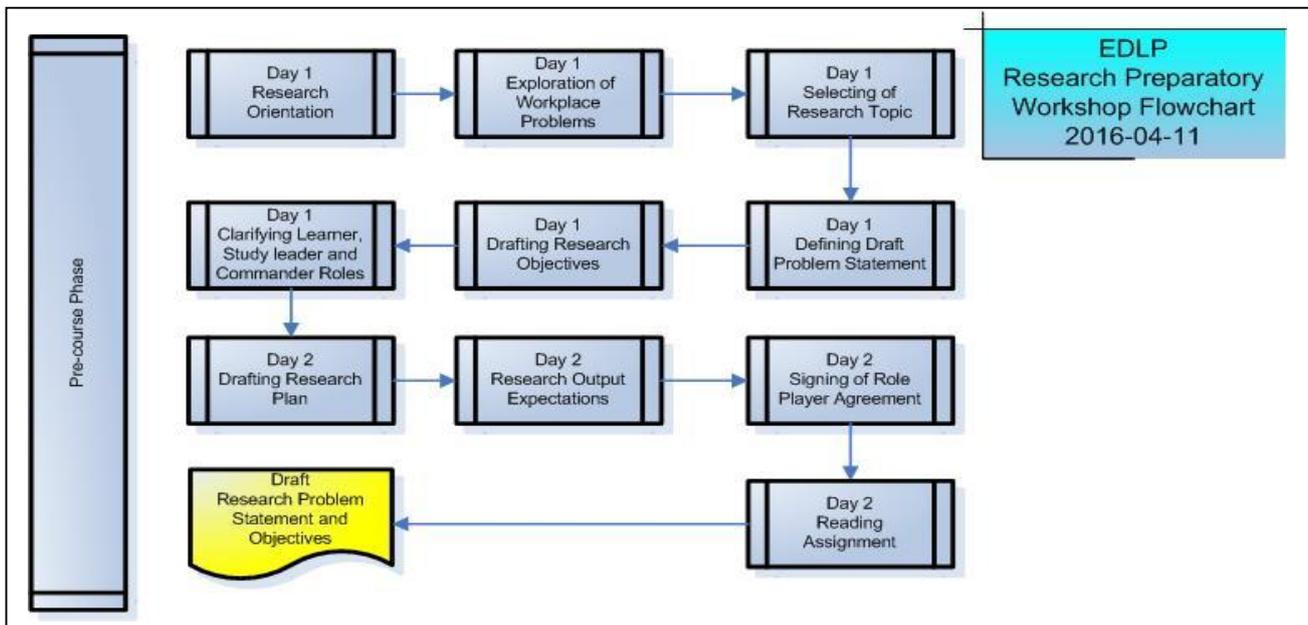
This means that police officers draw from their subjective opinions before they decide to participate in learning opportunities. However, the lack of workplace support enabling learners to conduct their studies necessitates the presence of both learners and their commanders at this pre-course workshop. The workshop will clarify the expectations from learners on the one hand, and inform their commanders of their roles in the intervention (Billett et al. 2008:4). The workshop will facilitate commitment from both learner (Tynjälä 2008) and commander to explore real problems in the workplace to keep the learning legitimate and authentic (Fourie & ten Kroonden 1999:6). With the learners' commanders on board, the learners can then develop a joint research problem statement, formulate research objectives and draft a plan to roll out their research proposals. The workshop would thus serve as mechanism to inform the workplace of the importance of workplace learning, facilitate support systems in the workplace to afford learners time to learn (Yamnill & McLean 2001:206), and negotiate ways of getting access to expertise in the workplace (Cleary 2011:36).

The pre-course workshop will prompt the trainers to recognise the research learner in terms of Knowles' andragogy as someone who has an independent self-concept and who can direct his or her own learning, has accumulated a rich source of life experiences, experiences learning needs that are associated with his/her social roles, is interested in the immediate application of knowledge to solve problems and is motivated to learn by internal rather than external factors.

Moreover, the workshop will provide the trainers with the opportunity to observe and identify learners with special needs and those who might not have the ability to develop the critical thinking skills needed for research (Frick et al. 2010:83). It could also help determine learners' fears and personal agency. Learners could be prepared for the research delivery phase by doing an assignment requiring a search for relevant information on their agreed research topics.

The pre-course phase could also serve as a mechanism to identify those learners who might not be able to complete the research module, especially those learners who do not show the mental capacity to develop research skills, or those learners who are nearing retirement. In other words, learners who are not ready to learn (Bradbury & Miller 2011:1-8) should not be exposed to research as it may cause learner injury or result in little return on investment. I propose the model, illustrated in Figure 6.2 below, for the research preparatory workshop. This is a new addition to the research model used by the SAPS.

Figure 6.2: Research Pre-course Phase



6.4.2. The research Delivery phase

The research delivery phase, as depicted in Figure 6.3 below, focuses on the three existing phases of the EDLP research methodology module. While the first phase covers the teaching part of the research module, the second phase deals with the experiential learning in the workplace, and lastly, the third phase puts emphasis on the value of the research for the SAPS. In terms of the teaching of research, I explored the evolution of the research module. The data revealed how the module was adapted to address the needs of the learners, the needs of the organisation and the steps taken to protect the organisation's reputation and the

credibility of the trainers and research output. I have suggested some amendments to the existing model used by the SAPS to deliver the research module.

Firstly, with the introduction of a pre-course workshop, learners will arrive at the SAPS Academy with research topics that have been agreed to by their commanders. The research problem will have been identified jointly by the learners and their commanders, which makes the project realistic. The learners would also have received a research assignment requiring them to collect information on their research problems and topics. This will assist in addressing the uncertainty of learners as they will already know what is expected of them in terms of the research project, and their commanders will know that they, in turn, need to support the learners, as both would be responsible for solving the problem in the workplace. The learners will bring the technical skills into the workplace while the commanders prepare the workplace to support the learner during the project.

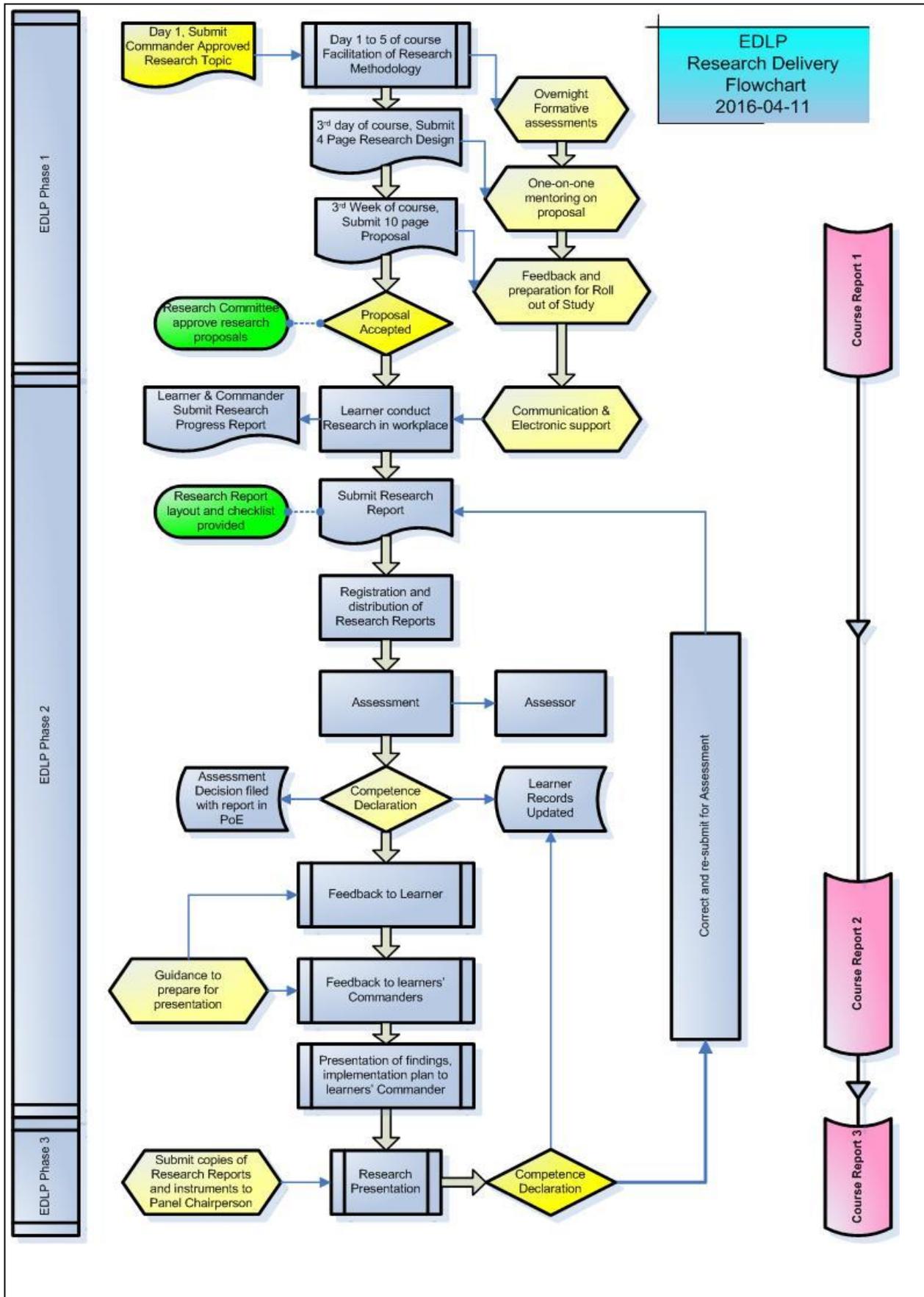
Secondly, the trainers will be informed of their learners' challenges due to their initial contact. They will not have to deal with learners' critical fears, as this would have been dealt with at the pre-course workshop. The learners would also have learned that research requires lots of reading. Some of the building blocks used in the current model, might not be necessary in the new mode during the teaching in phase one. However, the literature indicates that the development of critical thinking skills and reflection are needed for making ontological shifts in the way that learners think about problems in the workplace. It also indicates that reflective thinking and experience stimulates learning. The data revealed a strong reliance on reflection to teach research and that reflection is prominent in workplace learning.

Thirdly, due to the lack of support found in the data, the model needed a mechanism to ensure continued support in the workplace from the learners' commander. Such a monitoring process has been incorporated into the new model. The process would require learner's progress reports during the study from both the learner and his or her commander. This step was based on the literature that indicated that workplace learning needs organisational support, and the data that pointed out that the integration of learning into practice is dependent on workplace support. This would not necessarily be accepted well by the learners or commanders, but in view of the culture of the SAPS, an instruction to report progress might urge the learners' commanders to afford learners the opportunity to do their research. Although the data caution that police culture and identity tend to obstruct learning in the workplace, I propose that these

qualities be used to advance workplace learning. The disciplined compliance with instructions and police rules could serve as a medium to assist learners to complete their research projects.

Fourth, when the learners' reports have been assessed, they will get guidance to develop their presentations, but at the same time, their commanders will be prepared for the research panel presentation where they have to be present. The commanders will realise the seriousness of the learners' presentation and will assist the learners in developing the research implementation plans of their research findings. This process will ultimately improve the value of the study and its return on investment. The workplace will thus be prompted to allow learners to conduct their research, as their commanders will see the workplace benefits of the study. While the data advocate for learning through active participation, it also revealed that learning was mostly unintentional in the workplace. The involvement of the commanders in the learning process may result in their unintentional learning of the research process while they informally construct knowledge about the identified problem in the workplace. Informal learning through work is inevitable, as illustrated in the data of the study.

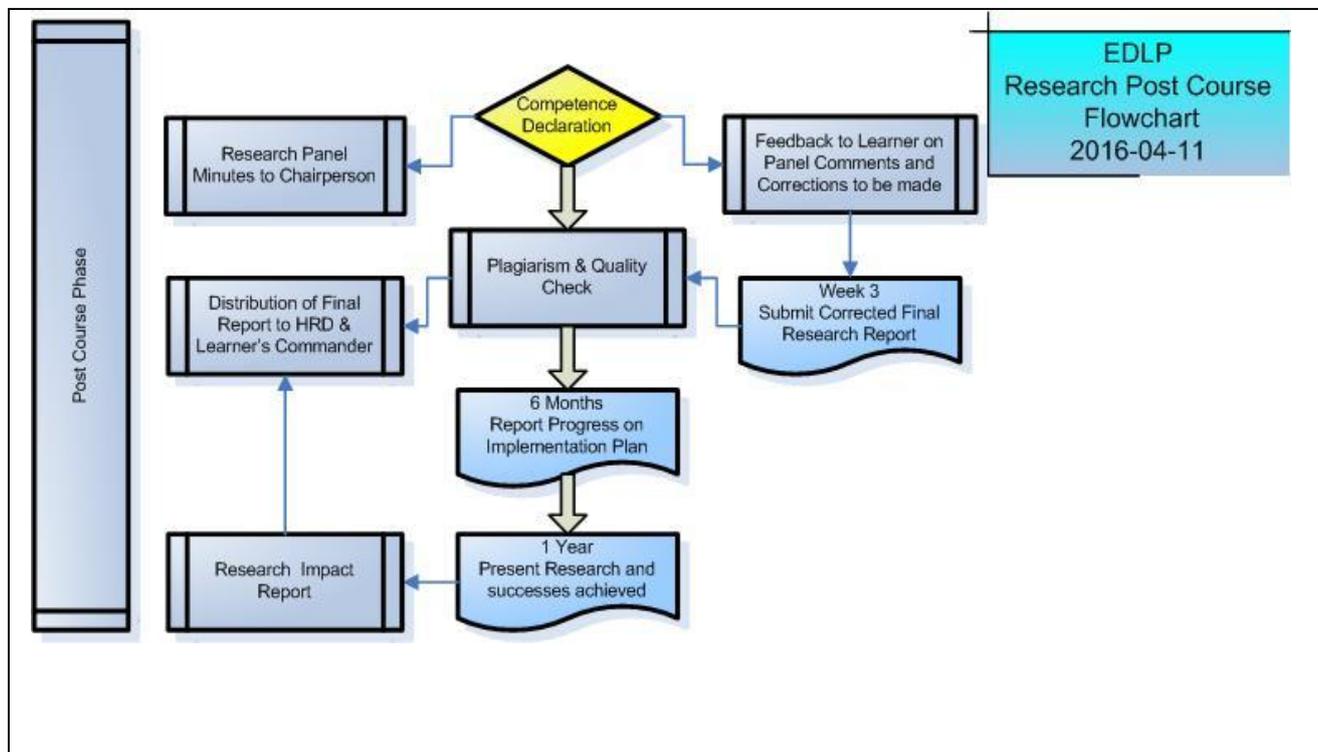
Figure 6.3: Research Delivery Phase



6.4.3. The research Post Course phase

The current research model does not make provision for post course activities such as monitoring the implementation of the research findings. This addition to the model is therefore added to officiate the monitoring of the research output. The data revealed how the existing research module was improved because of reflection and the construction of knowledge about the loss of impact of the research output. It highlighted the fact that workplaces help learners to integrate learning into their everyday practice. However, to counter the inhibiting effect of the police culture on learning, such as the organisation’s perceived lack of concern for the implementation of research project solutions, I propose a stronger reliance on the refinement of the research administration systems. Such steps have been built into the model of the post course phase by providing for implementation reports on both the progress after six months, and the success of the proposed solution after one year. Figure 6.4 illustrates the post course model.

Figure 6.4: Research Post Course Phase



6.4.4 The value of the Three-Step Research Model

The three-step research model has practical value in that it will accommodate both learners needs and provide the educators with critical background information such as cultural diversity, ethnicity, gender issues and language barriers before and during the delivery of the training intervention. However, as much as this model may advance pedagogy or ensure recognition for andragogy when dealing with adult learners, it still depends on the leadership of the organisation to acknowledge the formulation and implementation of policies that would support workplace learning. The model could become an important mechanism to prepare employees for solving problems in a more scientific or informed manner, especially for those employees who have been marginalised through past unjust education systems. Building research capacity among ordinary police officers may spread the use of research as problem-solving tool to fight crime in rural areas and urban areas alike, making the country safer and stimulating economic growth.

