

**MANAGING TEACHER PROFESSIONAL DEVELOPMENT IN MACAU  
SOUTH-EAST ASIA**

by

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submitted in accordance with the requirements for  
the degree of

**MASTER OF EDUCATION**

in the subject

**EDUCATION MANAGEMENT**

at the

UNIVERSITY OF SOUTH AFRICA

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November 2020

## DECLARATION

I declare that **Managing professional development In Macau South East Asia** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete reference.



15 November 2020

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## **ABSTRACT**

This study endeavours to explore the management of teacher professional development (TPD) for the implementation of the Primary Cambridge Curriculum at Macau Anglican College (MAC), Southeast Asia. Professional development (PD) in this research study is about learning for teachers and students and is viewed as a process to augment teacher knowledge and skills. Literature refers to PD as a structured, professional means of learning to enhance teacher knowledge, skills, and practices and to boost students' learning outcomes. The theoretical framework underpinning this study is based on the transformative and adult learning theories.

A qualitative case study research design was used, and data was collected by conducting seven individual interviews, a focus group interview with four participants, and analysing institutional documents such as teacher evaluation reports, TPD records and student academic records. The study revealed that teachers experienced professional growth and were grateful for PD training. However, the need to address content and skills in PD, the lack of a grassroots approach, the want for equitability for PD, the need for skills and content training and sharing of good practice were identified as shortcomings. Nevertheless, the study concluded that PD was satisfactorily managed.

## **KEY TERMS**

Professional development; teacher professionalism; student achievement; curriculum implementation; professionalism; management

# TABLE OF CONTENTS

## CHAPTER 1 ORIENTATION TO THE STUDY

1.1	INTRODUCTION .....	1
1.2	BACKGROUND TO THE STUDY .....	2
1.3	MOTIVATION FOR THE STUDY .....	5
1.4	STATEMENT OF THE PROBLEM.....	6
1.5	AIMS AND OBJECTIVES OF THE STUDY .....	6
1.5.1	Aim of the study .....	6
1.5.2	Objectives of the study .....	7
1.6	DELIMITATIONS OF THE STUDY .....	7
1.6.1	Scope of the study .....	7
1.6.2	Definition of key concepts.....	8
1.6.3	Professional Development (PD) .....	8
1.6.4	Teacher professionalism .....	8
1.6.5	Management .....	8
1.6.6	Curriculum Implementation.....	9
1.6.7	Professionalism.....	9
1.7	THEORETICAL FRAMEWORK .....	9
1.7.1	Transformative learning theory .....	10
1.7.2	Adult learning theory .....	10
1.8	ASSUMPTIONS .....	11
1.9	LIMITATIONS OF THE STUDY .....	11
1.10	RESEARCH AND METHODOLOGY DESIGN.....	12
1.10.1	Research paradigm .....	12
1.10.2	Research approach .....	13

1.10.3	Research design.....	13
1.10.4	Research methods .....	14
1.10.5	Research sites, population and sampling .....	14
1.10.6	Data collection methods, instruments and procedures.....	14
1.10.7	Data analysis and interpretation .....	15
1.11	<b>ETHICAL CONSIDERATIONS</b> .....	15
1.12	<b>TRUSTWORTHINESS</b> .....	16
1.12.1	Credibility .....	16
1.12.2	Transferability.....	16
1.12.3	Dependability.....	17
1.12.4	Confirmability .....	17
1.12.5	Plagiarism .....	17
1.13	<b>CHAPTER DIVISION</b> .....	18
1.13.1	Chapter 1 (Introduction to and background to the study) .....	18
1.13.2	Chapter 2 (Theoretical framework and literature study) .....	18
1.13.3	Chapter 3 (Research methodology).....	19
1.13.4	Chapter 4 (Data analysis and discussion of findings) .....	19
1.13.5	Chapter 5 (Conclusions, recommendations and limitations).....	19
1.14	<b>CONCLUSION</b> .....	19

## **CHAPTER 2**

### **THEORETICAL FRAMEWORK AND LITERATURE STUDY**

2.1	<b>INTRODUCTION</b> .....	21
2.2	<b>THEORETICAL FRAMEWORK</b> .....	22
2.2.1	The transformative learning theory .....	22
2.2.2	Adult learning theory .....	24
2.3	<b>LITERATURE STUDY</b> .....	26
2.3.1	The meaning of Professional Development .....	26
2.3.2	Effective Professional Development.....	29

2.3.3	Teacher professionalism .....	33
2.3.4	The impact of PD on teaching and learning.....	35
2.3.5	Teacher self-efficacy .....	36
2.3.6	Student achievement .....	38
2.4	<b>MANAGEMENT OF PROFESSIONAL DEVELOPMENT .....</b>	<b>39</b>
2.4.1	Education Departmental Level .....	39
2.4.2	School level .....	41
2.5	<b>CONCLUSION .....</b>	<b>43</b>

**CHAPTER 3**  
**RESEARCH METHODOLOGY**

3.1	<b>INTRODUCTION .....</b>	<b>45</b>
3.1.1	Research Paradigm.....	45
3.1.2	Interpretivist paradigm.....	46
3.1.3	Constructivist paradigm .....	47
3.2	<b>RESEARCH QUESTIONS AND AIM .....</b>	<b>48</b>
3.3	<b>RESEARCH APPROACH, DESIGN AND METHOD.....</b>	<b>49</b>
3.3.1	Research approach .....	49
3.3.2	Research design.....	50
3.3.3	Research method .....	52
3.4	<b>SAMPLING AND SAMPLING SELECTION .....</b>	<b>53</b>
3.5	<b>DATA COLLECTION METHODS .....</b>	<b>55</b>
3.5.1	Document analysis.....	55
3.5.2	Individual interviews .....	56
3.5.3	Focus group interviews .....	57
3.5.4	The role of the researcher .....	57
3.6	<b>ETHICAL MEASURES.....</b>	<b>58</b>
3.6.1	Informed Consent .....	59
3.6.2	Anonymity and confidentiality .....	60
3.6.3	Maintaining openness and disclosure.....	60

<b>3.7</b>	<b>METHOD OF DATA ANALYSIS .....</b>	<b>61</b>
<b>3.7.1</b>	<b>Trustworthiness .....</b>	<b>62</b>
<b>3.8</b>	<b>CONCLUSION .....</b>	<b>63</b>

## **CHAPTER 4**

### **ANALYSIS OF DATA AND DISCUSSION OF FINDINGS**

<b>4.1</b>	<b>INTRODUCTION .....</b>	<b>64</b>
<b>4.2</b>	<b>DATA ANALYSIS PROCESS .....</b>	<b>65</b>
<b>4.3</b>	<b>PRESENTATION OF THE FINDINGS .....</b>	<b>65</b>
<b>4.3.1</b>	<b>Teachers' perceptions regarding PD .....</b>	<b>67</b>
<b>4.3.1.1</b>	<b>Impact of PD on the implementation of the Cambridge Curriculum at MAC .....</b>	<b>68</b>
<b>4.3.1.2</b>	<b>Meaningful PD for personal growth .....</b>	<b>68</b>
<b>4.3.1.3</b>	<b>Meeting PD needs.....</b>	<b>69</b>
<b>4.3.1.4</b>	<b>Implementing new skills .....</b>	<b>69</b>
<b>4.3.1.5</b>	<b>Deciding on appropriate PD programmes.....</b>	<b>71</b>
<b>4.3.1.6</b>	<b>Improving the provision and management of PD.....</b>	<b>72</b>
<b>4.3.2</b>	<b>The impact of school management on PD .....</b>	<b>73</b>
<b>4.3.2.1</b>	<b>Direction and choice of PD programmes. ....</b>	<b>74</b>
<b>4.3.2.2</b>	<b>Participant selection for PD .....</b>	<b>75</b>
<b>4.3.2.3</b>	<b>Monitoring and evaluation of PD.....</b>	<b>76</b>
<b>4.3.2.4</b>	<b>Success and satisfaction rate .....</b>	<b>77</b>
<b>4.3.2.5</b>	<b>Issues regarding implementation .....</b>	<b>78</b>
<b>4.3.2.6</b>	<b>Improvement to capacitate teachers .....</b>	<b>79</b>
<b>4.3.3</b>	<b>Role of Education Department (DSEJ) .....</b>	<b>80</b>
<b>4.3.3.1</b>	<b>PD at school level.....</b>	<b>80</b>
<b>4.3.3.2</b>	<b>Monitoring school based PD .....</b>	<b>81</b>
<b>4.3.3.3</b>	<b>Expectations from teachers .....</b>	<b>81</b>
<b>4.3.3.4</b>	<b>Expectations from school management.....</b>	<b>82</b>
<b>4.3.3.5</b>	<b>Extent of DSEJ support given to PD .....</b>	<b>82</b>