6.5 CONCLUDING REMARKS

When considering the length of the data chapter and the subsequent elaborate discussion, I find myself doubting whether the setting and its culture were sufficiently described in this ethnographic study. In an attempt to bring across the characteristics of the sub-culture of the SAPS Academy's Executive Centre, I started writing from an insider perspective, which in return challenged the objectivity of my discussions. However, I tried to focus more on the workplace learning than on the history of the research methodology module evolution. On hindsight, I scrutinised the data to uncover new themes, but this confirmed existing knowledge, rather than introducing new concepts.

Warhurst's (2006:113-118) conception of workplace learning provides a good model that the SAPS can use as a benchmark for its course design. Warhurst's (2006:113-118) model includes the following aspects regarding the workplace: formal teaching that is supported by contextual learning, learning that takes place as a facet of belonging to communities of practice, learning resulting from the construction of meaning and meaning-making of experience, learning as a consequence of doing and experiencing legitimate peripheral participation, learning that takes place in the process of becoming someone or something and the construction of identity, and accepting that learning is both social and individual

(Warhurst 2006:113-118). These aspects were all present in the data and subsequently also discussed in this chapter.

Nevertheless, the insights obtained in this study indicated instances where further research is warranted. I discuss these instances in the last chapter. I also used the findings to develop a new model to present research in the SAPS. To this end, I did not attempt to develop a new model or typology in terms of the concept of learning in the workplace, but rather offer an improved research model, which the SAPS can consider for the development of its senior police officers. The model will not only provide clarity to learners and other role players in terms of the expectations and outcomes of the research module, it will also facilitate a process that enhances the likelihood of learners developing the intended research skills in the workplace.

In Chapter 7, I offer my conclusions and recommendations of the study.

CHAPTER 7: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

7.1 INTRODUCTION

In Chapter 1, I offered the background and context of the research problem. The study aimed to describe and explain how the EDLP trainers developed, presented and implemented research methodology for senior police managers in a training academy of the SAPS. To this end, the objectives were set to describe how SAPS learned to teach research methodology to its senior managers. In order to undertake the description and explanation of the above themes, I needed to understand how the SAPS research methodology module came into existence and how it developed into its current form. To achieve this objective, I aimed to capture the history of the research module of the Executive Development Learning Programme of the SAPS. In addition, I wanted to determine whether workplace learning took place during the teaching of research methodology. The study therefore explored experiences and lessons learned during the development and evolution of the research methodology module and the teaching and supervision of learners in their research projects. In other words, the study aimed at uncovering the ways in which workplace learning took place.

By following an ethnographic strategy, I collected data through observation and interviews in the setting, the Executive Centre of the SAPS Academy in Paarl. I also studied and analysed unsolicited police documents like reports, emails, letters, learner research files and policies to supplement my interpretations of interview and observation data. I described the natural history and research methodology applied in this study in Chapter 4. A review of the literature was done and offered in Chapter 2, in which a theoretical framework covered practices and related considerations when teaching research, and in Chapter 3, I developed a conceptual framework for workplace learning theory. I subsequently offered the empirical data in Chapter 5 and discussed the data in Chapter 6. In Chapter 6, I introduced an improved three-step model to teaching research. In this chapter, I offer the conclusions and recommendations for the study, but first I include a summary of key research findings.

7.2 SUMMARY OF RESEARCH FINDINGS

7.2.1 Chapter 2.

In this chapter, I discussed the theoretical framework of the study. The literature suggests that unfamiliar content should be introduced to in an appropriate manner to adult learners (Fourie & ten Kroonden 1999). Introductory modules will provide clarity on what learners can expect to do in the module and reduce learners' fears resulting from their past learning experiences (Blanchard & Thacker 2007). The design of learning programmes can thus be used to address learner fear (Torraco 1999:260). Properly designed learning interventions will reflect an incorporation of principles of adult learning (Richey 1995; Schulze 2009:1000). With regard to teaching research, the literature indicates that most novice researchers will not enter the learning intervention being able to apply critical thinking skills. They need to be assisted with making the ontological shifts to become critical thinkers. This means that they will have to be taught how to use reflection (Lee-Davies 2007; Schulze 2009) and develop problem-solving skills (Billett 1996).

Learners must be exposed to different situations of variation and sameness to learn from and to apply skills in different contexts (Marton 2006; Marton & Trigwell 2000). Moreover, researchers will have to be in a position where they can participate in the learning experience even after they have successfully completed the classroom learning exercise (Casey 2013; Corryell 2013). However, in order to ensure the practical application of theory, vibrant collaboration between academia and the workplace is needed. Educators must understand the workplace as a learning environment (Tynjälä 2008; Yamnill & McLean 2001) and be informed of the various theories and perspectives of adult learning (Yamnill and McLean 2001) and the transference of learning into the workplace (CIPD 2008). They must understand that the new kind of adult learner who expects a quick return for their learning experience (Walters & Koetsier 2006; Ezeokoli 2014). Educators therefore need to understand the role of workplace learning in the development of research skills (Torraco 1999; Billett et al. 2008).

Researchers need to be empowered for critical dialogue and be taught to use critical skills in the workplace (Henning 2008; Pinkney & Shaughnessy 2013). Learners also need support in the workplace to construct learning (Billett 1996; Schulze 2008). Educators therefore have

to liaise with workplace supervisors to expose learners to meaningful learning activities and to afford them the time to work on their research skills (Schulze 2008).

I specifically draw from the literature that:

- there is a need for an introduction to unfamiliar content to clarify expectations and to reduce learner fear;
- critical thinking skills and reflection are needed for ontological shifts;
- active participation is needed for learning research;
- learning through research at work needs organisational support;
- workplace learning needs comprehension in the workplace and in the training setting;
- educators need to be clear about their role in teaching research; and
- novice researchers can be empowered to develop research skills.

7.2.2 Chapter 3

I offered a conceptual framework for the study in two sections. In Section 1, I provided an overview of traditional and more contemporary learning theories. I have elaborated on behaviourist, psychological and socio-cultural approaches to learning as a backdrop to show where the later theories that are more related to adult learning are derived from. To this end, I provided a brief overview of theories of situated cognition, experiential learning, andragogy, problem-based learning, project-based learning and workplace learning. However, in moving into workplace learning as developing theory, I have also indicated that this is closer to constructivism and socio-cultural perspectives, while noting the situatedness of learning. In section 2, I have drawn from various authors to explore workplace learning. Various perspectives and themes regarding workplace learning were offered by looking at the concepts of work, place and learning.

Malloch and Cairns (2010:4) argue that work is much more than the completion of tasks and that the workplace has become a personal and negotiated location. Billett (2002b:56) explains that educational settings and workplaces are both seen as places of learning. For Warhurst (2006:114), the place of learning could be a structure or entity where individuals feel that they belong. Workplace learning is mainly informal. Jacobs and Park (2009:141) argue that informal learning recognises that the acquisition of knowledge and skills in the work setting does not result from organised programmes only. Learners learn on individual,

group, community or organisational levels. Employees learn of their own accord when they observe, imitate and initiate work activities and interactions, but these efforts are not enough to make informed judgements (Billett & Choy 2013:267). Employees also learn socially in communities of practice in the workplace, but they exercise agentic intent to learn in their interactions with the social environment and with others (Bandura 2001 in Malloch & Cairns 2010:10). Workplace learning is dependent on organisational support. Hodkinson et al (2004:21) argue for enhancing workplace learning opportunities by creating more expansive learning environments that are in line with what learners' want, their needs and what they respond to. The role of work in workplace learning is changing. Chappell et al (2000:3) argue that some knowledge cannot be transferred in a workplace, but has to be generated at the site of work. The literature suggests that learning in the workplace is both individual and social and although much is known about these learning processes, there still seem to be various factors to explore. The contributions of experts, who share their knowledge through mentoring,, needs further exploration. Workplace learning appears to be studied either by focussing on informal learning, or by focussing on the individual's learning through participation in social work environments.

The literature emphasises:

- that constructivist pedagogy is appropriate for designing research learning programmes;
- that the site of work and the role of work is changing;
- that informal learning has taken a stronger position in the workplace;
- that individuals exercise more control over their learning;
- that learning takes place through active engagement;
- that reflective thinking and experience stimulates learning; and
- that workplace learning needs organisational support.

7.2.3 Chapter 6

I discuss the data that I offered in Chapter 5.

7.2.3.1 Initial design, evolution of the module

The data revealed that the initial design had overlooked critical elements that impacted heavily on the teaching and learning of research methodology. Firstly, the custodians of the

EDLP never anticipated that the success of the entire programme would rest on the success of the research module. Secondly, by not taking into account the varying qualification levels of EDLP delegates, the design only focused on complete novice researchers. Thirdly, the first version of the EDLP only made provision for a two-day research teaching component in which complete novices were expected to develop specific knowledge, skills and attitudes. Fourth, although the module content and allocated time were not enough to enable learners to get a full picture of research, their progress towards competence was measured on several levels. Fifth, the development of the first version of the EDLP resulted in an astonishing number of practical challenges for the trainers. Sixth, the custodians were not open to new ideas to improve the research module, and when suggestions were made, they were not considered. Eighth, the design of the programme did not allocate time for discussions of the operationalisation of research proposals in the workplace (Schwartz & Human 2012). Ninth, the most critical aspect, was the administrative process of the research module, but it was never given any consideration.

However, the research module evolved to its current form when the trainers adapted their teaching methods to accommodate learner needs. A slideshow was used to reduce learner anxiety and the trainers incorporated adult learning principles into the research model. In their approach, they created research building blocks that could facilitate understanding of research principles and processes. The first building block included the initial introduction of research as a science. The second building block, the ice-breaker assisted learners to discover the need for research to address work-related problems. Since the EDLP did not provide for a pre-course preparatory research workshop, the ice-breaker had to perform the role of introducing the concept of research in such a way that it would entice learners to use their logic and implicit knowledge to comment on the research that was presented in the activity. . It was also intended to assist learners to learn at their own pace. The third building block was designed to keep the learning experience realistic. Learners were asked to work on their own research topics and to reflect on their own workplace to keep the research project real and authentic. The fourth building block required diligence from the learners to read and practice self-study on aspects of research that were not covered during lectures. The last building block exposed learners to small group discussions on research methodology and debates on topics that required critical reading and thinking.

The module was also shaped by the changing organisational need to elevate research output and reports to an academic level and to use the findings to solve workplace problems. The initial idea was to introduce research methodology to SAPS senior managers. The second version of the EDLP commenced in 2010. It built onto the short research lecture of the first version to include an experiential learning exercise that made provision for a five-month research project in the learner's workplace. By 2011, the Division: HRD demanded better returns from the research module. Instead of merely introducing research to learners, the organisation suddenly expected the learners to solve real workplace problems by engaging in experiential learning in the workplace. The extension of teaching days also necessitated an amended assessment process (P8:14). The new assessment strategy required learners to compile a well-structured and academically sound research proposal at the end of phase one when learners' research proposals had to be submitted to a newly established HRD Research Committee. The involvement of the HRD Research Committee advanced the organisation's agenda to solve workplace problems through scientific research.

The practices of the trainers and other role players were changed to protect the credibility of the EDLP, the trainers and the reputation of the SAPS. The trainers tried to protect their own credibility when it seemed as if their learners' achievements reflected negatively on their research and teaching capabilities. Realising that the research reports were subjected to intense scrutiny and quality checks, the research trainers made sure the learners got more time to practice conducting electronic searches on the internet, using SAPS Intranet databases and visiting the SAPS Academy library. The trainers and administration clerks reflected on the challenges in the programme during their morning meetings and it was this reflective activity that created the space for learning. The team realised that they needed to file all the course documentation as evidence to protect themselves and the integrity of the EDLP. Research trainers also had to keep a record of which specific programme a learner attended before giving guidance or assessing the report. This was important because of the many changes in the assessment strategy.

7.2.3.2 Developing research delivery methods

(i) Experimenting with teaching methods

It is clear that the trainers were not aware of the various theories and perspectives of adult learning as advised by Yamnill and McLean (2001) or how to improve the transference of

learning into the workplace (CIPD 2008). Nevertheless, the delivery method of the research module developed over time as the trainers tried new ways of teaching the basics skills needed to do research. The process was slow and based on trial and error as well as on the outcome of the reflection meetings held by the training team. For instance, the first ever lecture was based on a slideshow of an introductory research methodology learner guide that served as a textbook. The trainers reflected on the teaching experience and developed an icebreaker that introduced research and prompted learners to think about it.

(ii) Reflecting on teaching methods.

In order to determine whether or not a new teaching method was successful, trainers had to wait until the end of the course before they could re-evaluate their methods. Regular informal meetings between the trainers were held to reflect on the success of their teaching methods and on what needed to be done to improve the effectiveness of their approach. Yet, what was really vital, was for them to understand the workplace as learning environment (Tynjälä 2008; Yamnill & McLean 2001).

(iii) Responding to real learner and organisational needs

The research delivery method was shaped by the trainers' response to the real needs of the learners, the changed needs of the organisation and the need to protect the integrity of the research module. The trainers' response reflects an understanding of adult learners who expect returns for their learning experiences (Walters & Koetsier 2006; Ezeokoli 2014). Unfortunately, the role players in the delivery of the research module did not comprehend the role of workplace learning in the organisation and this impacted negatively on the development of research skills (Torraco 1999; Billett et al. 2008).

(iv) Coincidental alignment of teaching practice to constructivist pedagogy.

The trainers adapted their teaching practice to such an extent that it compared remarkably well with the constructivist learning model proposed by Schober et al. (2006:74). The parallel features developed purely unintentionally. The constructivist model provides specific outcomes for learning which were all achieved as follows:

- Learners should gain factual knowledge by studying textbooks and journal articles - this aspect was demonstrated by the use of a learner guide, a workbook, several articles and hand-outs of relevant reading matter;

- Learners should gain competence through self-regulated learning that involves forethought, performance and self-reflection – the use of the research workbook facilitated reflective thoughts about the real situation at work to develop research topics that were based on authentic problems;
- Learners should develop collaborative learning abilities by working together in teams and through social integration, success and autonomy they will gain intrinsic motivation – small group discussions, debates, learning partners and one-on-one interviews with learners encouraged collaborative learning through variation; and
- Learners should gain e-competence since they will be working on electronic platforms throughout their studies – learners were taught computer skills, shown how to access literature at the SAPS Academy library and were given time to practice internet data searches.

Billett (2002b:56) explains that educational settings and workplaces can both be seen as places of learning. The trainers transformed their workplace into a site for learning by reflecting on how to improve the success of the learning programme. They developed and refined graphical representations of their research model and the administrative process to guide the research team towards a standard practice.

7.2.3.3 Role Player experiences

(i) Divergence in the workplace obstructs learning

Role players experienced the learners' workplaces as volatile learning environments, especially that of the SAPS which has become a testimony to the changing nature of workplaces today. Changes within the organisation cause divergence among its leaders which impacts on workplace learning. Learners do not know whether their new skills will be relevant or useful when there is no clear direction in the organisation. The uncertainty as to why research forms part of the EDLP surfaced in the decision making of the custodians who often disagreed about the design and delivery of the research module, while, at the same time, the workplace did not understand the demands of the research module. This became clear in the fluctuating levels of support for learners during their research projects.

Learners were often transferred to other work environments while they were working on their research projects. However, learners may not have accepted the new work environment as

their workplace if they did not agree with the transfer. Warhurst (2006:114) explains that the place of learning refers to a structure or entity where individuals feel they belong. Not being able to adapt to a new environment can therefore inhibit learning. The workplace is thus a personal and negotiated location (Malloch & Cairns 2010:4). The authors also argue that as work involves learning, it is much more than just the completion of tasks. Workplaces are unique with each presenting the learner with its own dynamics, but when the organisation is at odds about its own structures, it cannot be good for learning. This is a serious concern for the SAPS as the workplace often represents the only and most viable location for employees to learn and develop their vocational practice (Billett 2002b:57).

(ii) Negotiating learning in the disconnect between research expectations and trainer capacity

The perceived expectations of unfairness by learners stemmed from the limited capacity of the trainers in the SAPS Academy to teach and guide research, which left the learners on their own for the bulk of their fieldwork. While the two research trainers offered their assistance to the learners, they were overloaded with the volumes of research projects that needed guidance or assessment. Learners therefore had to wait long periods before they received direction on their research. In the absence of guidance from the study leaders, learners had to rely on support in the workplace, but the learners' commanders were often not acquainted with the subject itself and thus could not assist or guide learners. In addition, the commanders frequently did not support structured learning in the workplace. Both trainers and learners perceived the limited guidance offered to learners during their research projects as unfair given the high expectations of the learners' research output.

The expectation that learners could produce academic level scientific research reports was unrealistic for various reasons. Neither the trainers nor the learners had control over who would attend the EDLP and could thus not guarantee that a learner would be able to develop research skills. The reality is that most learners could not develop the foundational skills needed to do research. Several learners could not define their research problems in a statement. However, while having to deal with the vast amounts of research responsibilities of teaching, supervising and assessing research, the trainers also had to execute other responsibilities at the SAPS Academy. They were unable to keep up with the growing number of studies and, at the same time, spend more time with learners to improve the quality of the research output. The trainers' perception of the unrealistic expectations of their capacity also

relates to their struggle to get assistance from their colleagues at the SAPS Academy. This situation subsequently forced the trainers to clarify their roles as trainers and the learners as responsible adults who need to take responsibility for their own learning. The learners reacted in ways that were not pre-empted. Some learners submitted poorly written reports just to submit something.

Unfortunately, there is no guarantee that workers will learn what they have to learn, because learners construct knowledge based on what they know (cognitive experience) and what they have experienced (pre-mediate experience). Their learning is thus unpredictable (Billett 2011:13). While the trainer's perception is based on his or her experience and knowledge of the demands of the research module, the learners are ultimately exercising personal agency in terms of whether or not they want to learn and what they learn. This behaviour relates to what Billett and Choy (2013:270) call 'bounded agency', which refers to the means by which individuals use discretion to negotiate between what they are able to do and how they exercise agency in engaging with those boundaries (2013:270). In line with the authors' argument, the EDLP learners' behaviour is a personally determined boundary which they must cross in order to learn. While the learners learned to cope with the escalating demands of the research programme, they also learned to follow the technicalities of the research process without really learning to do research.

(iii) Informal learning is constructed through work.

The research module aimed to develop research skills in learners, but this was not the case for all learners. When they were promoted in the workplace, the learners demonstrated their willingness to learn from a combination of sources (Schwartz & Human 2012), yet they were reluctant to do the same for research. To this end, the most significant learning was that of the trainers who had to learn to teach research and that of the administrators who joined the trainers in their effort to promote the development of the EDLP learners. This phenomenon is in line with Jacobs and Park's (2009:141) assertion that informal learning does not occur from organised programmes only. The trainers had, for example, learned to develop building blocks for the research module to develop learners' research skills. The administration clerks learned to do the research administration, but they also learned the research process. As the research team, the trainers and administrators had to develop several mechanisms or instruments to ensure the integrity of the research module. For Armson and Whiteley (2010:410; Klass and Whiteley 2003), such interactive problem solving at work is indicative

of workplace learning. Other role players alluded to how they had to engage in further reading to broaden their understanding of research.

Learning also resulted from assessing different research proposals and through mentoring. P 8 explained how he mentored P4, and P6 mentored P7 at the Executive Centre. However, exposure to learning does not automatically result in learning. P4 and P3 explained how they followed up on lectures by reading additional literature after work. Mentoring, coaching, job rotation, job shadowing and workplace projects, are structured or sanctioned efforts to enable learning in the workplace (Marsick & Watkins 1997; Billett 2003). Yet, it could still be informal as in P4 and P7's case. However, it is only the active engagement in research activities that led to the construction of the new identities of P2, P5, P6, P7 and P8. P5, a police officer, began to see herself as an academic when she served on the research panels. P8, who is a trainer, also identified himself as an academic. The administrators became trainers at times. The trainers and the administrators worked as a training team, functioning as a community of practice. At the same time P5 learned in a community of practice i.e. the research panels.

Wenger (1998 in Dison 2007:71) posits the makeup of a community of practice as being a joint enterprise as understood and continually renegotiated by its members. The joint enterprise also contains relationships of mutual engagement which bind the members together in a social entity, and the capability of employing routines and vocabulary that it has produced over time. However, the data showed that access into a community of practice rests on the newcomer's initiative and engagement with invitational qualities in the workplace. While the training administrators accepted the trainers' invitation to become part of their meetings and teaching activities, the receptionists did not accept such invitations. The other trainers were invited to become part of the research team and they were afforded opportunities to mark research reports, but they learned informally that teaching research is hard work and that research takes up a lot of one's time and it needs commitment. The other trainers' awareness of the workload of the research trainers is indicative of the informal construction of tacit or unintentional knowledge as posited by Watkins and Marsick (292:234).

Informal learning is therefore constructed when trainers or role players actively engage in workplace or research activities, but this learning can remain dormant if the relevant affordances are not utilised. However, the trainers' pre-existing identities could also have

influenced their decision not to become part of the training team because this would not fit well with their police identities. The construction of new professional identities therefore depends on the pre-existing identities of the newcomers (Blåka & Filstad 2007:72). Yet, active engagement seems to play an important role in learning, both inside and outside communities of practice. P2 and P3, who were part of the HRD Research Committee, developed research skills even though the HRD Research Committee did not function as a community of practice. Of importance is the fact that role players constructed informal learning during the teaching of research. This phenomenon is supported by claims in the literature that informal learning is emerging strongly in the workplace.

- (iv) The research administration systems developed through problem-solving in a community of practice.

The design of the research module did not make provision for an administration system for the EDLP research. The course files, as prescribed by the Education, Training and Development Provisioning Practice Guidelines (2015-2017), did not prescribe the way in which research administration is to be dealt with. In the EDLP research module, the process developed over time as a result of the trainers' and administrators' need to store learners' information or to account for the history of a learner's research journey. That meant that the administrative process had to be accurate, efficient and reliable. The research team did not have this focus initially, but as the research module became more complicated, they worked more closely together and met frequently to discuss the status of the research model and its impact on the administrative process.

This administrative process had to be reviewed and improved by the research team on a regular basis. Torraco (1999:256) explicates that this is indicative of workplace learning as it is characterised by the solving of poorly defined problems, the collectiveness of workplace expertise and the absence of boundaries between work and learning. The research administration necessitated a variety of tasks related to the accurate capture of record information. In addition, the medium of communicating with learners had to be standardised in templates. All communication, especially feedback after reviews or assessments, had to be done in writing and in such a way that learners were guided and encouraged to continue with their studies.

In addition, the system of keeping learner records developed from an initial Excel spreadsheet to a well-developed research database, which could be verified against the Excel spreadsheet before it was captured on the official SAPS Training Administration System (TAS). The administrative tasks of the research module, as captured on a mind map, were an indicator of the standard research and administration process. This mind map also served as training instrument to explain the process to newcomers. Importantly, however, the clear definition of the research administration system by the research team developed due to three elements that are present in a community of practice, as explained by Li et al (2009). Firstly, the Executive Centre created the common ground and outlined the boundaries for the team members to decide what is worth sharing and how to do that. Secondly, the research team created the social structure that facilitated learning through its interaction and relationships with each other. Lastly, the practice of administrating research stipulated the shared repertoires of resources, which included documents, ideas, experiences, information, and ways of addressing recurring problems (Li et al. 2009).

(v) The police culture has an effect on workplace learning.

The SAPS controlled the research learning from the beginning to the end. The organisation wanted the learners to identify and solve workplace problems through research to ensure a return on its investment of developing senior police officers. Hodkinson et al (2004:21) proposed that when organisations embark on employee development, they must enhance workplace learning opportunities by creating more expansive learning environments that are in line with what learners' want, their needs and what they respond to. The learning opportunities that learners want should then be prioritised over those which management think they need, and power differentials and workplace inequalities should also be taken into account. This approach was not considered by the SAPS who gave instructions for the design of the learning programme and compelled police officers to attend it.

The EDLP is a rank-based programme that requires police officers of specific ranks to attend. This is typical of the police culture that dictates that police officers comply with an instruction first and complain about the unfairness later when the job is done. Although the police culture impacts heavily on workplace learning, it is merely a contributor to the conditions for learning as the learners engage with learning opportunities in terms of their existing abilities, personal agency, knowledge of the organisational culture and willingness to participate in learning affordances at work. While some learners attempted to do the research, others responded

negatively to the organisation's instruction to do research by colluding not to roll out their research proposals. In addition, the notion of classism manifests as soon as the learners start to do research in the workplace. The divide is between those that could and those that could not do research. Those attempting to do research therefore struggle to get support in the workplace. Due to the lower ranks of the research trainers, they were not taken seriously by the senior police officers when they discussed the expectations of the EDLP research. The learners also tried to take advantage of the trainers by submitting work that had been copied straight from the internet which led to a few learners being disciplined for their blatant disregard for others work.

A stronger link between cheating in research, blatant plagiarism, and corrupt activities in the workplace emerged when learners who had submitted heavily plagiarised reports, were arrested and suspended for corruption at their police stations a year later. Learning research required a differed mind-set the one that learners were used to in the police culture, which teaches police officers to act on instruction. Being in a position to issue instructions, senior police officers tend to delegate the reading work to juniors who should then present an executive summary of what was read. This habit challenged the learners when they had to read about concepts and research methods during their drafting of research proposals, because they could not or did not want to read the textbooks or additional literature. Participants explained that people never learn to think for themselves in SAPS and they wait till somebody else does the work for them.

The organisational structures also worked against each other. While the custodians of the EDLP research module insisted that the trainers improve the quality of the research output, the trainers experienced a fading interest from various other role players, including the custodians. The SAPS is however confronted by a dichotomy. By emphasising personal agency, one ascribes all the responsibility for learning to the learner, or the learner and his or her supervisor. By emphasising the social and organisational approach to workplace learning, all employees will be viewed collectively as groups of employees whose individual development will be similar. The police culture dictates the latter position, but from the trainers' position, the learner is left on his or her own during research, which indicates that the custodians and workplace approach learning from the former position.

(vi) The development of critical thinking skills needed for research

The learners were, in general, not able to think critically about their research problems because they were not able to read critically. The trainers' efforts to encourage learners to think critically about their topic, to approach it from different angles and to follow discourses about the topic in the available literature usually had the opposite effect on learners. When learners received feedback on their work that required them to put in more effort, they mentally withdrew from the learning experience. They were still part of the learner cohort, but in reality, they stopped working on their research. Senior police officers feel embarrassed to ask the trainers, who are their junior in rank, for guidance because it would expose their lack of understanding of the task. Learners who struggled to understand the research module easily blamed their childhood schooling system that had prevented them from learning to understand research. The trainers ignored such claims because the work that the learners were doing in the workplace demanded much more arduous thinking than that demanded by the research project.

To this end, Gosling and Moon (2001 in CHE 2011:19) provide the answer to the question of how to assist learners to develop research skills when they have not yet mastered critical thinking skills. The authors explain that workplace learning opportunities must provide concrete experiences in which learners can actively take part. This aspect requires more engagement than just observing an activity at work. Learners must be exposed to reflective observation, which requires them to experience and observe the particular elements of the activity, and later to reflect on and analyse those elements. Learners must go through a process of abstract conceptualisation in which they use inductive reasoning to analyse observations, explain them, and then formulate theories about their conclusions. In the final step, learners should be allowed to experiment actively with what they have learned by testing their theories or conceptions of new learning in the workplace.

In summary, the experiences of the role players indicated:

- that divergence in the workplace obstructs workplace learning;
- that participants negotiate learning in the disconnect between research expectations and trainer capacity;
- that informal learning is constructed through work;
- that the research administration systems developed through problem-solving in a community of practice;

- that the police culture has an effect on workplace learning; and
- that the development of the critical thinking skills is needed for research.

7.2.3.4 Lessons learned about learning in the workplace

Several lessons have been learned about learning in the workplace. These are:

- (i) The empirical data emphasise organisational readiness to support research as a form of workplace learning

There is a general misconception in the SAPS that research is something that is only done in academic circles and a failure to understand it as a mechanism for exploring phenomena in the workplace. Research methodology is therefore not seen as relevant to the executive development that police officers receive and is subsequently resisted. The organisation overestimated the capability of the SAPS to develop research skills, especially in the limited time given to learn the skill. This became clear when senior managers could not acquire critical skills needed for research, found it hard to formulate research problems and showed very little commitment to understanding research. The learners, although their attitudes towards research was negative, cannot really be blamed for their failure at research when the SAPS expected them to grasp in two to five days of lecturing what most adults learn in three to five years. The organisation was not ready to support learners in the workplace and the workplace did not allow time for the learners to prepare for fieldwork before they engaged in data collection. Reading and writing reports were supposed to be done in learners' private time.

- (ii) When learners feel unsupported, they develop coping mechanisms which stimulate the construction of unintentional learning

Very few senior police officers had the emotional intelligence to deal with personal setbacks such as experiencing failure during research. As a result, they were unprepared for the unsympathetic workplace where they conducted their fieldwork. To counter this, the trainers devised ways of strengthening the emotional intelligence of learners by exposing them to escalating levels of critical questioning in their feedback in formative assessments. This required learners to reflect on and manage feedback as part of the reinforcement needed to cope with the feedback on reviewed chapters later. The lack of willingness to try and understand research was regarded as a form of the learners' fear of research. Such learners

tried to deal with research in their own ways, with some conspiring before they left the SAPS Academy not to do the research while others tried to cope with the time constraints and expectation of better quality reports. Some learners completed their studies because they expected a promotion, others feared the embarrassment of not being successful and a larger group succumbed to study leader enquiries, the pressure of their commanders or Head Office threats that they repay the course fees. Trainers tried to cope with their workload by motivating each other during their coffee breaks, which were also used to reflect on the learners' progress. Both trainers and P7 shared their habit of reflecting on work problems at home as planning for the next day. This saved them the time they could spend on other tasks at work. However, with little support in the workplace, they withdrew from the SAPS Academy activities like sports days, meetings and parades.

(iii) Reflection surfaced as being prominent in workplace learning

Reflection was used during various activities of the design and teaching of the research methodology module of the EDLP. The activities in the research process were carved out by the trainers during regular mentoring meetings during which they reflected on the research module. Boud et al (1985:19) explain that such activities of reflection were 'the intermediate' that allowed the trainers to generate meaning from their experience. The authors explicate that three major processes are at play during reflective learning. These are based on the trainers' thoughts, feelings and actions before and after their teaching experience. The trainers' writings usually took the form of mind maps and illustrations of relationships between activities in the research teaching model. They subsequently developed a research model to identify the problem areas in the research module and to suggest ways of improving the model by reflecting on their experiences and the feedback of learners.

This reflective process was also used to develop a research administration map. Role players like P5 reflected extensively on experiences in the EDLP to know what to look for in the research panel assessments. P8 used reflection to determine the effectiveness of his initial research training session. This reflection helped him to develop new training methods for the research module which was used in class to help learners monitor their own progress. The trainers therefore adjusted their teaching model to incorporate one-on-one sessions with the learners in which they could explain their studies and reflect on their progress towards their proposals. The trainers also used reflection to summarise learner activities as a way of informing the HRD Research Committee of the trainers' and learners' efforts to develop

research proposals. By regularly reflecting on the research progress when the administrators and other support personnel were present, the trainers established good cooperation in the research team. The role players developed such a solid understanding of each other's way of operating that trainers could discuss their teaching approach while the administrators could clarify their knowledge of the research module. Reflection was overall a helpful activity in assessing their own capabilities and progress and gaps in the learning process. However, most of it took place on individual level.

(iv) Active participation is needed for learning to take place

Individuals learn when they actively take part in the learning opportunity. Affordances to learning opportunities do not necessarily result in learning even when the individual attends the afforded development intervention. However, it emerged from the data that individuals exercise agency when they decide whether or not to accept invitations to participate in learning activities that reside in groups or communities. Learning therefore needs a wilful and deliberate effort to engage with the learning activity to construct new knowledge. Being declared competent at the end of a structured learning programme is not enough to secure solid grounding of new knowledge. The new knowledge has to be carried into the workplace and practiced in real work situations to internalise the newly developed knowledge and skills. The learner therefore has to be a participant in the learning process. From a socio-constructivist view, the learning will take place in a social work setting where interaction with others forms a necessary part of the learning exercise. The learning can thus only take place if the learner is afforded the opportunity to apply the new skills in the workplace, and when he or she is supported while doing so.