4.3.3.6	Improving PD at school level .....	83
4.4	CONCLUSION .....	83

## CHAPTER FIVE

### SUMMARY OF RESEARCH FINDINGS AND OVERVIEW OF PRECEDING CHAPTERS

5.1	INTRODUCTION .....	84
5.2	SUMMARY OF RESEARCH FINDINGS.....	84
5.3	OVERVIEW OF CHAPTERS ONE TO FOUR.....	85

## CHAPTER SIX

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1	INTRODUCTION .....	87
6.2	SUMMARY OF EMPIRICAL INVESTIGATION .....	87
6.3	CONCLUSION OF THE STUDY .....	88
6.3.1	Conclusions from the literature study.....	88
6.3.1.1	The meaning of PD .....	88
6.3.1.2	Effective PD .....	89
6.3.1.3	Theoretical framework for PD .....	89
6.3.1.4	Teacher professionalism .....	90
6.3.1.5	The impact of PD on teaching and learning .....	90
6.3.1.6	Teacher self-efficacy .....	91
6.3.1.7	Student achievement .....	91
6.3.1.8	Management of PD .....	92
6.3.2	Conclusions from the empirical data of the study .....	92
6.3.2.1	Teacher perceptions regarding PD.....	92
6.3.2.2	The impact of school management on PD .....	93
6.3.2.3	Role of Education Department (DSEJ) .....	94
6.4	RECOMMENDATIONS .....	94



6.5	RECOMMENDATIONS FOR FURTHER STUDY .....	95
6.6	LIMITATIONS OF THE STUDY .....	96
6.7	CONCLUSION .....	96

REFERENCES.....	98
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### LIST OF APPENDICES

APPENDIX A: CONSENT LETTER FROM SCHOOL SUPERVISOR.....	107
APPENDIX B: UNISA ETHICS APPROVAL LETTER .....	108
APPENDIX C: PARTICIPANT CONSENT LETTER.....	110
APPENDIX D: PERMISSION LETTER TO SCHOOL SUPERVISOR .....	113
APPENDIX E: FOCUS GROUP CONSENT AGREEMENT .....	114
APPENDIX F: INTERVIEW SCHEDULE QUESTIONS .....	115
APPENDIX G: TURNITIN REPORT .....	116
APPENDIX H: EDITORS CERTIFICATE .....	118
APPENDIX I: TRANSCRIBED INTERVIEW WITH TEACHER 2 (T2).....	119
APPENDIX J: TRANSCRIBED INTERVIEW WITH FOCUS GROUP .....	123

### LIST OF TABLES AND FIGURES

Table 3.4: Profile of participants.....	55
Table 4.3: Themes and sub-themes .....	66

Figure 2.1: Mezirow’s ten phases of transformative learning .....	23
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# **CHAPTER ONE**

## **ORIENTATION TO THE STUDY**

### **1.1 INTRODUCTION**

Teacher professional development (TPD) in the 21<sup>st</sup> century is an important component in the continuous development of quality teachers for quality education around the world. It is important to state from the outset that this research study was a dissertation of limited scope and must be examined as the second paper of my master's degree by coursework. The study investigated the management of TPD at Macau Anglican College (MAC) in Macau, South East Asia. This chapter briefly introduces TPD and gives a short background thereof. The motivation for the study, its statement of the problem, the aims and objectives of the study, the significance and delimitations of the study, the theoretical framework underpinning the study, the assumptions and limitations of the study, the research methodology and design of the study, and the ethical considerations are briefly discussed.

Professional development (PD) is a learning journey that is purpose driven, with a clear intent and desired destination in mind (Guskey 2017:33). TPD programmes aim to improve teaching practices for the enhancement of learner outcomes (Kekana & Gaigher 2018:1). Likewise, Darling-Hammond, Hyler, and Gardener (2017:12) defined effective PD as “structured professional learning that results in changes to teacher knowledge and practices, and improvements in student learning outcomes”.

According to Guskey (2017:33), the process for effective teacher professional learning experience commences by addressing the following questions: (1) What should be accomplished? (2) How do we know if we have accomplished our aims? (3) What are the possible positive or negative outcomes? This study set out to assess whether the managers of TPD could accomplish the implementation of a new curriculum. This would be determined when teachers have gained the curriculum knowledge and skills needed

to implement the curriculum and deliver the lessons according to the skills and methodologies required. Unforeseen variables, such as time constraints, the timing and implementation of the PD programme that obviously impacted the process, were identified.

## **1.2 BACKGROUND TO THE STUDY**

The significance of TPD is deemed by research to be the means by which teachers succeed in their profession. TPD focuses on how teachers learn new methods and skills to meet their students' learning needs (Bachitar, 2019: 67). Avidov-Ungar (2016:654) cited a definition for TPD as a means of enhancing teachers' understanding of teaching and learning and to facilitate their understanding of the students whom they teach. TPD begins with the training to become a teacher and continues throughout the teacher's professional service. It is a continuous process of learning that includes practise and supportive activities. It is therefore a process aimed at increasing a teacher's skills and knowledge.

The scope of TPD extends to allow for a balance between the needs of the school, the individual and the national educational needs in promoting knowledge, skills and values (Avidov-Ungar (2016:655). According to Bachitar (2019:67), TPD is a vital component of the policies for the improvement of teaching which will promote a responsible, creative and proactive approach to students' learning. TPD should therefore be able to help teachers increase their knowledge, skills and attitude which, in turn, have a close link to teachers' classroom practice. Darling-Hammond (2005) as cited by Avidov-Ungar (2016:655) claimed that the process of TPD happens throughout a teacher's professional career and is grounded in the teacher's motivation and personal commitment. A teacher's personal perceptions and imposed regulations implemented and authorised by a system affect a teacher's development.

Over the past decade teacher learning has undergone “reform”, leading to the prevailing belief that links high-quality PD to higher quality teaching, and higher quality teaching to increased student achievement (Stewart 2014:28). Recent research suggests that PD improves teachers’ knowledge and pedagogy and enhances teacher confidence, enabling the facilitation of a positive attitude regarding students’ learning (Lin, Cheng & Wu 2015: 66). Extensive research have emphasised the importance of teachers’ PD to improve schools, increase teaching quality and improve students’ academic achievements (Ungar 2016: 653).

Effective teacher PD facilitates the opportunity for skills and knowledge development needed to address student learning challenges (Mizell 2010: 10). The learning challenges that MAC students are facing might be as a result of the gap in content knowledge of the curriculum taught in the primary section as evidenced in students entering the secondary section. Garces and Granada (2016:40-41) went further by stating that teacher PD is a continuous process in which teachers engage to change some of their conceptual thinking and practices regarding pedagogy, methodology and didactics in order to find new ways of meeting the needs and interests of their own contexts. In the educational context, PD relates closely to the need for gaining new knowledge, abilities and attitudes.

The Organisation for Economic Co-operation and Development (OECD) (2014:49) posited effective PD for teachers as an ongoing process of training, practice and feedback. By giving MAC teachers the training, practice, feedback and support needed, the impact of these measures would hopefully be evident in the improvement of their teaching content, pedagogical skills and their students’ achievements.

Tannehill and MacPhil (2017: 334) argued that, although PD relates to opportunities of facilitated and structured learning tailored to improve teachers’ knowledge, competence, effectiveness and skills, research indicates a lack of evidence to support its effectiveness in raising the quality of teachers’ instruction and student achievement.

Lin et al. (2015:67) averred that the aim of teacher professional growth is not merely to pursue the personal achievement of teachers, but directly to benefit students through innovative and improved teaching approaches. Therefore, teacher PD programmes should be concerned about their influence on students' learning. They should include teachers' responses and the impact on students' learning and achievement. According to Mizell (2010:3), research indicated that raising student achievement, school leadership and teacher quality are the most important factors.

For this reason, educators should exercise discretionary learning, suggesting that their respective career development endeavours must be triggered by an intrinsic longing to grow professionally (Powell & Kusuma-Powell 2015:8). All teachers should have the desire to provide quality learning opportunities for their students. This opportunity is enhanced when teachers are life-long learners. As life-long learners, teachers enable themselves to keep abreast with the latest education research and methodologies in teaching and technology. PD holds the key to raising student achievement levels and narrowing achievement gaps.

There is an increasing interest in the notion that teachers should form a part of the process of planning and implementation of their own PD, according to Tannehill & MacPhail (2017: 335). Involving educators or educational leaders in planning their own developmental opportunities, enables them to be better equipped as educators and educational leaders. PD involves developing ideas and strategies which include reflecting, research and learning new ways of looking at teaching and learning. Experienced educators have to broaden their knowledge and skills throughout their professional careers by means of TPD.

Since its inception, the MAC primary school curriculum comprised of a combination of the British National Curriculum and the International Primary Curriculum (IPC). The adoption of the Cambridge Curriculum in the secondary section of the school soon unearthed skills and content knowledge gaps of primary students entering the secondary section, and their readiness for secondary education. Their lack of academic

skills needed for the secondary Cambridge Curriculum surfaced in most subject areas, especially in Mathematics, History, Geography, Science and English. The realisation of transitional gaps in the academic programme was a clear indication that a single-structured curriculum was needed in the primary school. A curriculum was needed that would align both primary and secondary academic programmes while still allowing the school to retain its international status.

### **1.3 MOTIVATION FOR THE STUDY**

The study was driven by the need for effective management of TPD for the implementation of a new Cambridge curriculum in the primary school of MAC. The aim of the research study was to establish an understanding of procedures that would facilitate the effective management of a PD programme for teachers. Darling-Hammond et al. (2017:4) stated that effective PD should comprise active learning and robust content focus that would collaborate and align with the curriculum and policies being followed while providing ample learning and practice time for participants. As a researcher and school principal, leading TPD falls within my scope of duties. Conducting the study should equip me with the skills and considerations needed for planning, managing and implementing TPD.

Much of the research literature on PD focuses mostly on the effectiveness of PD on student achievement and training models for PD. The limited literature available on the management of PD pointed to a gap in the research and literature. Undertaking this study presented the researcher the opportunity to narrow the literature gap in managing PD.

The study was further aimed at offering meaningful knowledge to the School Management Team (SMT) on how to manage and implement a relevant and effective PD programme.

The significance of the research study lies in the challenges of addressing the management of PD programmes in South East Asia. The benefits of the study are the proposed methods and strategies for consideration when planning and implementing TPD. The study was particularly aimed at benefitting the role of management in assisting to identify focus areas to be considered when planning PD at school level.

#### **1.4 STATEMENT OF THE PROBLEM**

Professional activities at MAC relating to TPD were poorly managed and failed to develop sufficiently the pedagogical skills and teaching content needed for teachers to execute their teaching duties in a meaningful way. Guskey (2017:33) explained that the engagement in PD is purposeful and intentional and has a clear destination in mind, which is to become better at one's profession. Desimore (2010:28) elaborated further that PD as a range of interactions and educational activities is geared towards increasing the teacher's skill and knowledge to improve their teaching practice.

The implementation of a new curriculum at MAC was dependent on the effectiveness of managing TPD. The study stemmed from the need to have an effective management system that would design a TPD programme for the implementation of a new primary curriculum.

#### **1.5 AIMS AND OBJECTIVES OF THE STUDY**

##### **1.5.1 Aim of the study**

The aim of the study is to investigate the management of TPD at MAC in Macau, South East Asia. The study is further aimed at presenting a meaningful PD development

programme to the SMT on how to capacitate primary teachers for the implementation of a new curriculum.

### **1.5.2 Objectives of the study**

The research aspires to investigate how best to manage quality PD at school level by determining:

- the perceptions of primary teachers regarding the management of PD for the implementation of the new curriculum;
- the critical issues experienced by the SMT when managing PD programmes at school; and
- the role of the Macau Education Department, Direcção dos Services de Educação e Juventude (DSEJ) in managing PD at school level.

## **1.6 DELIMITATIONS OF THE STUDY**

### **1.6.1 Scope of the study**

The study focuses on management of TPD at MAC for the implementation of a new Primary Cambridge Curriculum. The study, furthermore, addresses the following questions:

- What are the perceptions of primary teachers regarding the extent of PD offered by the school to improve their delivery of the new curriculum?
- What are the critical issues experienced by the SMT when managing PD programmes at the school?
- What role does the Macau Education Department (DSEJ) play in the management of PD at school level?



The study does not include the perceptions of MAC students, parents or the school board.

### **1.6.2 Definition of key concepts**

The study uses concepts widely found in literature related to it; therefore, clarification of its contextual meaning is essential.

### **1.6.3 Professional Development (PD)**

The concept of PD refers to the process of personal and professional growth. In this study the concept of PD means structured professional learning that leads to changes in the teacher's knowledge and practices, and the improvement of student learning outcomes (Darling-Hammond et al. 2017:2).

### **1.6.4 Teacher professionalism**

The concept of teacher professionalism refers to a set of educative standards aligned to teacher proficiency. In the context of this study, teacher professionalism makes reference to how teachers view their profession, their professional conduct and how they implement their knowledge and skills related to their profession (Wardoyo, Herdiani & Sulikah 2016: 90).

### **1.6.5 Management**

The concept of management is derived from the broader concept of managing. In the context of this study, management is related to various tasks such as planning, leading, organising and controlling (Smit, Cronje, Brevis & Vrba 2011:6) as it pertains to the SMT's role in managing PD. To promote organisational success, management must prioritise the interests of the organisation (Brunsson 2016: 292).

### **1.6.6 Curriculum Implementation**

Curriculum is defined in the glossary of the education reform as typically referring to knowledge and skills students are expected to learn including: expected learning standards, teaching units and lessons, assignments and projects, books, materials, videos, presentations, course readings, tests, assessments, and other methods used to evaluate student learning (Steiner 2017:4).

The concept of implementation is defined as the act of carrying out, executing, or the practising of a plan or method. The concept implementation in the study relates to executing a preliminary plan of PD for the implementation of a new curriculum. Implementation forms part of a diffusion-dissemination-implementation continuum. Whereas diffusion is the passive, untargeted and unplanned spread of new practices, dissemination is the active spread of new practices to the target audience using planned strategies, while implementation is the process of integrating new practices within a setting (Nilsen 2015:53)

### **1.6.7 Professionalism**

The concept professionalism refers to quality of service provided and improvement of status. The improvement of status includes the attitudes towards work and the attainment of high professional standards (Khizar, Anwar & Malik 2019:102)

## **1.7 THEORETICAL FRAMEWORK**

The theoretical framework underpinning the study to evaluate the management of TPD is grounded in Jack Mezirow's theory of transformative learning and Malcolm Knowles's adult learning theory.

### **1.7.1 Transformative learning theory**

The transformative learning theory introduced by Jack Mezirow in 1978 emphasised that adult learning can be transformative in moving the learner to an inclusive, differentiated, permeable and integrated perspective whereby validity is established through a rational discourse (Pavel 2014:210). The transformative theory placed a lot of emphasis on “meaning”, that is, how meaning is construed, validated and reformulated; thus, “meaning” is made both intentionally and unintentionally. Cranton (2000), as cited by Pavel (2014:210), provided a simplified definition of transformative learning by underlining the idea that people change the way in which they interpret experiences and interact with the world. Through events, traumatic or ordinary, individuals become aware of limited or distorted views they hold. Hence, transformation theory explains how adult learners make sense of their experiences and how social and other constructs influence the way they interpret experiences.

### **1.7.2 Adult learning theory**

In keeping abreast with changes in education, teachers constantly have to engage in learning and adapting to new techniques, content and curriculums. The framework provided by adult developmental theories shed light on understanding how adult learners are different from younger learners. Adult learning theory is an educational developmental psychology model that defines the characteristics and cognitive processes of adult learners. Essential to this theory is the significance of task relevance, active learner involvement in goal setting and the inclusion of skills practised as an effective pedagogical technique (Laidley 2000:46).

Knowles (1973), the pathfinder of adult learning theory, posited that adult learners have nine major characteristics: control of their learning; immediate use of learning; they focus on issues that concern them; they test their learning as they go; they anticipate how they will use their learning; they expect performance improvement; they maximise available resources; they require collaboration, respect, a mutual and informal climate

and rely on information that is appropriate and developmentally placed (Zepeda 2014:299).

## **1.8 ASSUMPTIONS**

The research is anchored on the following assumptions:

- PD will transform teachers' beliefs and assumptions about learning and teacher development;
- Teacher PD will effect a shift in a person's thoughts, feelings and actions;
- Teacher PD will create opportunities for teachers to experience learning and professional growth;
- Teacher PD will change the ways in which teachers interpreted experiences and interacted with the world

## **1.9 LIMITATIONS OF THE STUDY**

A limitation of the study was the oversight of the perceptions and views of the primary students who were the recipients of their teachers' training. The exclusion of the view of parents about TPD may also be viewed as a limitation. No participant received financial remuneration for their participation.

The study only focused on participants that best suited the research aims and objectives, which resulted in a small teacher and SMT sample group. Participants' personal backgrounds and beliefs affected their perceptions of and attitudes towards PD, which might also be seen as a limitation to the study.