An example from the data is where participant P4 acknowledged a research knowledge gap and subjected herself to being mentored over a period of time. P4 was willing to learn and got involved with the research module at every level. P4 supported her new knowledge by reading research literature and discussing her understanding of concepts with P8 on a regular basis. For Torracco (1999), the qualified co-worker holds the distributed expert knowledge in the workplace which the newcomer needs to find and access, to learn from. The data also revealed that when individuals work together in a community of practice, it is very difficult for other individuals to join such community. Much of this difficulty stems from the way in which the invitational encounters are presented or extended, although personal agency has its influence on the individual's decision to accept such invitation. Warhurst (2006:114)

explicates that membership of a community is an intrinsic condition for learning and that belonging to such a community results in participation in its practices at work. The administration clerks' experience portrayed positive engagement with learning affordances extended by the research team. This enabled P7 to gain a good idea of the research process while handling the research administration.

From a socio-cultural perspective, new learning will be developed when the culture, rules and social interaction between members of the community of practice do not obstruct the invitational qualities of the community. Newcomers need to discern the invitational opportunities, evaluate the qualities of the culture and workings of the community of practice and exercise judgement over the benefit of accepting such invitation to join. Learning takes place when the newcomer engages in the activities of the community with its other members. Automatic inclusion in such a community of practice does not necessarily result in learning as the individual will still exercise agency before taking part in the activities of the community practice. This became clear when the research team experienced the hesitation and unwillingness of the receptionists of the Executive Centre to get involved with the research activities. This is ascribed to the receptionists' feelings of not belonging at the Executive Centre.

Warhurst's (2006:115) study pointed out that employees who felt part of something, like the research team, demonstrated their belongingness to the group and place. The employees made a psychological connection with the workplace, as explained by Malloch and Cairns (2010:7). Yet, not everyone who was afforded the opportunity to learn really engaged with the practice thereof. The learners found themselves in the workplace where there were no communities of practice formed. It appears that the majority of learners struggled to engage in research while others did not commit to learning research methodology at all. It emerged from the data that those learners who engaged with the research literature, asked more questions in class, requested regular feedback and guidance from study leaders and generally did better in their research projects. The readiness to learn, willingness to learn and engagement to learn rested on learner agency.

- (v) Learning is very effective in communities of practice, but its culture may inhibit entrance of newcomers

In essence, there were three small groups of actors in the teaching of research. The first group was the research trainers and administrators who were involved with the learners from day one until the certification of the successful learners. The second group was the HRD Research Committee who dealt with the approval of research topics and proposals, and the third group constituted the research panels who consisted of three permanent members and one or two ad hoc members. Each of these three groups had its own way of working and learning. Billett (2004:119) asserts that the thinking and acting of individuals who form part of these three groups are influenced by the practices in their workplaces. The research team, responsible for teaching and administration, and the research panels operated as a community of practice. Regular meetings and open communication drew the actors in the setting together, to such extent that they developed their own way of doing things and their own processes and rules that were different to that of the main campus.

A sub-culture, which was closer to an academic setting, developed so strongly that it challenged the militaristic culture practiced at the main campus. This is a strong indication that the development of a community of practice is indeed an informal collective, which is defined by its members by the shared ways of working, their rules and ways of responding to research challenges resulting from their interpretation of events (Gherardi & Nikolini 2002). Vygotsky's Zone of Proximal Development, explains that employees extend their knowledge much further than independently possible when they learn from more experienced colleagues in the social setting where the work is done (Billett & Choy 2013:268). The data revealed several examples of how the participants extended their own knowledge by learning from another team member. Yet, Vygotskian views suggest that learning is largely dependent on the learner's agency and not on a reliance on expert partners (Billett & Choy 2013:268). The trainers' willingness to learn from each other enabled their construction of knowledge.

Participants explained how they participated willingly, even in their private time, and how they were guided in the way in which the research module was presented and how to align the administrative process with new development. This behaviour is consistent with Billett's (2001) view that it is through the individual's participation in activities, their intentional engagement in available learning opportunities, the guidance afforded in the workplace and the invitational qualities that influence how individuals learn and what they learn. The

administrators learned to work within the research team and to work together as administrative clerks, even though they actually worked for two different subsections. Research was not the administrators' core responsibility, but their commitment to it saw them engaging in training activities. In this case, the learning originated from their crossing of personal and workplace boundaries when they engaged in trainer activities to assist learners. Engestrøm (2001) refers to this aspect as 'multi-voicedness' as the learning occurred within activity systems and across boundaries where individuals face internal and external contradictions and tensions.

P6 and P7 confronted their responsibilities as administrative clerks and considered their experience and relations with the learners to cross into trainer roles which enabled them to further their own understanding of research in the SAPS. However, newcomers do not automatically become part of a community of practice. They evaluate their expectations and abilities to determine to what extent they can belong to and build relationships with established members of the community of practice (Blåka & Filstad 2007:72). Two scenarios indicated that newcomers' abilities, expectations and belongingness do affect their response to invitational gestures of established communities of practice, in this case the research team. In one scenario, the receptionists could not join the research team because of their job description and non-commitment to the workplace. The receptionists did not feel that they belonged there. In the other scenario, the Academy trainers had no intention of engaging with research even though they were afforded the research courses.

The Academy trainers' stance reiterated Billett and Choy's (2013:268) argument that even though the trainers were afforded opportunities to learn from experienced research trainers, their workplace learning depended on their level of interest, motivation and ability to learn. Being declared competent at the end of a learning intervention does not equate to competence in the application of such skill in the workplace. There has to be a wilful engagement with opportunities in the workplace to practice the newly acquired knowledge and skill. Therefore, gaining access into a community of practice rests on the newcomer's initiative and engagement with invitational qualities in the workplace and not necessarily the other way around. The trainers struggled to accept invitations to become part of the research team. A possible reason for this is that the research team, which was functioning as a community of practice with its own ways of doing things, appeared to be exclusive in their

practice. Hence the labelling of the Executive Centre, where the research team works, as an 'old age home' and an island on its own.

The research panels, consisting mostly of men, worked differently, but also as a community of practice. The conclusion that the research panels formed a community of practice is based on a few aspects posited by Wenger et al. (2002). Firstly, the domain created the common ground and outlined the boundaries for panellists to decide what is worth sharing and how to do that. The 'brotherhood' kept the functioning and repertoires of activities and the discussions of research presentations to themselves. Secondly, the research panel created the social structure that facilitated learning through interaction and relationships with others. The discussion of the research methods and research output of learners pulled the assessors (panellists) together. They learned from each other and created situations for homogeneity in which they respected and trusted each other.

Lastly, their practice stipulated the shared repertoires of resources, which included specific documents like presentation programmes, ideas, records of experiences (minutes), information, and ways of addressing recurring problems. These forms, like panel programmes, assessment feedback and minutes of the panel sittings serve as examples of the research panels' operations. But newcomers struggled to be accepted in the research panels. P5 became part of the panels by complying with an instruction from her seniors. She was not inducted into the activities and had to rely on her own previous panel presentation experience to get an idea of what she was supposed to do. P5 did not know how to listen and assess simultaneously, or whether her assessment was on par with the rest of the panel. Her difficulty in being accepted as member of the community could have resulted from her level of exposure to research and the fact that she did not have a Master's degree at the time. However, if P5 was viewed as an 'intruder' that could threaten the workings and culture of the research panel rather than a being a potential team member of the community, the research panels could be said to have become a clique.

(vi) The police culture and police identity obstruct learning in the workplace

The SAPS Academy is thus part of the learners' workplace for the duration of their contact sessions. Depending on where the research panels of the third phase of the EDLP take place, their research learning may extend to a third and temporary workplace that is removed from their everyday workplace. The learners will, as a result, experience different organisational

cultures and levels of support for their learning at each of these settings. Learning at the SAPS Academy depended on the individual's will to learn, but in their own workplaces were characterised by operational responsibilities and time constraints for learning. To this end, the first thing for EDLP learners to do was to learn how to learn when their time was occupied by several concurrent tasks, because they would have to face similar conditions when they did their research projects while continuing their everyday jobs. The strategy of getting learners to do several concurrent tasks or activities did not fit well with the older and slower learners as they struggled to cope with the amount of work, the complexity of research and the pace at which they had to learn. All they did learn was how to manage time and how to survive the demands of the EDLP institution phase. However, despite the agony of the intense first phase of the EDLP, there was ample support for the learners as the setting was closer to an academic culture than a police culture. Unfortunately, the design of the learning programme did not provide enough time for candidates to learn research methodology before they returned to a workplace where their police roles took over.

Back in their workplaces, the police identity of learners dictated the prioritisation of police work over that of learning. There was very little understanding by commanders of the peculiar position that EDLP learners found themselves in. The demand to meet targets of fighting crime were superseding the learning initiative by far. Developing research skills challenges the profile of a police officer. Police officers are selected and trained in a culture that emphasis compliance to instruction rather than allowing them discretion in their work. Further, work is strictly supervised, which leaves little room for debate or exploration of alternative methods of problem-solving. The police culture is based on standing orders, procedures, and rules. In SAPS, people never learn to think for themselves or argue about facts, because SAPS is such a disciplined environment. Work gets done upon instruction.

Doing research is different to following instructions. While research requires learners to read and compare, to think and reason about things, to understand and solve a problem, the learners' supervisors expect learners to follow their instructions in order to solve a problem in the way that their supervisors deem appropriate and adequate. The support in the workplace was poor in general. The learners' challenges with the workplace started with the selection of research topics, because those learners who had not been exposed to research before could not identify researchable topics and those who could identify a topic, struggled to get it approved. Regardless of these circumstances, the organisation demanded a good

return on its investment. Once in the workplace, learners were usually left to complete their projects without support or supervision. This situation was disadvantageous to the learners who relied on supervision and instruction to work. Subsequently, several learners did not complete their studies.

(vii) Products of informal, unintentional learning were more prominent than intended outcomes of the experiential learning in the workplace

The persistence of the custodians in including the research methodology module in the EDLP was not clearly understood. While their intention was to teach police officers how to conduct research in the workplace, the learners constructed other unintentional knowledge. For instance, learners had to devise alternative ways and means to execute the research projects through which they learned. The knowledge and skills developed at the SAPS Academy, was not really transferred to the workplace. Very little evidence was found that research skills were applied in the workplace or even that the findings that were made in the research projects were implemented in the workplace. The transference of research skills failed to occur because the practical application of theory in the workplace and the incorporation of research in their daily business depended on the foundational knowledge of research which was not adequately mastered by the bulk of the learners.

All the efforts of the trainers to keep the training methods close to the reality of the workplace were in vain because the learning transfer was hampered by a lack of collaboration and understanding in the workplace. Workplace learning needs understanding from commanders and collaboration by all role players to allow learners to practice research. The organisation's culture needs to be addressed to enable effective learning experiences for learners. Due to the course comprising part of the criteria for promotion, the learners used their experiential learning for career advancement and not for the betterment of policing in general. Participants could only refer to instances where they read documents critically and utilised arguments from the documents in meetings, or where they would consult other role players before making impulsive decisions. The other role players constructed knowledge by getting involved with the training activities. P7 learned through interaction with learners and experience of the training administration processes to provide additional support to learners. Through trial and error, P5 learned how to assess and guide learners effectively and to negotiate ways of becoming part of the research panel community of practice. P8 learned to deal with pressure and to rely on others' expertise because he became part of a dedicated research team that

functioned as a community of practice. P2 reinforced her research knowledge as a result of assessing the research proposals, and, with P3, the learning that resulted from reading more about specific methodologies encountered in proposals was utilised to assess research proposals with greater confidence. P4, due to her constant exposure to research literature, research supervision and informal interaction at work where research was discussed, could further her tertiary studies.

(viii) Deliberate actions to support the integration of learning into practice required Workplace learning needs a deliberate and structured approach if organisational needs are to be addressed. However, commanders in SAPS do not understand the research model and its purpose and therefore have not provided legitimate learning experiences. The integration of learning into the workplace was not well planned for, because the initial design indicated that the research module aimed to introduce the concept of research only as a problem-solving mechanism in the SAPS. Research was not intended to become a prioritised skill to address workplace problems. The offering of a research module as part of executive development did not sit well within the militaristic culture of the SAPS. The decision to solve problems in the workplace through research left quite a number of practical difficulties in the hands of the trainers. The research module was amended and developed into a very practical, real life approach as its aim was to keep the research project close to the reality of the workplace

In this teaching model, learners identified real problems in the workplace, developed their own research problem statements and then set objectives applicable to their own particular workplaces. Learners were prepared for research in the workplace and understood the concept of integrating learning into practice when they left the SAPS Academy. They were guided to reflect on the value of their study to keep them focused on solving real problems in the workplace. If their proposed solutions were effective in solving problems in the workplace, the organisation would be in a position to solve similar problems elsewhere just by sharing the findings. However, not much is known about the implementation of plans resulting from EDLP research and none of the reports have been placed in the SAPS libraries yet. The difficulty in using research skills in the workplace surfaced when learners argued that when they return to their workplaces - after completing phase one of the research module - they found it hard to communicate with their colleagues on an academic level. The learners therefore did not seek assistance at work, as there was no empathy with their learning. The

norm is that learners resume their responsibilities, which leaves no time for research. In the end, very little learning was integrated into the workplace, except for the informal learning that the actors at the Executive Centre integrated into their practice. This finding has implications for other organisations too.

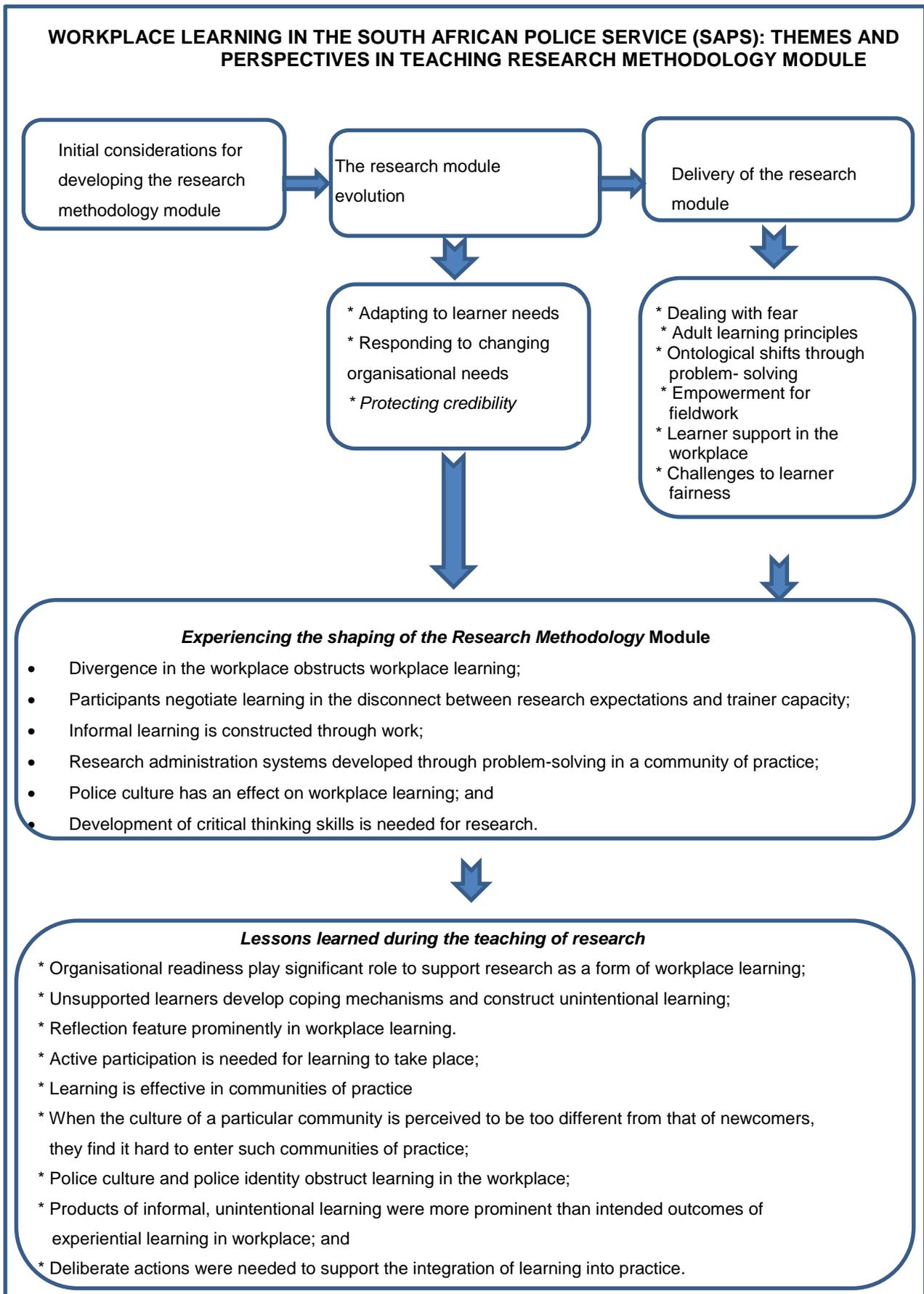
The lessons here also relate to how challenging it might be in other departments or law enforcement agencies to establish research as a legitimate and practical problem solving mechanism in the workplace. The effect of not supporting the development of research capabilities in the organisation might result in policing strategies and policies that are not scientifically researched. Bigger challenges such as policing regional crime syndicates and cross-border police operations depend on well researched intelligence and without building research based investigative and report writing capabilities. The study will therefore assist such organisations to develop a research model that will be supported in the workplace.