The study only focused on one semi-private institution in Macau, limiting the scope for data collection. A bigger sample which could have offered the opportunity for a

comparative analysis would have added more value to the study. The downside of using the qualitative study design is the lack of generalisation of the results, the non-standardisation of measurement and the time consuming data collection and analysis process (Mouton 2013:150).

## **1.10 RESEARCH AND METHODOLOGY DESIGN**

### **1.10.1 Research paradigm**

The conceptual framework of this study is a combination of the interpretative and social constructive paradigm. The choice of this twofold paradigm allowed for the interpretation of new knowledge and the construction of a TPD programme that assisted in the implementation of the new curriculum. The paradigm enabled the researcher to build a rich understanding of the life experiences of the SMT, the teachers and the students, and of classrooms and school cultures (Taylor & Medina 2013: 2). The researcher tried to understand “the diverse ways of seeing and experiencing the different contexts and cultures” and tried to avoid bias in studying the events and people with their own interpretations (Lan 2018:3).

The interpretivist paradigm required the researcher to interpret elements of the study, integrating human interest into the study. Applied to this study, the interpretivist approach regarded the researcher as a social actor and therefore it was important for the researcher to appreciate differences between participants while focusing on understanding the meaning of managing TPD, and employing multiple methods that reflected the different aspects of managing TPD at MAC (Dudovskyiy 2018:54).

A social constructivist approach influenced by Vygotsky emphasizes the social contexts of learning and regards knowledge as mutually built and constructed (Kalpana 2014:28). Vygotsky (1978) as cited by Churcher et al. (2014: 35) states that knowledge is constructed through interaction and dialogue with others. Vygotsky further argues that

knowledge is co-constructed in a social environment, through the process of social interaction where people use language to construct meaning. Thus, the researcher in this study positioned himself within the context of the environment, namely MAC, to collect participants' generated meanings of the management of the TPD programme and collaborated with participants to validate the accuracy of his findings.

The advantage of the interpretative and social constructive paradigm is having a diversified view of phenomena; interpretivist researchers not only describe objects, human or events, but also understand the social context and natural setting in which the research is conducted (Lan 2018:3). The paradigm's interactive interview methods allowed the researcher to investigate and prompt things that could not be observed. The researcher's ability to probe an interviewee's thoughts, values, prejudices, perceptions, views, feelings and perspectives is another advantage of the paradigm (Lan 2018:4).

### **1.10.2 Research approach**

The study was conducted following an ethnographic case study approach which aimed to provide an in-depth description of the case studied (Mouton 2013:149). A detailed, in-depth analysis of the study, that is, managing PD for the implementation of a new curriculum, was conducted at a single site, MAC, by a process of interviews and analysing documents relevant to the study.

### **1.10.3 Research design**

A qualitative case study was used to obtain and analyse data regarding the management of PD for the implementation of a new primary curriculum at MAC. Through descriptive studies, the researcher was able to illustrate and clarify the actual position of participants: teachers, the school's management team (SMT) and an education department representative. The study was conducted where it naturally exists, the school, MAC, without the manipulation of conditions, individuals or events (Mertler 2016:111).

The strengths of the case study design allowed for the establishment of a rapport with the research participants which, in turn, offered in-depth insights and a high construct validity (Mouton 2013: 150).

#### **1.10.4 Research methods**

The study used applied research that followed an exploratory method. As an exploratory study, it explored the research topic, *management of TPD for the implementation of a new curriculum*, and did not attempt to offer final and conclusive answers to the research question (Dudovski 2016:60).

#### **1.10.5 Research sites, population and sampling**

The research site for the study was the school, MAC, situated in Macau, South East Asia.

The study used purposive sampling to explore and understand the PD needs of teachers at MAC. The purposive sample of individuals allowed for a representative sample of the given population (Mertler 2016:231). Sampling involved selecting teachers from the primary section of the school, five members of the SMT, including the head of primary, the assistant principal, the curriculum officer, the curriculum examinations officer and one official from the Macau education department.

#### **1.10.6 Data collection methods, instruments and procedures**

Data were collected by analysing specific documents, such as existing PD records and evaluation reports.

Interviews were conducted using semi-structured questions with six individual teachers and one official from the education department. A focus group interview with four SMT

members was also conducted. The use of open-ended interview questions of an exploratory and descriptive nature allowed participants to express their in-depth views and experiences (Mouton 2013: 149).

#### **1.10.7 Data analysis and interpretation**

The recordings of individual and focus group interviews were transcribed and organised into written data. The researcher used the Atlas.ti software programme that assisted in organising various data collected into themes and sub-themes (Mertler 2016: 214). Written documents and records collected were analysed and interpreted according to ethical codes of reliability, integrity and 'representativeness' (Punch 2011: 160).

### **1.11 ETHICAL CONSIDERATIONS**

The study adhered to the most fundamental levels of ethical considerations which ensured that the participants' informed consent was obtained. The voluntary participation of participants was maintained and the confidentiality of all participants and information obtained were ensured. By adhering to ethical considerations, the avoidance of any harm and the protection of vulnerable populations were also guaranteed (Rovai, Baker & Paton 2014: 8).

The researcher adhered to legal and ethical requirements as the study involved people. An ethical certificate from the University of South Africa (UNISA) was obtained in adhering to legal and ethical requirements. Interviewees were protected from any form of deceit, mental, physical, or emotional injury. Their informed consent for participation in the study was obtained (Hancock & Algozzine 2011:45). The study withheld participants' names for ethical reasons.



## **1.12 TRUSTWORTHINESS**

The data management and trustworthiness of the research methods were vital to the success of the study (White, Oelke & Friesen 2012:246). According to Mears (2012:174), trustworthiness can be measured by how accurately the study reflects the participants' meaning of the topic studied. Lincoln and Guba (1985) as cited in Creswell (2012:259), further states that trustworthiness of a research study ensures that the components of credibility, transferability, dependability, confirmability and plagiarism are addressed and guaranteed. The trustworthiness of this study was grounded on these components.

### **1.12.1 Credibility**

The credibility of the study vindicates the researcher's confidence that collected data are valid and findings are credible. Throughout this research, meticulous records were kept and the researcher demonstrated a clear trail of decisions ensuring that the interpretation of data was consistent and transparent. Participants of the study were invited to check the interview transcripts for accuracy and whether final themes and sub-themes reflected and addressed the research study. The researcher further included rich verbatim descriptive accounts of participants that supported findings. According to Nowell et al.(2017:3), credibility addresses the match between the participants' views and the researcher's representation of the views. The credibility of this study was further ensured by the prolonged engagement with participants and included triangulation as part of the data collection process.

### **1.12.2 Transferability**

Transferability ensures the applicability of the study to other contexts and its transferability for future purposes. Transferability refers to the generalisation of the inquiry (Nowell.et al. 2017:3) and in this study it was ensured by the researcher's

provision of detailed descriptions of research sites for those who might seek to transfer the findings to their own site.

### **1.12.3 Dependability**

The dependability of the study ensures the replication and consistency of the findings in other contexts, settings and groups. Dependability is achieved by the researcher ensuring that the research process is logical, traceable and clearly documented (Nowell et al. 2017:3). By reading this research and examining the research process, the reader is able to judge the dependability of the study.

### **1.12.4 Confirmability**

The confirmability of the study relates to its degree of neutrality and objectivity. The findings of the study should be free of researcher bias that may influence the outcomes, explanations and analysis of the study. In this study confirmability was applied and this ensured the interpretations and findings of the researcher were closely derived from the data. The researcher in this study went further and demonstrated how conclusions and interpretations were reached (Nowell et al. 2017:3). Guba and Lincoln (1989), as cited in Nowell et al. (2017:3), confirms that confirmability is established when credibility, transferability and dependability are all achieved.

### **1.12.5 Plagiarism**

Helgesson and Eriksson (2015: 4) defined a plagiarist as someone who deliberately takes the work of someone else in the form of an idea, a method, data, results or text and presents it as their own work instead of giving credit to the person who owns the original work. Common to the definition, plagiarism is composed of two parts, namely: (1) to appropriate the work of someone else and (2) to pass off work as one's own by not giving proper credit to the origin (Helgesson & Eriksson 2015: 4).

The policy on plagiarism and other acts of dishonesty of the University of South Africa (UNISA) identifies acts of plagiarism as being the unethical use of another person's work for research or study purposes. In addition, the infringement of copyright, the owner's economic rights and the infringement of the author's moral rights constitute a criminal offence (UNISA 2005:5).

In this study all forms of plagiarism were avoided through the accurate quotation of resource references; the source of references consulted were acknowledged directly through a quote or indirectly (Mouton 2013: 241). Further, the full dissertation was submitted for plagiarism verification to "Turnitin", an online programme used to promote academic integrity and deter plagiarism.

## **1.13 CHAPTER DIVISION**

This study was organised in the following way.

### **1.13.1 Chapter 1 (Introduction to and background to the study)**

Chapter one provided an introduction and background to the study. It briefly introduced TPD and gave a short background thereof. The motivation of the study, the statement of the problem, the aims and objectives, the significance and delimitations, the theoretical framework, assumptions and limitations, the research methodology, and the ethical considerations were briefly discussed.

### **1.13.2 Chapter 2 (Theoretical framework and literature study)**

Chapter two presented an in-depth review of literature related to the study to gather theoretical information on managing TPD for the implementation of a new curriculum. The theoretical framework underpinning this study was discussed in this chapter.

### **1.13.3 Chapter 3 (Research methodology)**

Chapter three provided an account of the research methodology adopted for the empirical investigation. The chapter discussed the sample selection, procedure for data collection and data analysis, and the credibility and trustworthiness of this study.

### **1.13.4 Chapter 4 (Data analysis and discussion of findings)**

The analysis of data and a discussion of the findings were presented in chapter four. The chapter provided a discussion and understanding of problems and issues encountered during the study.

### **1.13.5 Chapter 5 (Conclusions, recommendations and limitations)**

The final chapter provided a summary of the research and findings. Recommendations on the provision of TPD for the implementation of a new curriculum were made and suggestions put forward to improve the management of TPD at MAC. This chapter also offered areas for future study.

## **1.14 CONCLUSION**

The research study aimed to evaluate the management of TPD at MAC for the implementation of a new primary curriculum. The new curriculum was intended to standardise the content and skills taught in the primary school. Managing the PD required primary teachers to undergo a series of curriculum content and instructional skills training, to receive individualised coaching, and to undergo lesson observations to receive feedback for further development. The study identified ways of improving the management of PD at MAC and recommended areas for further study relating to the PD for teachers.

Chapter 2 is an in-depth review of literature related to the study. The literature study was used to gather theoretical information on managing TPD for the implementation of a new curriculum.

## **CHAPTER TWO**

### **THEORETICAL FRAMEWORK AND LITERATURE STUDY**

#### **2.1 INTRODUCTION**

The previous chapter introduced the study and laid out the background, the research statement, the research question and the aims and objectives of the study. The chapter also discussed the study rationale, research methodology, study delimitations, ethical considerations and clarified key concepts used in the study. This chapter discusses the conceptual and theoretical framework on which the study is grounded and combines a literature study relevant to the research question. This chapter has five focus areas of study: the meaning of PD; theoretical framework underpinning the study; teacher professionalism; the impact of PD and finally, the management of PD.

Undertaking the literature study required the examination of previously conducted research related to the research topic to form the theoretical grounding for this study (Suter 2012:104 & Phorabatho 2013:25). The study of the related literature served to support the research question by highlighting empirical, theoretical and methodological knowledge of the study (Phorabatho 2013: 25; Kelly 2011: 84). The purpose of the literature study was to obtain information on managing TPD for the implementation of a new curriculum, with a focus on the role of the SMT and the education department.

The literature review is structured to address the research question, the meaning of PD and the theoretical frameworks that underpin the study. The literature review goes further to discuss the concept of teacher professionalism and the management of PD. The literature review ends by drawing conclusions from the literature studied.

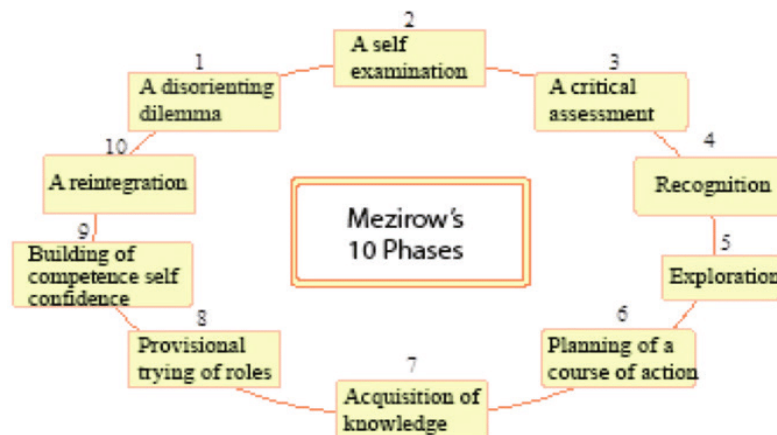
## **2.2 THEORETICAL FRAMEWORK**

### **2.2.1 The transformative learning theory**

The transformative learning approach to adult learning introduced by Jack Mezirow in 1978 emphasised the transformative nature of adult education in moving an individual to an inclusive, differentiated, permeable and integrated perspective of meaning of which validity is established through a rational discourse (Pavel 2014:210). The transformative theory places a lot of emphasis on “meaning” and how meaning is construed, validated and reformulated, and that “meaning” is made both intentionally and unintentionally.

Two central concepts to the theory are the concept of meaning schemas which relates to a person’s beliefs, attitudes and emotional reactions created through interpretation and the concept of meaning perspectives which are meaning schemas acting as perceptual and conceptual codes to form, limit and distort how we think, believe and feel, and how, what, when and why we learn (Pavel 2014:210). The analysis of transformative learning research by Taylor (2000) as cited by Pavel (2014:211) found that even though the theory is applied to different situations, limited research is available that provides data to support Mezirow’s comprehensive model. The available research focused on critical reflection and context transformation which are portions of the theory.

Mezirow’s transformative learning model has ten stages: (1) having a disorienting dilemma, (2) undergoing self–examination with feelings of guilt or shame, (3) doing a critical assessment of epistemic and socio-cultural assumptions, (4) the recognition of one’s discontent and the process of transformation shared, (5) exploration phase, (6) planning a course of action, (7) acquisition of knowledge and skills for implementing one’s plan, (8) a provisional try out of roles, (9) building competence and self-confidence, and (10) a reintegration into one’s life conditions dictated by one’s perspective.



**Figure 2.1: Mezirow's ten phases of transformative learning**

Cranton (2000) as cited by Pavel (2014:210) provided a simplified definition of transformative learning by underlining the idea that people change the way in which they interpret experiences and interact with the world. Through events, traumatic or ordinary, individuals become aware of limiting or distorted views which they hold. Hence, the theory of transformation is a theory explaining how adult learners make sense or meaning of their experiences and how they interpret the influence of social and other structures on their experiences.

The meaning of experiences would undergo dynamic modifying when learners find meanings dysfunctional (Christie et al. 2015: 10). Transformational learning therefore aims to help individuals challenge current assumptions on which they act and the wish to change would include mental and behavioural shifts (Christie et al. 2015: 11). Transformative learning is a deep structural shift in the basic assumption of a person's thoughts, feelings and actions (Calleja 2014:118). The theory refers to "past experiences" to guide events of the future based on communication. The framework of educational practice considers transformative learning as a learner's exposure to a learning process resulting in a subsequent change in their life (Izmirlı & Yurdakul 2014:2294).



Research has shown that adults (or teachers as in this study) who participate in educational developmental activities undergo a transformation process in their relevant area or topic of development. Hence, in this study primary teachers who undertook online and face-to-face development activities acquired the content and skills needed to implement a new curriculum, and thus underwent a transformation.

### **2.2.2 Adult learning theory**

The theory of adult learning is defined as a family of educational and developmental psychology models defining the attributes and cognitive processes of adult learners. This theory stresses task relevance, the importance of learner involvement in setting goals and the use of skill practice as an effective pedagogical technique (Laidley 2000:46). Knowles (1978) formalised adult learning theory which developed into andragogy, a term referring to the method and practice for teaching adult learners. The writings of Knowles (1978) is based on the work of Eduard Lindeman (1926) who believed learning is a life-long goal to be understood at an adult level to promote the need to learn throughout the stages of life (Kelly 2017:3). Knowles' (1978) research study focused on how adults were successful at life-long learning habits and connections that could be made to learning theories (Kelly 2017:3). The concept of andragogy made popular by Knowles set out six adult learning assumptions which is distinct from pedagogy: (1) adults' self-concept moves from a dependent personality towards a self-directing human being, (2) an adult has a reservoir of experience which is a rich resource for learning, (3) adults have a readiness to learn which relates to the development of social role, (4) an adult is more problem-centred than subject-centred in learning, (5) the most potent motivations are internal rather than external, and (6) adults need to know why they need to learn something (Malik 2015:49). An element essential to adult learning theory regards teaching as more effective when directed towards educational needs identified by the learners, while learners must be prepared and motivated to learn (Laidley 2000:46). The theory asserted that learning is encouraged when the learner recognises existing knowledge is inadequate or inaccurate. By presenting new information in a knowledge deficit context and providing new

information, which is compelling and makes sense, learners will incorporate new information into existing concepts of knowledge (Laidley 2000:46).