In summary, lessons learned were:

- The empirical data emphasised the significance of organisational readiness to support research as a form of workplace learning;
- When learners feel unsupported, they develop coping mechanisms which stimulate the construction of unintentional learning;
- Reflection surfaced as being prominent in workplace learning. However, the data confirmed that active participation is needed for learning to take place;
- Learning is very effective in communities of practice, but when the culture of a particular community is perceived to be too different from that of newcomers, they find it hard to enter such communities of practice;
- The police culture and police identity obstruct learning in the workplace;
- Products of informal, unintentional learning were more prominent than intended outcomes of experiential learning in workplace; and
- Deliberate actions were needed to support the integration of learning into practice.

Finally, before drawing conclusions, I illustrate the study and its findings in Figure 7.1.

Figure 7.1: Research findings



I offer my conclusions by responding to the research questions of the study.

7.3.1 First main question: how did SAPS learn to teach research methodology to its senior managers?

This research question has two sub-questions, which I address first, namely:

- How has the SAPS research methodology *module content* evolved since its inception to become of a notable standard?
- How has the *delivery method* of the Research Methodology Module developed to its current form?

7.3.1.1 How has the SAPS research methodology module content evolved since its inception to become of a notable standard?

Based on my empirical evidence and the consideration provided by the literature, I conclude that the research module evolution was inspired by the discovery of insufficient module content by the trainers. Consequently, the trainers' responded to learner needs, changing organisational demands and a dire effort to protect their integrity and the research module, they had shaped and improved.

7.3.1.2 How has the delivery method of the Research Methodology Module developed to its current form?

The delivery of the research module developed to its current form because of the trainers' experimentation with teaching methods as a way of finding the most effective method for both novices and more experienced learners. Reflection formed an integral part of both teaching and learning processes. The delivery method was a response to the real needs of the learners and the new expectations of the organisation. In addressing these needs, the trainers moved their practice closer to a constructivist approach to teaching. However, this alignment was coincidental.

Finally, I respond to the first main research question which is 'how did SAPS learn to teach research methodology to its senior managers?'

I conclude that the SAPS learned to teach research methodology by improving its initial research design to compensate for the initial module content shortfall. The module evolved because of the need to develop foundational research skills in learners and to align the supplementary module content with the escalated expectations of research output. The trainers learned to teach research methodology by experimenting with teaching methods and reflecting on their teaching methods. The trainers adapted their methods to accommodate the real learner and organisational needs. In order to standardise their approach, the trainers developed graphical research teaching models and research administration mind-maps to control effectively the quality of the research offering. The steps taken by the trainers to develop the training module and to improve their teaching methods, unintentionally transformed the research teaching model to become a representation of the constructivist pedagogy proposed by Schober et al (2006:74).

7.3.2 *Second main question: what workplace learning has taken place during the teaching of research methodology in SAPS?*

As indicated earlier in this study, the question had four sub-questions. However, during data analysis I realised that the third sub-question was addressed by the first two sub-questions. I subsequently answer the first two sub-questions only as they will address the lessons and experiences of the trainers that comprise the answer of the third sub-question. Similarly, the responses of the fourth question that focuses on the workplace learning of the learners who attended the research methodology module are intertwined in the responses of the other questions, in particular question 2.

Sub-questions:

- What were the experiences of those involved in the shaping of the Research Methodology Module of the SAPS?
- What lessons have been learnt in the process of teaching Research Methodology to senior police officers?
- What were the experiences of SAPS lecturers in supervising learners in their research?
- What has been learned by the senior police officers who attended the research methodology module of the EDLP during their research projects?

7.3.2.1 What were the experiences of those involved in the shaping of the research methodology module of the SAPS?

Role players experienced divergence in the workplace that obstructed workplace learning. The role players in the research module experienced both positive and negative aspects of learning in the workplace. The way that the organisation operates constituted an underestimated challenge to workplace learning. Key individuals and structures in the SAPS did not combine well together to enable workplace learning. Instead of addressing the challenges, the custodians expected more from an already overloaded research team even when it was clear that they could not do more.

The expectation of solving real workplace problems seemed to be the best approach for developing research skills, but this expectation was perceived to be unrealistic by the trainers and unfair by the learners. Neither the trainers, nor the learners had control over who would attend the learning programme, which meant that learners who had no interest in research or had no capacity to develop research skills and/or saw no need for such skills were compelled to learn to do research. While the trainers tried their best to adapt their teaching methods to improve their effectiveness, the learners responded by going through the motions without being engaged. The commanders in the workplace could not understand the demands of the research process and this caused the learners to construct alternative unintended and sometimes undesirable learning procedures.

Some learners submitted poorly written reports just to submit something. Others attempted to cheat the research process by submitting heavily plagiarised reports. These examples indicated that much informal learning was constructed through work while the participants were involved with activities of applying research principles. The extent of informal learning was much more evident than the intended workplace learning. To this end, the trainers learned to teach research methodology and the research team developed a research administration system by using problem-solving techniques. However, the police culture has an effect on workplace learning, not entirely, but mostly, negative. Role players experienced that the SAPS is not ready for learning in the workplace and that operational demands will always take priority over learning.

Learners generally struggled to get support in the workplace, mainly because of ignorance about research and because of the development of classism between those that could do research and those that could not. Another serious concern for the organisation's aspiration to develop research skills materialised in the seeming inability of senior police officers to think critically, define problems clearly and to argue or debate issues based on facts. The majority of operational learners could not develop these critical skills because of the difficulty they had in reading and critically reflecting on what they had read. Other professionals, for example legal experts, did not experience such problems at all as the discipline forms an integral part of their profession. The lack of development of critical thinking skills could be a result of the police culture that requires police officers to follow instruction rather than debating issues, but I argue that this is a matter of personal attitude and the willingness to learn.

7.3.2.2 Which lessons were learnt in the process of teaching research methodology to senior police officers?

Based on the findings of the study, I conclude that several valuable lessons have been learned about learning in the workplace. A critical matter is the fact that the organisation is not ready to support research as a form of workplace learning, because it does not comprehend the concept of research and does not yet recognise the value of informal workplace learning. As a result, the SAPS struggles to support its senior managers' learning in the workplace. Learners are simply not afforded the opportunity to work on their research projects even though they have been granted time in the workplace for their projects. When learners feel unsupported, they develop coping mechanisms that stimulate the construction of unintentional learning such as submitting blatantly plagiarised research reports. This is a serious concern as such undesirable learning could be indicative of corrupt activities in the workplace, as has happened recently. It was therefore not a surprise to learn that informal, unintentional learning was more prominent than intended learning in workplace.

There was very little evidence that learners really transferred research skills into their practice. When learners had completed their studies, they found no support when trying to implement the proposed solutions to problems. This aspect further indicates that the organisation is not ready for research as a problem-solving mechanism and finds it hard to make sense of learning in the workplace. As was evident in the experiences of the role players, reflection as it was practiced by learners, trainers, research panel members and

administrators, also surfaced as being prominent in workplace learning. Perhaps the most important lesson for the organisation to learn from this is that active participation in workplace activities precipitates learning. Even if there is no evidence of a group, team or community of practice in the workplace, the individual learner exercises agency over his or her learning to decide whether to learn.

Being afforded a classroom learning experience does not equate to learning in the full sense of the word. Knowledge needs to be applied before it has meaning. Several trainers were afforded research courses, but none of them engaged with opportunities to apply their knowledge. These trainers have not learned any more than they heard in the classroom. Learners who were involved in group research activities, such as the HRD Research Committee, developed skills that they could apply when they assessed research proposals. To this end, the findings indicated that learning is indeed most effective when constructed in communities of practice, but when the culture of such community is perceived to be too different from that of newcomers, they find it hard to enter. As a result of the way in which the training team operated, the trainers could not engage with the invitational qualities of the community of practice.

The research team operated more academically than the SAPS Academy's trainers who functioned in a militaristic police culture. These were two conflicting cultures. The police culture and police identity emerged as an impediment to workplace learning to such an extent that deliberate actions to support the integration of learning into practice were needed. The police culture is based on rules and compliance to rules, regulations and instruction, whereas research requires one to challenge the status quo, to make ontological shifts in the way problems are solved, to debate issues and to be critical. These qualities do not fit well within the police culture. However, I also conclude that communities of practice could become counter-productive when they develop a sub-cultures that are stronger than the organisational culture. This was clearly the case with the research team.

In conclusion, the strong sub-culture of the research team became exclusively academic in nature, which differed strongly from the SAPS Academy trainers' police culture. As a result, the research trainers could not increase their capacity, which left them overloaded with research and the learners under-supervised. The coerced inclusion of a person to function in a community of practice also results in the non-sharing of the practices of the community.

This was evident in the research panels where newcomers were instructed to join the community as assessors. The existing members adopted a protective mode to keep the culture and practices intact.

7.4 RECOMMENDATIONS

In view of my conclusions, I offer recommendations in terms of the module development, the teaching practices and the workplace readiness for workplace learning. I address these as implications for the SAPS as organisation, i.e. The Division: HRD, the SAPS Academy, the research trainers and other role players. My recommendations are, as Yanow (2000:6) asserts, not free from my own values, beliefs and feelings, even though I attempted to be as objective as possible. To this end, it is not possible for me to stand as spectator outside the policies of the organisation. I am involved in the shaping thereof and as such, offer the following:

7.4.1 National and Public Service Level

Recommendation 1

On a national level, and with reference to South Africa's agreement with other BRICS partners, its role in Southern African Developing Economic Community (SADEC) and its participation in Southern Africa Regional Police Chiefs Cooperation Organisation (SARPCCO), the study offers the lessons learned in developing employees, especially those who have been educationally marginalised through war, politics, and broken school systems. The study has revealed that it is possible to teach research at an acceptable standard to employees who entered the workplace marginalised. The study has indicated that when employees are not supervised in their learning at work, they will develop skills that are not supporting the strategy of the organisation. Organisations such as SARPCCO and cooperatives of SADEC and BRICS can learn from this study and capitalise on the benefits of workplace learning to develop critical skills needed to grow their economies, to implement research as a reliable problem-solving mechanism in a way that benefits employees and citizens alike, especially when employed in policing contexts.

The SAPS has done the groundwork for developing a model for teaching research to senior managers. This model was developed over time and was funded by public funds. There is no need for other departments within South Africa to go through the same process again. This study has provided the opportunity to study the research module development and its transformation. It explored the teaching methods and subsequent learning to develop an improved model for teaching research in the government sector. The model incorporates the appropriate workplace learning practices and constructivist pedagogy to ensure a return on investment. The model, offered at the end of chapter 6, incorporates constructivist pedagogies that take andragogy into account. Having gained vast experience in developing research skills among well-educated and previously marginalised employees in a government department, many lessons have been learned in terms of what works and which aspects proved to be challenging.

7.4.2 SAPS

Recommendation 2

Based on the importance of organisational readiness to support research as form of workplace learning and the divergence in the workplace that obstructs learning from research, I concluded that deliberate actions which support the integration of learning into practice are needed. This implies that the workplace must be informed of the importance of workplace learning and of the contribution it could make to employees to develop skills which remain relevant in the organisation. The current practice of posting the Guidelines on Workplace Learning Programme in the SAPS (2013-2015) on the SAPS intranet is not enough to market the organisation's position on learning in the workplace. More has to be done to educate commanders, HR Heads, supervisors and employees of the existence and content of the workplace learning guidelines. However, policy makers should expand the definition of workplace learning to include experiential learning such as the EDLP research implementation because informal learning still requires a study leader that functions in a manner similar to a mentor. If this is not done, much of the intended learning of structured programmes will be lost or replaced by undesirable and unintended learning. Reviewing the Guidelines on Workplace Learning Programme in the SAPS (2013-2015) to include experiential learning will ensure better return on investment and facilitate more support for research in the workplace.

Recommendation 3

I concluded that informal learning is constructed through work and that products of informal, unintentional learning were more prominent than intended outcomes. Also, that employees will construct unintentional knowledge when they develop coping mechanisms in the absence of support from supervisors and workplace experts. Employees will therefore learn while working, whether deliberate or not, to survive in changing workplaces. With SAPS comprising heavily supervised workplaces with its own culture of command and control, commanders have to ensure proper supervision for employees to construct appropriate knowledge from which the workplace can benefit. The development of appropriate knowledge and skills, therefore, depends on access to supervised expertise. The organisation can control workplace learning by exposing newcomers to legitimate and authentic opportunities to learn, but this should be under supervision to avoid the construction of inappropriate skills. Structured approaches such as mentorship (covered in the Guidelines on Workplace Learning Programme in the SAPS) (2013-2015), should become part of the organisation's everyday learning practice. Such practice should incorporate reflection and problem solving. To this end, I refer the policy makers to the contribution of Vaughn (2008:14) who asserts that the structure of the workplace, its goals, immediate workplace conditions and workers should be considered before embarking on a specific workplace learning pedagogy. She lists these as the socio-cognitive demands that include (1) task complexity and the skills needed to perform such tasks; (2) the socio-interactional requirements that focus on whether or not there is a need to work in and interact with teams; (3) the importance of the job in the organisation which centres on the impact of a task on the larger work processes; (4) the organisation, and the prestige it bestows on the worker; and (5) the access characteristics of knowledge, referring to where the knowledge is located, what the individual needs to understand, and whether or not that individual is permitted to have access to it (Vaughn 2008:14).

Recommendation 4

I concluded that learning is very effective in communities of practice, but when the culture of such a community is perceived to be too different from that of newcomers, they find it hard to enter that community. This is particularly relevant to specialised units within the SAPS where the development of sub-cultures within the communities of practice could steer members away from the police culture and identity. Such conflicting sub-cultures might become counter-productive. To this end, I recommend that the formation of communities of practice

in supportive, specialised and professional environments should be encouraged for productivity and learning, and controlled to avoid exclusivity and clique forming. The formation of communities of practice in operational environments where the police culture and identity are constantly reinforced and operate homogeneously should be encouraged, but this has to be done in collaboration with the Division: HRD to monitor the productivity, culture development and type of learning that is constructed. The Division: HRD has to ensure that working in communities provides access to experts.

Recommendation 5

The SAPS has to get clarity on its intentions with regard to the research output. Making research reports available in libraries for others to read is not enough. As public money is used to fund research problems in SAPS, the implementation of proposed solutions needs closer monitoring to ensure an acceptable return on investment. I recommend an extension to the existing EDLP research module, as offered in Chapter 6, to manage the return on research better.

7.4.3 DIVISION: HRD

Recommendation 6

I concluded in this study that whilst development of critical thinking skills is needed for research, such learning is dependent on the active participation of the learner. It was evident in the study that the development of such skills is relevant for SAPS police officers, but they tend to associate these only with research, which they fear. These skills should be taught to entry-level constables initially, to enable them to think critically before they act. It is a skill that is not limited to research. It relates to how police officers reason. Starting at younger ages to develop critical thinking skills will secure a better calibre senior manager in future. Learning programmes should therefore be revised to ensure that enough activities are built into the design to enable critical thinking and encourage ontological shifts. Police officers should be taught to think critically even if it seems to conflict with their police identities and culture of 'just following instruction'.