The theoretical foundation of the study was drawn from the theory of adult learning because PD is a form of adult learning which supports administrators, teachers and student learning (Zepeda 2014: 299). Following the adult learning theory paradigm, PD is able to incorporate action learning, experiential learning, self-directed learning and project-based learning. The effectiveness of adult learning is built on ownership, appropriateness, structure, collaboration, internalisation, reflection and motivation. Knowles (1980, 1992) explained that adults are independent learners who are goal, relevancy directed and practical people who through past experiences have gained knowledge. For adults therefore, the main motivation factor for learning is success, volition, value and enjoyment (Zepeda 2014:300). Illeris (2004) viewed adult learning as selective, self-directed and very different from child learning, as adults are more inclined to engage in self-selected learning. Adults tend to learn best what they find subjectively meaningful, a necessity for them to learn or an important experience (Zepeda 2014:300).

The adoption of transformative learning coupled with the adult learning model of action learning, experiential learning and self-directed learning, formed the framework for the study of managing effective TPD. TPD was central to this study as an adult learning opportunity which occurred on the job, during professional learning activities, seminars or in-training sessions. Primary teachers in this study undertook professional learning activities necessary for teachers to acquire the skills and knowledge for the implementation of a new curriculum at MAC.

## **2.3 LITERATURE STUDY**

### **2.3.1 The meaning of Professional Development**

Past research in the arena of PD gave rise to extensive literature, theories and definitions for the concept. For the purpose of this study the concept of PD refers specifically to the PD of teachers in a school context.

The Teaching and Learning International Survey (TALIS) of the OECD (2014) referred to PD as the activities that develop an individual's skills, knowledge, expertise and other characteristics of a teacher (OECD 2014:49). This definition caters for the development of teachers in various ways, from formal to informal, using external expertise in courses, workshops, formal qualifications, and for the collaboration between schools, teachers across schools or within schools where teachers work (OECD 2014:49). Bolam (2002) as cited in Orit (2016:654) defined PD as the constant development of one's knowledge and professional skills throughout one's educational career. This definition proffered the view of PD as a process through which the professional identity of a teacher is formed and implicit knowledge becomes explicit. PD is the process of personal and professional empowerment of the teacher within the realm of their expertise (Orit 2016:654).

A growing body of research highlights benefits for teacher PD and emphasizes the importance of PD as the means for teachers to succeed in their duties. The importance thereof is contributed to the fact that PD focuses on how teachers learn new methods and skills to meet the learning needs of their students. It is therefore seen as an appropriate process to increase teacher knowledge and skills (Bachitar 2019:67). The PD activities that focus on teacher knowledge, teacher skills and teacher attitudes impact on the quality of a teacher which in turn is linked to increases in student learning (Abbot, Lee & Rossiter 2018:2). This view was further supported by Darling-Hammond et al. (2017: 2) who defined PD as structured professional learning giving rise to changes in teacher knowledge and practice for the improvement of student learning outcomes.

The report of the OECD (2016:28) viewed improving teaching quality as key to student achievement, leading to greater importance of and a push for TPD. In a study conducted among teachers of English Language Learners (ELL), participating teachers agreed that the quality of PD led to changes in teachers' pedagogy and identified factors associated with the higher achievement of learners (Tong et al. 2015:294). Through PD, teacher understanding of teaching, learning and the students they teach increased (Orit 2016:654).

Teachers' development beyond their initial training leads to updating their subject knowledge, their skills, attitudes and approaches to new teaching techniques and objectives. These updates enable teachers to apply new curricula and teaching practices which in turn allow schools to develop and implement new curricula and teaching strategies (Mosley 2015:10-11).

Therefore, the PD of teachers must start with training them for their role as a teacher and must continue throughout their service as a professional teacher. This ongoing process would include teaching practice and support activities to aid the teacher's development (Orit 2016:654). Desimore 2010:28 went further in explaining PD as a range of interactions and educational activities that is geared towards increasing the teacher's skill and knowledge, improve teaching practice and build up personal, social and emotional growth.

The activities and experiences range from formal structured seminars and workshops to informal everyday discussions with teachers (Desimore 2010:28). A research study on language and literacy development suggested that effective PD consists of meetings, workshops, PD follow-ups, and hands-on practice opportunities conducted by an invited collaborator (Tong, Luo, Irby, Lara-Alecio & Rivera 2015:295).

PD could therefore be conceptualised as being produced both externally and internally through on-the-job training that would increase the knowledge of teachers and improve

teaching practice to support their students' learning (Darling-Hammond et al. 2017: 2). This notion was further supported by Bachtiar (2019: 67) who emphasised that PD is aimed at helping teachers improve their knowledge, skills and attitudes, as these aspects have a strong connection to the teacher's classroom practise.

The numerous perceptions and definitions of PD have made it possible to recognise a few paradigms. PD could be viewed as procedures earmarked to aid the professional (in this case the teacher) fill existing gaps of knowledge and skills. It is an attempt to improve a teacher's ability to be functional as a professional by learning new knowledge, attitudes and skills (Orit 2016:654). Another conceptualisation of PD would be the concept of personal growth, where the desire to enhance one's skills is a means for expertise advancement in the field of teaching. The concept of PD for this study is conceptualised as part of organisational reform which would be the school. In this study PD was viewed as the vehicle for reform, that is, the implementation of a new curriculum.

Within the school's reform, teachers would undergo certain changes which require the development of certain skills and the adoption of certain concepts (Orit 2016:655). A final paradigm of PD makes it part of a solution in addressing wider problems. For this study, PD was seen as a means of improving student academic achievement (Orit 2016:655). Following on from this notion, Guskey (1995) as cited in Orit (2016:655) made the connection between the PD concepts of "growth" and "problem-solving", emphasising that PD is a process and not an event, and the process is an intentional systematic attempt to instil change and improvement in the teacher participating in the PD.

Fraser, Kennedy, Reid and McKinney (2007) as cited in Orit (2016:655) emphasised that PD is a balance between the needs of the school, the individual's needs and national needs, and aims to promote knowledge, skills and values. The process of PD takes place for the duration of a teacher's professional life and it is grounded in the personal commitment and motivation of teachers and affected by their personal

perceptions. Having said that, the outcome of PD could also be an imposition of regulation, which is implemented and authorised by a system of which the teacher is a part (Orit 2016:655).

The purpose of PD can be better achieved if the PD opportunity takes into account how teachers acquire knowledge and various ways in which teachers develop and improve (Saydam 2019: 916). Teachers learn by formal and informal methods which include planned learning strategies, such as self-monitoring or reflective journals and unconscious strategies which result from everyday experiences (Saydam 2019: 916). However, studies conducted with teachers in evaluating the effectiveness of learning, found that they perceived direct classroom experience as the most effective source of learning, followed by peer observation, individual study and research (Saydam 2019: 916). Furthermore, a teacher's prior experience, knowledge and beliefs play an important role in teacher learning. What teachers bring to the learning process affects what they learn from the PD.

The literature indicated that sustainable PD cannot only be achieved through providing training, as training only increases awareness and does not guarantee the application of acquired skills and knowledge. PD therefore creates new practices based on data and evidence through analysing practical tools applicable to specific contexts and their adaption for particular needs that leads to improved practices in daily life (Muzafarova 2019: 279).

### **2.3.2 Effective Professional Development**

Resulting from recent research on PD, a new paradigm distinguishes effective teacher development opportunities from the usual one-day workshop traditional model (Darling-Hammond et al. 2017: 4). Recent research also indicates that many PD programmes are still conducted according to traditional models that usually do not meet the desired PD objectives, which are to improve the quality of teaching and learning (Bachtiar 2019: 68). The traditional models of PD can be explained by the way the PD is organised and

the activities for the PD are usually not held at the workplace of the teachers. The content of the traditional model does not address issues and problems of a teacher's daily practice and participants of the PD usually assume a passive role for the duration of the training. Examples of the traditional PD models would include: one-day workshops, seminars and conferences (Bachtiar 2019: 68).

The traditional model has been criticised for failing to deepen teachers' knowledge. Its approach does not amend deep rooted beliefs that are embedded in teachers' practice and teachers generally find the approaches to learning boring, irrelevant and easily forgotten. The reason for the lack of interest and low retention of content learning could result from the fact that the traditional approach does not capitalise on the expertise of the teacher but rather functions from a deficit model (Bachtiar 2019: 68).

A view of teacher PD which is broader than the traditional PD model has emerged over the past decade, seeing teacher learning as social and interactive, nestled in community practice (Desimone 2010:28). This broader view of TPD comes with innovative forms of PD practices and activities. The researcher argues that the innovative PD refers to interventions coming from the active role the teachers play and the issues in their own teaching practice which are instrumental in determining the content they are teaching.

According to Bachtiar (2019:68), innovative forms of TPD can be referred to as mentoring, coaching, study groups, research conducted by teachers, learning communities and networking. Bachtiar further argued that the innovative forms of PD are more effective in meeting the needs of the teachers as the approach includes forms of collaboration while grounded on teachers' classroom practice. It further allows teachers to reconstruct their knowledge, skills and try new ideas; all these are instrumental in improving teaching practice and teachers' knowledge (Bachtiar 2019: 68). TPD should therefore include aspects of three major categories: (1) training in professional knowledge, including subject area, pedagogy, and learning; (2) training in skills and techniques and (3) ethics and attitude that envision sustainability (Muzafarova 2019:279).

Guskey (2017:33) explained that the engagement in PD is purposeful and intentional and has a clear destination in mind, that is, to become better at one's profession. A teacher striving to become better relates to having a greater influence on student-learning and on helping more students to learn well. This basically means knowing where you want to go to, or knowing your destination. The effectiveness of your efforts or professional learning depends on knowing your destination (Guskey 2017:33).

The research undertaken on the effectiveness of PD has been mixed. It, however, supplied positive information on which distinctive elements for high-quality teacher professional learning should be based. Effective PD should comprise of active learning features and robust content focus and it should collaborate and align with the curriculum and policies being followed to provide ample learning and practice time for participants (Darling-Hammond et al. 2017: 4). The review of related literature highlights that the primary challenges facing effective TPD is planning, evaluation and dissemination (Muzafarova 2019:279).

The field of education has seen a rise in evaluating the impact of effective PD in the last two decades. Evaluations of in-service education initiatives have led to the conclusion that teachers with low-skills are in need of specific guidance in attaining the minimum acceptable levels of instruction (Wolf & Peele 2019:2). The findings of these evaluations also highlight the importance of helping teachers improve their interactions with students and not only focusing on teacher instructional training. Findings further indicate that in low-resourced countries, specifically guided instruction is required for the successful improvement of teaching practice (Wolf & Peele 2019:2).

In contrast, the findings pointed to evidence of successful teacher PD in high income countries where the effectiveness of engaging outside experts who provided ongoing teacher training in and out of the classroom. An example of the outside training is the individualised intervention coaching of teachers which led to improved teacher-child



interactions. These interventions in turn led to significant gains in student achievements (Wolf & Peele 2019:2).

A study by Desimone et al. (2002) using a national sample of teachers revealed that features of effective PD matter when it comes to enhancing the teachers' knowledge, skills, and classroom practice. These features included: a content focus PD that focuses on subject matter and how students learn the content; active learning allowing teachers opportunities to be involved in the training such as giving feedback, observing, analysing student work or making presentations as opposed to being passive listeners; PD activities to be consistent and coherent with other PD and school policies; the duration of the PD activities should be spread over the semester; and group participation by teachers of the same school, grade or subject should participate in the PD together to develop interactive learning communities (Desimone 2011:69).

In a another study conducted with a sample of mathematics and science teachers, teachers noted that effective PD related to its relevance, delivery style, and opportunities to network with other teachers. Respondents further indicated that effective PD must be relevant and useful in their classroom, describing relevance as a condition achieved when: PD topic is focused on the content and grade level that they teach; the participants all teach the same content; PD is aligned with state and grade level content; PD is not heavily theory laden but instead focuses on classroom-based practice; the ideas presented are practical for classroom use and setting; the effectiveness of the PD depend on the delivery style; PD is well organised, well-structured and includes efficient use of time; PD is well focused, preferably on a few big ideas; PD is convenient regarding location and schedule; valued PD experiences involving interactions with peers is a definite feature (Chival, Abell, Pareja, Musikul & Ritzka 2008:38-40).

### **2.3.3 Teacher professionalism**

The concept professionalism refers to being moulded on the basis of knowledge, skills and quality of service and not improvement of status (Khizar, Anwar & Malik 2019:102). Professionalism is raised within the context of increasing the quality of applied competence to produce knowledge while achieving high standards as a role model (Parlar, Cansoy & Kilinc 2017:15). It further requires individuals to apply the best updated skills and knowledge to their profession (Parlar et al. 2017:15). The development of professionalism emphasises pre-service teacher preparation to develop professionalism based on knowledge, skills and the attitudes of prospective teachers (Khizar, Anwar & Malik 2019:102).

Teacher professionalism is the way teachers think and feel about their profession, why they should be professional, how they behave, and how they implement skills and knowledge (Wardoyo, Herdiani & Suilkah 2017:90). Leading on from this understanding, the concept of teacher professionalism comprises the competencies that a teacher is required to possess in order to meet professional education standards. The competencies of pedagogy, personal, social and professional competence ensure that professionalized principles are met and teachers have a qualified professional background (Wardoyo et al. 2017:90). The competencies required relate to how teachers fulfil their different roles as professional teachers.

Furthermore, teacher professional behaviour accentuates a teacher's commitment to the profession, to professional co-operation and the high calling to teach. This behaviour extends further to striving to bring learning and education to qualified levels for improving student learning and the quality of education in schools (Parlar et al. 2017:15). The literature reveals that the professional behaviour of teachers is linked to efforts of increasing TPD and sharing of skills and knowledge (Parlar et al. 2017:15).

According to Hargreaves (2000) as cited in Parlar et al. (2017:16), teacher professionalism can be conceptualised according to four historical periods: the pre-

professional period which considered the teaching profession as a technical and simple profession; the autonomous period which allowed for discussion surrounding the autonomy of teachers; the collective working period which emphasised professional collaborative learning and cooperation; and finally the post-professional period during which the teaching profession was re-defined and schools were questioned. Based on these conceptualised indicators, we are facing the post-professional phase in which teachers are required to have many skills and diverse knowledge, high flexibility and a democratic professional background (Wardoyo et al. 2017:91). Khizar, et al. (2019:102) define teacher professionalism as pertaining to professional qualifications and teaching excellence, including understanding the teaching process, teaching competencies and attitudes towards teaching.

After reviewing several studies on teacher professionalism, Demirkasımoğlu (2010:2050) postulated that teacher professionalism may be interpreted as a professional field or work due to its sociological, ideological and educational dimensions. Teacher professionalism aims to achieve the highest standards in the teaching profession. This is based upon the professional formation of knowledge, skills and values. He further explains that even though there are different perspectives worldwide, the common denominator of teacher professionalism is raising the quality and standard of the career and public image of teachers.

In her attempt to construct an operational definition for the concept 'teacher professionalism', Evans (2011:851) discovered that teacher professionalism is lopsided because the professional reforms implemented primarily focused on teacher behaviour instead of their attitude and intellectuality. She therefore concluded that teacher professionalism comprises of behavioural, attitude and intellectual dimensions. In the light of multiple views on teacher professionalism, Evans (2011:851) nonetheless concurs with Demirkasımoğlu (2010:2050) that teacher professionalism refers to a set of educative standards aligned to the proficiency of teachers.

According to Zafiroopoulos (2016:52), teacher professionalism is based on behaviour but also reflects professional competencies including communication, knowledge, technical skills and reasoning. He further explains that teacher professional competence goes beyond factual knowledge which includes the ability for problem solving, managing problems and making decisions (Zafiroopoulos 2016:52).

In general terms, teacher professionalism comprises of the following: (a) exemplified knowledge by obtaining teaching credentials and the support of continuous PD; (b) the autonomy or the extent of the decision-making power that teachers have over aspects of teaching; and (c) peer networking or the role that teachers play in regulating their own network of school-based programmes and practices that would involve teachers in peer socialisation, guidance and feedback (OECD 2016:46).

#### **2.3.4 The impact of PD on teaching and learning**

Over the past decade the movement to reform teacher learning and development has linked high quality PD to higher quality teaching and higher quality teaching to student achievement (Stewart 2014:28). This belief underlying the reform movement is echoed by Lin et al. (2015:66) who advocate for teachers to apply newly acquired knowledge and skills to design and the implementation of curricula that will enhance students' learning ability.