Recommendation 7

The police culture has such a strong effect on workplace learning that it tends to obstruct learning. Learning programmes that contain an experiential learning element should be

reconsidered as the organisation has difficulty supporting learners in such experiential learning phases. Learners should either remain learners for the full duration of the learning programme or the experiential part should be omitted. The extent to which the organisation inflicts learning injuries such as the embarrassment of not being able to complete the programme, is a concern. Older learners hardly recover from such embarrassment and the impact on their careers is devastating. The organisation has to prepare the workplace for support of the learners should it wish to provide structured learning programmes in the workplace. In this case, case workplace learning facilitators should be identified and tasked with managing experiential learning programmes.

Recommendation 8

The design of the EDLP research module should be reviewed to update learning material and to incorporate constructivist methodologies for teaching research. I recommend the amended three-part research model as proposed in Chapter 6. The model provides for a research pre-course phase which prepares both learners and their commanders for the research module. It also provides for a post-course phase to provide clarity for dealing with the research output. The model incorporates the pedagogical practices as suggested by Billett and Choy (2013:271) to improve the quality of workplace learning. I mention these:

- First, before entering the workplace learners need to be orientated on the requirements of engaging effectively in the workplace, should be made aware of the expectations of what they have to learn and should understand the means of that learning. In this regard, it would be preferable to meet with EDLP learners before they report for the intervention in Paarl to explain what will be expected of them;
- Second, learners need to possess certain capacities to undertake the activities that they could reasonably be expected to master. In the EDLP learners' case, this may result in a very low number of qualifying learners. However, because the learning programme is rank-based and compulsory for senior police officers, the SAPS might have some difficulty accepting this practice;
- Third, the expectations surrounding the purpose of support during the learning process and the roles and responsibilities of other parties in the workplace require clarification. This implies that the learners' commanders should also attend some form of preparatory session to brief them on their role during learning;
- Fourth, learners, being dependent and interdependent in the workplace, should understand their own roles and responsibilities as their learning is self-directed. Their

observations, engagements and interaction should contribute to their learning. Learners will have to become aware of the roles that personal agency, groups, culture and boundaries can play in the success of their learning; and

- Fifth, learners need to be prepared for circumstances where their encounters are unpleasant or confrontational in order for them to manage these situations for their own well-being and sense of self (Billett & Choy 2013:272).

7.4.4. SAPS Academy Paarl

Recommendation 9

The existing research capacity is not enough to sustain the demands of the organisation in terms of the expected research output. It is recommended that the SAPS Academy extend the capacity of the research team to include developing researchers of the Academy. Based on their reluctance to accept invitations by the research team to participate in the research teaching and their apparent reliance on their police identities, I recommend that the Training Manager instruct that they be involved. That is what the trainers will understand in a police culture. Such instruction will coerce the trainers to apply their theoretical knowledge of research, which, if personal agency permits, will help them to overcome their fear of research. Further construction of professional research identities will only commence once the trainers' involvement and active participation has been closely monitored.

Recommendation 10

In view of the research team's effort to develop a research model and research administration map to clarify the steps in the research and research administration process, it is recommended that the research administration process be developed as a standard operating procedure for the SAPS Academy. Documents should be standardised and checklists for research files should be developed to track the progress of each learner's research. This process should then become the training provisioning administrator's guide for undertaking referral, guidance, training and evaluation. Moreover, the process should be steered by the SAPS Academy's Monitoring and Evaluation Section to assure quality from the start.

7.5 AVENUES FOR FURTHER RESEARCH

The study has indicated the need for further research into the influence of sub-cultures and identity construction in communities of practice and on employee entrance into such communities. Whereas the existence of communities of practice was found to have advantages for learning for some participants, others found it difficult to enter such communities due to the incompatibility of the sub-culture with the organisational culture. In another community of practice, the existing members protected the status quo and access to information when a newcomer was instructed by a senior officer to enter the group. Both these instances occurred in a militaristic environment where authority lies with the highest-ranking police officer. In the research team, in which rank did not play a role in the culture of the community of practice, there were several examples of workplace learning resulting from a learners' engagement with learning affordances. In the research panels, rank played an important role, with newcomers struggling to engage with learning opportunities as the existing members exercised the established police culture of guarding the status quo. The phenomenon of developing sub-cultures in communities of practice should thus be researched further to determine its influence on performance within the community of practice, and outside such community.

The study also indicated that the site of learning is not necessarily at the physical location as participants indicated that they often reflected on the challenges of the workplace when they were at home. These moments occurred at odd times, for example, when they woke up during the night, when they showered before getting dressed for work, or when they watched television. Such reflection normally deals with ways of addressing a particular problem for which there was no guidance in the workplace. It is established in the literature that the boundaries between work and home are blurry and that the place of work is changing, but the extent to which informal learning takes place after work when employees try to make sense of workplace occurrences, needs further exploration.

7.6 LIMITATIONS OF THE STUDY

The study provided insights into the development and transformation of the research module of the EDLP of SAPS. The participants, although limited in number, covered all aspects of all

the role players in the current research-teaching model. The study is unique to the SAPS as it functions in a militaristic fashion. While it might be informative for other organisations or departments, the lessons learned in this study are based on the experiences of learners in a heavily supervised police culture. The proposed model could therefore serve as benchmark for other government departments or interested parties, but care must be taken to view the participants' responses in a police context. The findings can, as a result, not be generalised to any environment.

Further, the study focused on the organisational culture and the formation of sub-cultures in the workplace. This was due to limited representation of racial groups in the target population working at the Executive Centre. Diversity, ethnicity and gender could only be addressed through inclusion of more learners of the EDLP, which might have tilted the focus of the study towards the learners and not the development of the research model. Individual culture, gender and ethnicity therefore played a lesser role in this study. The findings may subsequently not advance issues of culture or gender in education in other government departments, in South Africa or even Africa, but it will highlight the challenges associated with establishing a research culture in workplaces. Further study, over a longer period of time, needs to be conducted in a setting where a more diverse group of employees learn and teach research.

Another limitation might be that the custodians of the EDLP and research module did not accept the invitations to participate in the study, which prompted me to interview other participants who worked closely with them. The view of top management about the EDLP research is, therefore, based on the experiences of other participants. This may limit the portrayal of the leaderships' efforts to advance workplace learning.

7.7 THE 'GOODNESS' OF THE STUDY

In offering my concluding remarks, I am reminded by Schurink (2004:3), that assessing qualitative research is challenging. Quality criteria should be considered right from the onset. While offering my reflection, I note that that my study is part of my doctoral research, and that it is not possible to mention every decision taken during the study. I therefore offer the most

important considerations in terms of assessing the study's quality and on the key contributions in par.7.8. In line with my ethnographic research strategy,

7.7.1 Reflexivity

Looking back at what I have done in this study, and how I have done it, I realise that my study could easily have been a very subjective narrative of the evolution of the EDLP research module. Yet, I remember how cautious I was not to let the intersubjective dynamics between the participants and I influence the study. My awareness of my own social background, assumptions, positioning and behaviour could have influenced key decisions during the study. Hence my use of reflexivity to identify and interrogate my personal and professional practices. I therefore offer my personal account of the course of the study to highlight the 'goodness' of the study. To this end, Bogden and Biklen (2003:114) point out that personal reflections and notes such as those I made during the study, could be helpful in this regard. The authors argue that qualitative researchers know that their level of understanding and reflection is not free from some or other influence when they construct research outcomes like field notes and memos. Qualitative researchers therefore offer their personal accounts during reflection:

...you record the more subjective side of your journey. The emphasis is on speculation, feelings, problems, ideas, hunches, impressions, and prejudices... the expectation is that you let it all hang out: Confess your mistakes, your inadequacies, your prejudices, your likes and dislikes...

In qualitative studies, researchers'

goal is to purposefully take into account who they are and how they think, what actually went on in the course of the study, and where their ideas come from...
(Bogden & Biklen 2003:114)

In reflection, I realise that data collection did not really go according to plan. I still made basic errors during interviews, because I tended to use body language to indicate that I understood what the participant was saying, but later when I listened to the recording, I needed to rely on my memory to make notes to explain what I experienced during the interview. In some cases,

I had to conduct a short follow-up interview or spend more time with a participant to validate my interpretations. I still need to improve my listening skills and let the participants say what they want to say. However, in some instances I had to use an unstructured interview approach to focus on the crux of the matter as the participants' time was limited. This might have been their excuse to save time, because they might have been trying to avoid a lengthy interview, especially since I had given them the interview schedule a day before the interviews. However, I must admit that although I had planned my study very carefully, very little of it materialised. I had to be flexible in my approach to interview participants when they were available. In between interviews, I engaged in observations about the interpersonal relationships of actors in the setting, but I could not make any observations about the trainers' and administrators' interaction with learners until early in 2016 when the learners returned to the SAPS Academy. However, during quieter moments, I studied and analysed police documents related to the research module. What worked well for me was that I could reflect on the history of the research module when I read the official reports and other internal communication.

7.7.2 Peer debriefing

This was an interesting experience as I was in a fortunate position of being able to do a study that coincides with my research colleague's doctoral study. Although we both focus on the EDLP research, we approached it from different angles. This made it easy to discuss my interpretation of data with her. We could also pace ourselves according to our Academy's annual training plan. This kept us motivated and encouraged us to continue with the study for two reasons. Firstly, we were not alone in this and secondly, we could relate our findings to each other's studies. Having insider knowledge assisted my colleague to understand the points I was arguing and why I did so. However, I also made a point of discussing my study with learners who were not part of the study to determine whether my interpretations of their experiences were correct. Lastly, I asked my wife to listen to my interpretations of data from an outsider's perspective to assess the logic of my reasoning.

7.7.3 Audit trail, credibility and dependability

Apart from my notes, I realised that I could scan my documents onto my laptop computer and analyse them from there. It made the timeline of my study so much easier as I could refer to

the data from which the document was created to generate an audit trail. I captured the natural history of the study by making calendar entries on my Microsoft Outlook diary. Daymond and Holloway (2002) argue that such a trail should start at the beginning stages and capture the key decisions that could influence the course of the study. The emphasis should be on the context of entries. In this regard, I found it easier to make my notes about the time, date and circumstances on the first page of the document that I was working with. The audit trail will serve as evidence of the credibility and dependability of my findings.

7.7.4 Authenticity

In terms of authenticity, as explained by Bryman (2012:393), I am convinced that my study represents the viewpoints of the various role players in the research module and is fair in its representation. Role players who participated in the study have gained a better understanding of their contribution to research and of their experiences in the teaching of the module. This relates to the study's ontological authenticity. In terms of educative authenticity, I am sure that at the very least the research team and the research panel members have gained an understanding of other participants' perspectives. I am however, hesitant to say that all participants have expressed their intention to improve their circumstances relating to the research module. I am certain of at least the research team's desire to improve their circumstances relating to the catalytic authenticity of the study. Lastly, the study has prompted the trainers to take action to build research trainer capacity at the Academy (Bryman 2012:393).

7.7.5 Transferability

It is the researcher's role to help the reader to transfer the specific knowledge gained in the study to other settings (Daymon & Holloway 2002:93). To this end, and considering the concept of transferability in relation to theory-based generalisability, I have managed to explain the experiences and perceptions of participants to such an extent that readers would be able to associate the experiences with other work environments in the SAPS. However, by developing a model that could guide other institutions and policy makers in their institutionalisation of research modules, I facilitated a way of transferring the constructed new knowledge to cross over into non-militaristic environments. This was possible even though

the research sample was small, because it represented the full spectrum of the research activities of the SAPS EDLP research module.

7.8 CONCLUDING REMARKS

In offering my concluding remarks, I return to the objectives of the study to determine whether I adequately achieved them. I set out to describe and explain how the EDLP trainers developed, presented and implemented research methodology for senior police managers in a training academy of the SAPS. I wanted to understand and explain how the SAPS research methodology came into existence and how the EDLP trainers developed the content of the research methodology module from its beginnings to its current form. Secondly, I wanted to capture the workplace learning that was taking place as well as recording the history of the existence of the SAPS EDLP research module.

I am comfortable that I have addressed these objectives by providing the essence of the history of the SAPS research module development and evolution, even though this study was not offered as an historical narrative. Further, I have recorded the participants' experiences of the research module and the learning that took place. Moreover, I managed to uncover the ways in which the participants constructed knowledge. I therefore believe that the study contributes to both social science theory and methodology.

7.8.1 Theoretical contributions

The findings of this study are inductively derived from observations, documents and interviews with participants. I offered lengthy descriptions and deliberations on the participants' views and experiences. I was able to relate this empirical data to concepts and constructs extracted from the literature. The empirical findings prompted me to explore additional literature on workplace learning and this literature assisted me to improve the research model that the research trainers had used over the years. The existing model was conceptualised and developed by me, but it represented the way in which the custodians of the EDLP directed the delivery of the research module. Minor improvements were made through the trainers' reflection on the model. The new three-step model, encapsulates the

principles of workplace learning and of constructivist learning pedagogy. Both are needed to transfer learning effectively into the practice of police officers. The three-step research model provides educators the opportunity to get to know the diversity of the learners pertaining to language, culture and ethnicity in a pre-course workshop. These aspects and the application of andragogy will help educators to adjust their pedagogy to suit the learner and to prepare learners for their learning journeys, facilitate support from supervisors in the workplace and place the ownership for learning in the hands of the learner. A post-course session will benefit the organisation in measuring return on investment on the one hand, and evaluate the application of knowledge and skills gained during the training intervention.

The study provides some insights into the experiences of the trainers' who teach research methodology in SAPS. To some extent, the study provides a response to February et al.'s (2010:972) assertion that very little is known about those who teach students and what these lecturers' experiences and insights are in relation to the provision of quality teaching and learning. The study also contributes to Hutchins' (2013:22) experience of moving between roles during her teaching of aspiring researchers, by pointing out the commonalities in research lecturer practices. Further, this study added to the depth of the research teachers' experiences of adapting their teaching approaches to the needs of the learners as alluded to by Jenkins's (2011:79). Moreover, the trainers learned how to cope with work overload by putting the responsibility for learning back in the hands of the learner. This important aspect emphasises a firm grasp of adult learning theories.

The study contributes to the body of knowledge that holds that learning in the workplace is mostly informal and, as Billett (2004:119) argues, is influenced by practices in the workplace. In addition, the study highlights how learning is constructed in communities of practice and through active participation in learning affordances. This study therefore confirms Billett's (2004:318) argument that participation in work practices is based on the invitational qualities of a workplace, which are influenced by factors associated with norms and practices in the workplace (Billett 2004:318). To this end, the study uncovered new insights into the barriers that prevent entry into communities of practice in police environments where culture obstructs learning.

7.8.2 Methodology

In this study and to some extent, I built onto the work of Humphreys (2006) who conducted an autoethnographic study as an account of his own parallel experiences of teaching qualitative research methods. I contributed to Humphreys work by including an autoethnographic essay in this ethnographic work, as part of the narrative told by several actors and documents.

This move may find support in Tedlock's (2000:464) assertion that recent ethnographic works have moved away from the 'objective' observer who lived in a society for a prolonged period of time, and from being emotionally involved and objectively detached, to being more open to subjective first person accounts of their own and others' experiences (Tedlock 2000:464). To this end, I shared freely my experiences and accounts of teaching research in the SAPS in an autoethnographic essay. The study's value is embedded in the elaborate ethnographic explanations of the participants' encounters with research, observations of their interactions in the setting, and records of the history of the research module. The reader can get a realistic feel for the social context of the work environment and culture within which the research is presented. The study thus strengthens Tedlock's argument for the inclusion of a subjective first person account.

Closer to home, I strengthened the argument of Dison (2007) that social constructivist and socially situated or socio-cultural approaches to learning and knowledge are appropriate for studying workplace learning. In particular, by exploring workplace learning from a constructivist point of view, I was able to determine that personal agency plays a major role in learning and from a socio-cultural point of view, I was able to determine how learners engage with learning affordances in a community of practice.

7.8.3 Practical value

The study offers recommendations to SAPS to improve the effectiveness of learning programmes that require learners to learn while working. One of these recommendations is to consider the implementation of the new three-step research model that I introduced in Chapter 6. Several of the theories that I discussed in Chapter 2, find relevance in the three-step research model. For instance, the pre-course phase provides for the introductory

research module and the use of research skill building blocks to move from known to unknown learning content. The learning is kept realistic to assist learners in realising the need for learning research. The literature in Chapter 2 mostly found its application in the proposed structure of the new three-step research-teaching model. Moreover, the theory of workplace learning and its proposed models have been incorporated in the approach to constructing knowledge in the workplace. This consideration was based on the uncovering of problems with learning in the SAPS work environments.

This study is the first of its kind in the SAPS, but it builds onto the earlier work of Schwartz and Human (2012) who studied how to improve the low submission rates of EDLP learners' research. It not only captured real experiences and observations, but it also provided insights into the way that informal learning in SAPS is constructed in experiential learning encounters. The study exposes the need for police trainers to and managers to take organisational culture, language and other cultural factors into consideration when embarking on practical research projects in the workplace. It prompts one to consider the impact of one's work in a broader context in terms of the difference it could make in policing in society, the impact on cross-border crimes and economic stability and growth in the long run.

7.8.4 Policy

This study is particularly helpful to the policy makers of SAPS, although it was not the intention to comment on policy during the study. However, since research in the police is regulated by National Instruction 1/2006: Research in the Service, and several draft documents pertaining to research and the functioning of the Research Ethics Committee, it is important to clarify the roles of the different research structures in SAPS. This study highlights the confusion created by having several research structures in the organisation.

Further, in view of the exclusion of experiential learning in the SAPS definition of workplace learning, this study emphasises a redefinition of such learning to include experiential learning, as viewed by Jacobs and Park (2009:134). The study further illuminates the need for better marketing strategies and management of structured workplace learning.

More important though, is the implication for leadership in acknowledging research as a problem-solving mechanism to find lasting solutions in the fight against crime, especially

while South Africa forms part of the BRICS agreement. This agreement provides the opportunity to expose police officers to joint cross-border operations in which research can make a valuable and meaningful contribution. Operations and strategies alike will be substantiated by scientifically sound information needed for intelligence and policing. Recognition of the value of workplace learning will need stronger policy as workplace learning is a relatively cheap investment in preparing the workforce for the future. The cost aspect is an important one for South Africa, the region and several developing countries that are struggling to grow their economies.

7.9 PERSONAL REFLECTIONS

From the literature, it seems that personal reflections are indeed personal, reflecting on emotions and experiences during the study. Much of my experience and personal moments were woven into the texts of this report. For instance, I alluded to my rediscovery of qualitative research in Chapter 4 before entering into my discovery of ethnographic research. I nevertheless offer some personal moments.

Since my previous qualitative studies and my teaching of research to senior police officers, I have gained some confidence in my knowledge and experience in research. I found that I generally leaned towards qualitative approaches and I tend to steer my learners in the same direction. Yet, over time, I have become complacent with what I read and what I teach. I realised that I had fallen into the trap of only introducing concepts or topics in research when I teach, but I ascribe this to the fact that I teach to novices. My engagement with the literature renewed my interest in qualitative research to such extent that I experienced a rediscovery of qualitative methodology.

Moving into ethnography was exciting and challenging at the same time. As I explored the history and development of ethnography, I realised how easily one can end up writing one's own memoirs rather than offering a narrative of the actors' lives and habits in their own cultures. I found myself moving between my own subjective thoughts and experiences to more objective stances when I engaged with participants in the setting. I therefore had to remind myself that although I am an actor in the setting, the story is not about me. It is about the journey of a close-knit work community that presents research to visiting learners.

However, in the process of uncovering the participants' ways of teaching and providing administrative support, I became aware of the community's unique culture of working and collaboration. I felt part of the community and that cautioned me to take a step back every now and then to reflect on my emotions and level of objectivity. Yet, I knew that I could not interpret any observations or interactions without bias to some degree. To this end, the literature on ethnography, especially Tedlock's (2000) work, enlightened me that my approach to data collection was still acceptable.

I believe that I have adequately addressed the objectives of the study. However, I found myself doubting the lengthy texts in the data chapters. I referred to other theses to get good examples of how other researchers have offered their data and realised that such lengthy offerings were normal. I also relied quite a lot on other ethnographic studies for guidance to support my thoughts. I was fortunate enough to work with a study leader who afforded me the freedom to conduct the study in my unique way. In a sense, it boosted my confidence and in another, it made me a bit nervous as I was afraid to redo my work if it was not acceptable.

I have learned during this study that my support came from my family who afforded me time to work on my research when they were socialising. However, my wife was a strong pillar of support. I know that she is a financial person who regards things in her world as either right or wrong and nothing in between, but she found time to listen when I talked about my study. She shared my excitement and lifted my morale when I went through a dip. However, I did not want to disappoint my family by quitting or not doing well in the study. When my children asked me why I enrolled for another doctorate degree, I responded that I needed this to keep up with the world and to prove to myself that I can push my boundaries even further. I hope that through this study, I can inspire my children to pursue their doctorate degrees.

I must admit that my journey was a pleasant one. I sacrificed a lot, but I also gained as much. My late hours on a Friday were not as bad as one would think, because I shared my desk with a glass or two of the finest red wine of the Boland. My study was a mess, but others referred to it as organised chaos. I knew where everything was filed and my wife knew not to clean or rearrange my study. So, one thing that both of us are looking forward to, is to file the last of my documents, and to put the files and boxes of data in safe storage. Then, finally, we will have our overdue holiday.

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Interview Schedule (by email): Participant 3: Research Curriculum Developer (Parts 1 & 2 – Questions 1 to 4) -

Workplace learning in the South African Police Service (SAPS): Themes and perspectives in teaching research methodology module.

Interview date and time: _____

Participant information:

Gender	
Position held	
Rank	
Years in service	
Role played in Research Module delivery	
Years involved with Research Module	
Academic Qualifications	

Part 1: Research Module Intervention Approach:

Question 1. In your experience, how was the Research Module content of SAPS Executive Development Learning Programme developed and maintained?

Sub-questions:

- Was there provision made for appropriate introduction to new learning?

(Please type responses here)

- Did the design of the Research Module take the needs of learners into account?
(Please type responses here)

- In your opinion, how was design done? (process followed)
(Please type responses here)

- Was the nature of adult learning, such as using experience and learners taking ownership for own learning and pace of learning, considered before/during the research module's delivery?
(Please type responses here)

- What was SAPS' approach to the learning intervention or principles of learning – was it a 'mass' (once-off) or 'distributed' (phased) practice? Explain please.

(Please type responses here) -----

- Were there signs of overlearning (continued focus on competencies mastered already) of certain aspects evident in the structure/design of the module?

(Please type responses here)

- Was your previous experience of your involvement in research used to improve your understanding of the module content /learning? Please explain.

(Please type responses here)

2. Question 2: In your experience, how was the research methodology module delivered?

Sub-questions:

- Did the delivery method enable the creation of ontological shifts (thinking differently) in formulating research problems?
(Please type responses here)

- What was done to reduce learners' fear of new learning – was this considered?
(Please type responses here)

- Was reflection (thinking back, considering what is currently happening or considering what will happen in future) used to enable learners' problem-solving or learning skills?
(Please type responses here)

- Were problem-solving techniques used for transfer of learning into practice during the intervention?
(Please type responses here)

- Were learners confronted by issues of sameness and variation during teaching?
(helped to identify sameness and variation in situations such as in application of research methods)
(Please type responses here)

- Were learners encouraged to participate in generating new learning/skills after being declared competent? (learners to take ownership of problem solving?)
(Please type responses here)

- Has trainers' actions established collaboration between academia and workplace?
(Please type responses here)

- Has such trainer-workplace relationship had an effect on learners' experiential learning?
(Please type responses here)

Part 2: Workplace Learning:

Question 3. What lessons have you learned about teaching research, specifically with reference to your own particular role in development, teaching and/or assessment of research?

Sub-questions:

- Who was the gatekeeper(s) in the learning process?
(Please type responses here)

- How do you see yourself in the research teaching process? (as what or in which role)
(Please type responses here)

- Do you consider yourself as a learner? Please motivate why
(Please type responses here)

- How have you learned to play your part during the teaching of the research module?
(Please type responses here)

- What role does Workplace Learning play in your research project? (where and how did you learn to develop/design the research module?)
(Please type responses here)

- How have you and other role players been empowered of for critical dialogue in the research module design?
(Please type responses here)

- How would you describe the teacher–learner-relationship during a research project? (Please type responses here)

- How did all the SAPS role players in the research module work together? (What were your experiences?)
Please type responses here)

4. How did you experience teaching of adults, specifically in supervising researchers in the workplace? (Here you can refer to assessment of proposals for the Research Committee)

Sub-questions:

- What role do the available resources play in supervision of research projects? (Please type responses here)

- How was Information Communication Technology utilised in the guidance of research projects?
(Please type responses here)

- Was reflection considered as quality improvement strategy? Motivate your response
(Please type responses here)

- What is the workplaces' impact on learners' ability to complete their research projects?
(Please type responses here)

- Is the adult learner really understood and supported in the workplace? Motivate please
(Please type responses here)

- Does organisational culture influence researchers in the workplace? Motivate please
(Please type responses here)

- How would you describe the relationship between SAPS as learning organisation and learners' experiential learning in the workplace?
Motivate please
(Please type responses here)

Thank you for participating and for your contribution. Please indicate if you may be contacted for further clarity if needed – Yes/No

Document Analysis Worksheet

Research Topic:

Workplace learning in the South African Police Service (SAPS): Themes and perspectives in teaching research methodology module.

Analysis date and time: _____

Section A: Document information:

Type of document (letter/course report/ minutes/personal notes/etc)	
Reference nr	
Date of document	
Purpose of document	
Author of document (Participant nr)	
Recipients (participants/ organisation)	
Other	

Section B: Content Analysis: Research Module Intervention Approach: What was said about-?

1. Module content and changes:	
Appropriate introduction to learning	
Introductory Modules mentioned or planned?	
Design of intervention – did it take needs of learners into account? How was design done?	

Was the nature of learning considered before/during the modules delivery?	
Approach to intervention/principles of learning - mass or distributed practice? Signs of overlearning?	
Experiences of those involved used to improve module?	
2. Delivery method	
Creation of Ontological Shifts	
Reducing Fear of learning– was this considered?	
Reflection used for problem-solving/learning?	
Problem-solving used for transfer of learning	
Sameness and variation applied in teaching?	
Participation after competence? (Learners to take ownership of problem solving?)	
Vibrant collaboration between academia and workplace?	

3. Role players' lessons learned	
Acting as gatekeepers to learning?	
How do trainers see themselves? Are they learners too?	
Understanding the role of Workplace Learning?	
Learners empowered of for critical dialogue?	
Teacher –learner relationship?	
4. Experiences of SAPS lecturers in supervising researchers	
Resources?	
ICT utilisation?	
Reflection as quality improvement strategy applied?	
Enabling workplaces dealt with?	
The adult learner really understood & supported?	

Section C: Content Analysis: Workplace Learning: evidence of -?

Communities of Practice	
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Influence of Workplace Culture on learning	
Link between organisational learning and workplace learning	
Worker dispositions and learning	
Participation of learner to learn in the workplace (after competence in classroom)	
Learning expanding into other organisational systems (evidence of research being used in other situations than the research project)	
Workplace learner friendly (enabling)	
Other evidence?	

ANNEXURE C

SUID-AFRIKAANSE POLISIEDIENS  SOUTH AFRICAN POLICE SERVICE

Private Bag: X 3034

Fax No: (021) 807 4977

Your reference/U verwysing:		OFFICE OF THE COMMANDER SAPS ACADEMY PAARL
My reference/My verwysing:	11/1/3/1	PRIVATE BAG X 3034 7620 : PAARL
Enquiries/Navrae:	Lt Col Schwartz	
Tel:	(021) 807-4977 071 883 1969	
Email address:	SchwartzG@saps.gov.za	

The Commander
SAPS ACADEMY: PAARL

**REQUEST FOR PERMISSION TO CONDUCT RESEARCH AT SAPS ACADEMY
PAARL: DOCTOR IN PHYLOSOPHY OF EDUCATION: LIEUTENANT COLONEL GJ
SCHWARTZ: UNISA STUDENT NUMBER 38113775**

1. I am doing research with Professor VJ Pitsoe, a Professor in the Department of Leadership and Management, towards a D Ed at the University of South Africa.
2. You are invited to participate in a study entitled '*Workplace learning in the South African Police Service (SAPS): Themes and perspectives in teaching research methodology module*'.
3. The purpose of the study is to provide an accurate account of the experiences and workplace learning of the actors involved in the development and delivery of a research methodology module in the South African Police Service. The lessons learned in the process may help other government departments not to repeat the same mistakes should they wish to embark on the same journey of institutionalising research methodology as a problem-solving mechanism.
4. SAPS Academy Paarl has been selected as research setting because of its critical role it plays in the development and delivery of research methodology to senior police officers.
5. The study will entail a document analysis of course reports and general correspondence related to research methodology, observations in the Academy and personal interviews with personnel involved with research methodology at the Academy.
6. The study will expand on the knowledge base of adult learning, workplace learning and distance learning since the study will be conducted in an adult learning environment where all learners are mature adult learners that are situated in

**REQUEST FOR PERMISSION TO CONDUCT RESEARCH AT SAPS ACADEMY PAARL: DOCTOR IN
PHYLOSOPHY OF EDUCATION: LIEUTENANT COLONEL GJ SCHWARTZ**

demanding workplaces which are not enabling for learning and which mostly takes the form of distance learning.

7. The study holds no potential risks for the organisation, the Academy or its employees (both participants and non-participants).
8. Feedback on the outcomes of the study will be provided electronically and a copy of the report will be made available should you request that.

Kind regards,



**LIEUTENANT COLONEL
TERTIARY PROGRAMMES COORDINATOR: SAPS ACEDEMY PAARL
GJ SCHWARTZ (Dr)
DATE: 2015-12-03**

SUID-AFRIKAANSE POLISIEDIENS

APPENDIX K
SOUTH AFRICAN POLICE SERVICE

Private Bag: X 3034

Fax No: (021) 807 4977

Your reference/U verwysing:		OFFICE OF THE COMMANDER SAPS ACADEMY PAARL
My reference/My verwysing:	11/1/3/1	PRIVATE BAG X 3034 7620 : PAARL
Enquiries/Navrae:	Lt Col Schwartz	
Tel:	(021) 807-4977 071 683 1989	
Email address:	SchwartzG@saps.gov.za	

The Commander
SAPS ACADEMY: PAARL

**REQUEST FOR PERMISSION TO CONDUCT RESEARCH AT SAPS ACADEMY
PAARL: DOCTOR IN PHYLOSOPHY OF EDUCATION: LIEUTENANT COLONEL GJ
SCHWARTZ: UNISA STUDENT NUMBER 38113775**

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2. You are invited to participate in a study entitled '*Workplace learning in the South African Police Service (SAPS): Themes and perspectives in teaching research methodology module*'.
3. The purpose of the study is to provide an accurate account of the experiences and workplace learning of the actors involved in the development and delivery of a research methodology module in the South African Police Service. The lessons learned in the process may help other government departments not to repeat the same mistakes should they wish to embark on the same journey of institutionalising research methodology as a problem-solving mechanism.
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5. The study will entail a document analysis of course reports and general correspondence related to research methodology, observations in the Academy and personal interviews with personnel involved with research methodology at the Academy.
6. The study will expand on the knowledge base of adult learning, workplace learning and distance learning since the study will be conducted in an adult learning environment where all learners are mature adult learners that are situated in

**REQUEST FOR PERMISSION TO CONDUCT RESEARCH AT SAPS ACADEMY PAARL: DOCTOR IN
PHILOSOPHY OF EDUCATION: LIEUTENANT COLONEL GJ SCHWARTZ**

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7. The study holds no potential risks for the organisation, the Academy or its employees (both participants and non-participants).
8. Feedback on the outcomes of the study will be provided electronically and a copy of the report will be made available should you request that.

Kind regards,



**LIEUTENANT COLONEL
TERTIARY PROGRAMMES COORDINATOR: SAPS ACADEMY PAARL
GJ SCHWARTZ (Dr)
DATE: 2015-12-03**

Approved
C. M. KOTZE
15/12/14
BRIG.

G.P.S. 0024022



SAP 21

South African Police Service

Suid-Afrikaanse Polisiediens

Private Bag X-177 Pretoria 0001
Privaatboks

Fax No: 012 334 3638

Faks No:

Your reference/Ur verskyfing:

READ: GENERAL RESEARCH AND CURRICULUM DEVELOPMENT
HUMAN RESOURCE DEVELOPMENT

My reference/My verskyfing: 317131

Enquêtes/Navorsers: Colonel DV Hynd
SAC V Keka

0001: PRETORIA

Tel: 012 334 3761

Lieutenant Colonel GJ Schwartz

APPLICATION TO CONDUCT RESEARCH WITHIN SAPS: DOCTORATE IN PHILOSOPHY OF EDUCATION

1. With reference to the above mentioned your topic has been approved by the Research Committee Human Resource Development on the 28 October 2015.
2. You are required to furnish the Research Committee with an electronic copy of your research report once it has been finalised.
3. Good luck in the endeavour of your studies.

Kind regards

COLONEL

**CHAIRPERSON: RESEARCH COMMITTEE
DIVISION: HUMAN RESOURCE DEVELOPMENT
DV HYND**

DATE: 30 OCT 2015

COLLEGE OF EDUCATION RESEARCH ETHICS REVIEW COMMITTEE

14 October 2015

Ref # **2015/10/14/38113775/52/MC**

Student#: Dr GJ Schwartz

Student Number #: 38113775

Dear Dr Schwartz

Decision: Ethics Approval

Researcher:

Dr GJ Schwartz

Tel: +2721 807 4977

Email: kschwartz@mweb.co.za / SchwartzG@saps.gov

Supervisor:

Prof VJ Pitsoe

College of Education

Department of Educational Leadership and Management

Tel: +2712 429 4436

Email: pitsov@unisa.ac.za

Proposal: Workplace learning in the South African Police Service (SAPS): Themes and perspectives in teaching research methodology module

Qualification: D Ed in Educational Leadership and Management

Thank you for the application for research ethics clearance by the College of Education Research Ethics Review Committee for the above mentioned research. Final approval is granted for the duration of the research.

The application was reviewed in compliance with the Unisa Policy on Research Ethics by the College of Education Research Ethics Review Committee on 14 October 2015.

The proposed research may now commence with the proviso that:

- 1) The researcher/s will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.*
- 2) Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study, as well as changes in the methodology, should*



be communicated in writing to the College of Education Ethics Review Committee.

An amended application could be requested if there are substantial changes from the existing proposal, especially if those changes affect any of the study-related risks for the research participants.

- 3) *The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study.*

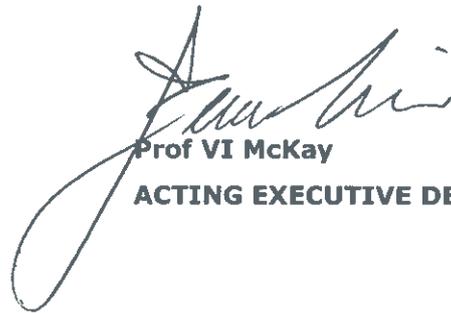
Note:

*The reference number **2015/10/14/38113775/52/MC** should be clearly indicated on all forms of communication [e.g. Webmail, E-mail messages, letters] with the intended research participants, as well as with the College of Education RERC.*

Kind regards,



Dr M Claassens
CHAIRPERSON: CEDU RERC



Prof VI McKay
ACTING EXECUTIVE DEAN

SUID-AFRIKAANSE POLISIEDIENS  SOUTH AFRICAN POLICE SERVICE

Private Bag: X 3034

Fax No: (021) 807 4977

Your reference/U verwysing:		OFFICE OF THE COMMANDER SAPS ACADEMY PAARL
My reference/My verwysing:	11/1/3/1	PRIVATE BAG X 3034 7620 : PAARL
Enquiries/Navrae:	Lt Col Schwartz	
Tel:	(021) 807-4977 071 683 1969	
Email address:	SchwartzG@saps.gov.za	

Dear Participant

INVITATION TO PARTAKE IN RESEARCH CONDUCTED AT SAPS ACADEMY PAARL: UNISA STUDENT NUMBER 38113775: LIEUTENANT COLONEL GJ SCHWARTZ: DOCTOR IN PHYLOSOPHY OF EDUCATION

1. This letter is an invitation to consider participating in a study I, Kobus Schwartz, am conducting as part of my research as a doctoral student entitled '**Workplace learning in the South African Police Service (SAPS): Themes and perspectives in teaching research methodology module**' at the University of South Africa.
2. Permission for the study has been given by SAPS Division HRD Research Committee and the Ethics Committee of the College of Education, UNISA. I have purposefully identified you as a possible participant because of your valuable experience and expertise related to my research topic.
3. I would like to provide you with more information about this project and what your involvement would entail if you should agree to take part. The importance of workplace learning in education is substantial and well documented. The purpose of the study is to provide an accurate account of the experiences and workplace learning of the actors involved in the development and delivery of a research methodology module in the South African Police Service. Although there is no compensation for your participation, your contribution is vital to learning and recording any workplace learning taking place. You will also experience the satisfaction of expressing your views about your part in the delivery of the research module.
4. In this interview, I would like to have your views and opinions on this topic, together with fourteen other participants (trainers, developers, assessors, learners, administrators and managers who work together to present research methodology in SAPS). All participants have been purposefully selected for their rich experience in and due to their specific roles and contribution to the delivery of the research

INVITATION TO PARTAKE IN RESEARCH CONDUCTED AT SAPS ACADEMY PAARL: UNISA STUDENT NUMBER 38113775: LIEUTENANT COLONEL GJ SCHWARTZ: DOCTOR IN PHYLOSOPHY OF EDUCATION

module.

5. This information and the lessons learned in the process may help other government departments not to repeat the same mistakes should they wish to embark on the same journey of institutionalising research methodology as a problem-solving mechanism.
6. Your participation in this study is voluntary. It will involve an interview of approximately 45 minutes in length to take place in a mutually agreed upon location at a time convenient to you. You may decline to answer any of the interview questions if you so wish. Furthermore, you may decide to withdraw from this study at any time without any negative consequences.
7. With your kind permission, the interview will be audio-recorded to facilitate collection of accurate information and later transcribed for analysis. Shortly after the transcription has been completed, I will send you a copy of the transcript to give you an opportunity to confirm the accuracy of our conversation and to add or to clarify any points. All information you provide is considered completely confidential. Your name will not appear in any publication resulting from this study and any identifying information will be omitted from the report. However, with your permission, anonymous quotations may be used. Data collected during this study will be retained on a password protected computer for 12 months in my locked office.
8. There are no known or anticipated risks to you as a participant in this study.
9. If you have any questions regarding this study, or would like additional information to assist you in reaching a decision about participation, please contact me at 021 870 1784 / 071 683 1969 or by e-mail at kschwartz@mweb.co.za.
10. I look forward to speaking with you very much and thank you in advance for your assistance in this project. If you accept my invitation to participate, I will request you to sign the consent form which follows on the next page.

Kind regards,



**: LIEUTENANT COLONEL
TERTIARY PROGRAMMES COORDINATOR: SAPS ACEDEMY PAARL
GJ SCHWARTZ (Dr)
DATE: 2015-09-05**

INVITATION TO PARTAKE IN RESEARCH CONDUCTED AT SAPS ACADEMY PAARL: UNISA STUDENT NUMBER 38113775: LIEUTENANT COLONEL GJ SCHWARTZ: DOCTOR IN PHYLOSOPHY OF EDUCATION

CONSENT FORM

I have read the information presented in the information letter about the study '**Workplace learning in the South African Police Service (SAPS): Themes and perspectives in teaching research methodology module**' in education.

I have had the opportunity to ask any questions related to this study, to receive satisfactory answers to my questions, and add any additional details I wanted.

I am aware that I have the option of allowing my interview to be audio recorded to ensure an accurate recording of my responses. I am also aware that excerpts from the interview may be included in publications to come from this research, with the understanding that the quotations will be anonymous.

I was informed that I may withdraw my consent at any time without penalty by advising the researcher.

With full knowledge of all foregoing, I agree, of my own free will, to participate in this study.

Participant's Name (Please print):

Participant Signature: _____ **Date:** _____

Researcher Name: GJ (Kobus) Schwartz

Researcher's Signature: _____ **Date:** _____

Participant: P5

8th of January 2016 12:03

Interviewer: *This is an interview with Brigadier X and it is about a study on workplace learning.*

Brigadier, I've explained everything to you. I think you've seen the questions on the email. It's always better to talk about things, because I can ask these questions for clarity and we get it over and done with. If there is anything else, we don't need to communicate or correspond on everything.

Um, everything is about the research module, although it's not just [about] the research. It also covers parts of the EDLP and the idea of the study is that we deal with the issues of learning at work. We have expertise as subject specialists, we know what to teach, we know how to teach. But how to deal with research is something quite different and we stepped into this and we didn't exactly know to deal with this. So as we progress we learn to do things differently and so on. You were part of the panel assessors, so everything that we deal with here is part of, um, or relates to the assessment during the panel presentations. So there's only...the second part of the questionnaire that I will deal with and that's two main questions. The first question is: what lessons have you learned about teaching research, specifically in reference to your own particular role in assessing presentations of research imports? Now the first thing that I actually want to know is, who is the gatekeeper of the learning in your experience there. Now it's about your own role, it's not about the learners there although you can talk about that. But it's about your own experience. Who was the gatekeeper in terms of learning to assess?

Participant: Kobus, this is a quite difficult question to answer, because in SAPS...because it's something new in SAPs, it wasn't there beforehand although there was a research section who dealt with a little bit of research, there wasn't really given a lot of attention to research in SAPS. So it's only when we really started with the EDLP that it started off and that a Head Office panel was started with under General Y and it really came off the ground. And, um, according to me, the gatekeepers were supposed to be that panel that was established. But later on as we improved, as we moved on, we lost some of those people and the real people who were actually supposed to sit on the panels were not there anymore.

But also, on the other hand, it was positive, because more and more the actual people who worked with the research and who had hands on knowledge of the research, they were coming in and they were in a better position to evaluate these people. If I'm talking, for example, a commander of a person doing research sitting on the panel. That person listens to the practical part of the research and does not necessarily understand the research process. So when they assess that person, they assess him or her on the work part and what needs to be done, but not the part on the research process and then when

you get the...afterwards when you look at the marks and you get the outcome of the assessment, then it doesn't necessarily speak to what it is supposed to speak. So that's where I say the panel was established under General Y but it changed as time went on. So, currently if I have to say, I am not really very sure who is the gatekeeper.

***Interviewer:** From what I understand is that, during the changes, there was no real development from one panel, or from passing on knowledges or specifications of how to conduct it or anything like that. Did you also experience it that way?*

Participant: Absolutely. I was just told that I must chair this panel. I started off on the SDIP panels and then, suddenly, I was told also on the EDLP panels I must sit in and I have to chair which was a big thing for me, because it was normally done by a General, Um, high...even a provincial commissioner, even initially the Divisional Commissioner Training had to sit in. And then it was, as time went on, it was now brought down to me that is a Brigadier, who had to sit in and evaluate these panels. If it wasn't that I did the EDLP myself and also had to present to a panel, I wouldn't have been able or knowledgeable on what to look for, although we were briefed beforehand. If you hadn't gone through it, you wouldn't be able to do it. And that's why I way that it was really difficult for me in the beginning and I sometimes wondered if I asses people on how I was assessed or on how I did my research. So I, I...that was my learning school and I didn't have the, let's say experience, that those people on the initial panel had.

***Interviewer:** How do you see your role in the teaching of the research model in general?*

Participant: In general I think it something that is an ongoing thing, not necessarily only in class. But the research in the police should be an ongoing thing. A thing that you do on a daily basis. For example, if I have to write a policy I have to follow the research process to be able to write the policy and that has taught me a lot. But I do feel that research is very important, specifically in our academy, for what we are doing, and even to all our learners, even if we just teach them the basics of research, and if they just start knowing the jargon of research. Because that first time, when you sit there in that class and you start talking about the types of research that you get, and this and that and whatever, it's a total...it throws you because you don't have a clue about what the facilitators are talking about until you get it and you understand it and it becomes something that you enjoy. But it's not everyone.

***Interviewer:** Having gone through that experience, um, during the panels, how do you see your role there? Do you, as an assessor in terms of learning, do you assess and you just look at the assessment or do you assess keeping the learning aspect in mind?*

Participant: The learning aspect is very important. You need to be able to guide through the assessment that person who has done the presentation. I don't think, when they present to us, that the research must stop there, because there's always something that they can improve on, always something that you can refer them back to. So the learning process doesn't stop there. So, it's more for me, my role as the chairperson of the panel is more to guide on what it should really be and to give them more information, tell them also go and look at this, also go and look at that, you could also do this, or you could also have done this type of research instead of that one. So always give them more than what they give you and hopefully they will go back and they will go and finalize their document or it will give them something to work on for future purposes. Because I always tell them 'remember this is not the last time that you are going to do this and whatever you are going to do, you have to be able to do this.

***Interviewer:** would you say, that from your experience, you find that assessment is part of the learning process and not the end result of learning...*

Participant: Yes.

***Interviewer:** ...It doesn't conclude the process, it's just still part of that?*

Participant: Absolutely. You cannot say it's the end of the process.

***Interviewer:** Um, I think the other question you've already touched on, because you said how you've learn from your experiences and so on, but do you consider yourself as a learner?*

Participant: Yes, absolutely. On a daily basis I keep on learning. Um, what it...the research I did in the EDLP was a first for me. I have never done research before that, except those days we studied. We do a little bit of research methodology in the Higher Education Diploma. After that I have never done research. Project planning and project management and that, but not research so it was a first time for me. And I really struggled. I found it hard, but the supervisors that we had in the EDLP were of the best people and if it weren't for them I would have really struggled. But it made it so much easier for me, now when I'm doing Masters I'm not really struggling with the concepts. I find it easy, and sometimes I think isn't it too easy, am I not doing something wrong, because I find it...it's just flowing. Um, so it seems to me the more you do it, the easier it becomes. And you more and more understand

the concepts the more that you are working with them. So I'm continually [sic] learning and I cannot say that I'll ever know everything.

Interviewer: Has the research maybe made you a little bit more inquisitive?

Participant: Absolutely! And I also learn a lot. You know, the reading part or the literature review part of the research...you learn so much, you read so much, it enriches your knowledge base so much that you have so much more to talk about, so much more to do. Specifically, us in the policing environment and the things that we are doing. My current Masters research is very much based on what I had done in the EDLP research, but since then I feel I have grown so much and I have now even found new environments to study for the Master's degree. And it is so interesting to me that I would want to know more about it. For example, if we talk about generations, the X and the Y and those generations...it is so important [for] what is happening in our country currently, in our workforce currently. So that reading opens my mind to people, to what we are doing on a daily basis. So ja, it's very interesting.

Interviewer: So you look at issues from different angles now?

Participant: Totally.

Interviewer: something else that you have already talked about is that, I wanted to know how did you play your part in the assessment. You spoke of following examples or you learned from experience, but how do you prepare for that?

Participant: there is not really a specific...there's no guideline on how do you prepare. There's a guideline in terms of the assessment that you have to follow on how do you assess and evaluate, and the marks that you give and whatever. But on what to look for and what to listen for when a person is presenting...there's no guideline on that and it is very difficult. You have to sometimes follow what you are thinking and sometimes we as panellists do not agree with one another, because I have my own concept of thinking and the person next to me is different and as I said, it's just something that I had to...and I promise you, still up until today, sometimes I don't know whether I am right in my assessment, because how can I say to someone that something is wrong when I haven't studied myself and I'm not a content expert. I can evaluate and assess people on the process, but I'm not a content expert so I cannot tell them 'what you did here is wrong or right or whatever'. So it's just a feeling, but sometimes you get really very poor researches and you can see that this person doesn't have a clue. And if you ask a person a question, at least he must be able to defend his study and if he can't do that, then I know this person obviously doesn't know what he or she is talking about. I think that's the big

thing: if you can see that they can defend what they are doing, and if you look at the sources and resources that they have used, you can see that this person has really gone through a lot of trouble. Those that haven't you can immediately see when you open that research.

Interviewer: Anything else that you perhaps draw from perhaps when...while you are assessing, what goes through your mind when you assess? Because you talk of the quality and everything else, but what goes through your mind when you assess?

(Note: This is an excerpt only. The transcript continues up to page 17)