It is however important to mention the results from the professional learning experiences of teachers to classroom practices. They indicate that teachers are inclined to change their practice as a result of their professional learning. Further, teachers implement innovative ideas if they believe they are applicable in their particular classroom context (Saydam 2019:923). The conclusions of a study conducted with Turkish teachers who teach English as a Foreign Language (EFL) revealed that although PD is considered important, not all professional growth opportunities can be applied to teaching practice (Saydam 2019:923).

### **2.3.5 Teacher self-efficacy**

The concept of self-efficacy is grounded in Bandura's theory (1994:1) that defines self-efficacy as a person's belief regarding their capability to produce levels of performance that influence events in their lives. Teacher self-efficacy is conceptualised as teachers' beliefs in their ability to organise, plan and carry out activities required to attain required goals. It could also be interpreted as the teachers' beliefs that they can influence student achievement even if students are difficult to teach or unmotivated (Bachtiar 2019:66). Research studies conducted on teacher-self efficacy in an educational context indicated that teachers' self-efficacy beliefs relate to actions teachers take and the outcomes of their actions in their achievement (Bachtiar 2019:66).

Teacher self-efficacy is further viewed as a future oriented motivational frame focusing on teachers' beliefs regarding their competence in increasing student achievement through their teaching. The belief of teachers regarding their abilities to perform teaching tasks have been connected to important areas of schooling, including student achievement, student and teacher motivation, classroom management and teacher stress (Powers, Kaniuka, Phillips & Cain 2016:3).

According to Tschannen-Moran and Hoy (2001) as cited in Bachtiar (2019:66), the self-efficacy of teachers is important as it determines the extent to which a teacher will control his/her own internal and external actions. An example of this notion would be a teacher putting less effort into teaching a child who the teacher does not expect to be successful. This led on to further research (Bandura 1996; Gersten, Keating, Yovanoff, & Harris, 2001) as cited in Bachtiar (2019:67) which indicated that efficacious teachers tend to plan duties better than low efficacy teachers. High efficacy teachers view difficult tasks as challenges rather than threats while low efficacy teachers will avoid or steer away from difficult tasks as it is viewed as a personal threat. These low efficacy teachers further have a low commitment to the learning goals that they have stated (Bachtiar 2019:67).

Providing teachers with PD can be instrumental in helping them improve their self-efficacy. The PD should comprise content and pedagogy knowledge training that will enable teachers to be effective in teaching. In addition to content and pedagogical knowledge, the teacher should be motivated and develop efficacy to transfer content and pedagogy knowledge to their students (Bachitar 2019:67). A study which investigated the link between self, collective efficacy, school academic climate and student achievement (Chong & Ong 2016) as cited in Bachitar (2019:67) found that teachers with a higher perception of self and collective efficacy had higher interest and beliefs in promoting organisational change and student achievement (Bachitar 2019:67). Studies investigating teacher self-efficacy have also found that teachers with a high efficacy find jobs more rewarding, have higher student expectations, assess through self-reflection when students fail, set goals and develop strategies for achieving goals have a positive attitude and a sense of control (Powers et al. 2016:4).

In understanding teacher self-efficacy, Bandura (1977) as cited in Powers et al. (2016:4) stated that it is important to know how it is developed and proposed that efficacy beliefs come from four sources: (1) mastery experiences, (2) vicarious experiences, (3) verbal persuasion, and (4) physiological arousal. Mastery experiences for teachers occur in teaching a classroom of students or working with small groups of students. The degree of success or failure in executing these tasks is the basis on which teachers develop their efficacy beliefs (Powers et al. 2016:4). Mastery experiences therefore are most influential on efficacy as they provide direct feedback on capabilities.

A study conducted to investigate the relationship between teacher efficacy and student achievement indicated that students' achievements were higher in classrooms of teachers who had more contact with coaches, and in classrooms of teachers who had more confidence in the effectiveness of education (Ghaffar et al. 2019:227). Numerous studies elaborate on the impact of teacher efficacy on student achievement. These studies show that teachers with high self-efficacy beliefs are more likely to implement innovative didactic practices in the classroom, use classroom management strategies with adequate teaching methods, encourage student autonomy, keep students on task

and attend to students with special learning needs, than teachers with low self-efficacy beliefs (Ghaffar et al. 2019:227). This current study examined the extent to which the PD of teachers influences the efficacy of teachers participating in implementing a new curriculum at MAC.

### **2.3.6 Student achievement**

For teachers the central reward associated with their profession is the promotion of student learning. Teachers adopt learning experiences which can directly be applied to their teaching practice and promote student learning (Saydam 2019:917). Saydam (2019: 917) further stated that teachers who engage in cycles of effective PD take greater responsibility for student learning and can see the impact of their new professional knowledge on their students' achievement. A teacher's efficacy is impacted positively when they witness the improvement of their students.

Student achievement is considered as a main factor influencing students' academic learning and teachers are considered the main influence affecting students' academic performance (Bai et al. 2019: 348). A study conducted on the influence of teacher variables on student academic performance found that a teacher's characteristic variables of age, education and majors had no effect on student performance, while a teacher's teaching variables such as teaching plan, teaching strategy and teaching attitude were important factors affecting student performance.

The study also indicated that a teacher's preparation methods, peer listening, course and research participation had no significant impact on student performance while a teacher's preparation, training participation and peer-peer assessment have a significant impact on student performance (Bai et al. 2019: 348). A research study to explore the influence of teacher variables of students' mathematics scores based on controlling student variables in the nested relationship between teachers and students showed that the participation of teachers in mathematical knowledge and education

training will have a positive effect on their classroom teaching, leading to a higher average score for students (Bai et al. 2019: 355).

However, a study conducted in China to evaluate the impact of the National Teacher Training Programme (NTTP) on student achievement revealed that teachers participating in the PD programme had no positive impact on student achievement. No significant difference was found in the mathematics achievement between the treatment and the control student groups. This indicated that teacher participation in the NTTP may have resulted in the lowering of student scores (Lu et al. 2019:121). The analysis of the study indicated that the improvement of teacher mathematics knowledge did not result in any significant effect on teaching practice because the PD failed to encourage teachers implementing what they learnt in training into classrooms (Lu et al. 2019:122). From the literature and studies conducted it is safe to conclude that teachers are a vital factor in influencing the learning outcomes of students (Bai et al. 2019: 355).

## **2.4 MANAGEMENT OF PROFESSIONAL DEVELOPMENT**

The concept of management is to promote organisational success and first tend to the interests of the organisation, making it the number one priority for the management (Brunsson 2016: 292). The management of PD in the implementation of the new curriculum at MAC focused on the role of the education department, the school management and the teachers. This section of the chapter reviews the different roles of these participants in the implementation of the PD.

### **2.4.1 Education Departmental Level**

The educational authorities of Macau, the Macau Education Department, Direcção dos Servicos de Educação e Juventude (DSEJ), determine the extent to which national education is prioritised in schools, then plan and develop high-quality PD programmes in line with set priorities (Archibald et al. 2011:3).



The Macau Education Department and the schools in Macau place a premium on teacher support and teacher development. The general provisions for teachers in Macau are undertaken by the Education and Youth Affairs Bureau (DSEJ). This department is responsible for the funding of TPD (Education and Youth Affairs 2012:31-34). Article 45 of education law no.3/2012 of the Macau Systems Framework of Non-tertiary Education allows educators to plan for their own PD. Teachers decide on how they want to participate in PD, such as, self-learning, research and practice, and training (Education and Youth Affairs 2012:31-34).

The purpose of PD is to improve the career qualifications of in-service teachers and improve the educational needs of those who have already met the standards of a qualified teacher in Macau (Education and Youth Affairs 2012:31-34). Another condition stated in article 45 of education law no.3/2012 of the Macau Systems Framework for Private School Teaching Staff of Non-tertiary Education is the PD opportunity of sabbatical leave and off-the-job training for teachers, to assist those teachers who would like to improve their teaching qualifications (Education and Youth Affairs 2012:31-34).

Macau measures PD based on the number of hours educators spend on training. Specifically, Macau strictly imposes a 30-hour PD requirement for teachers per year (Education and Youth Affairs 2012: 31-34). Article 15 and 16 of the law no. 3/2012 set out the general provisions whereby teachers are given rank promotions based on the amount of PD they have completed. Schools are responsible for recording the hours of training successfully completed by their teachers and report to the education department (Education and Youth Affairs 2012:31-34).

To encourage educators to take up PD willingly, the DSEJ provides a subsidy to teachers (Education and Youth Affairs 2012: 31-34). Clear guidelines on the PD subsidy for teaching staff are provided by the education department. The development subsidy is available to all teachers, irrespective of their various qualifications and rankings. A

teacher with a higher teaching qualification and years of experience will receive a higher subsidy per month (Education and Youth Affairs 2012:31-34).

The management of PD at an education department level comes with challenges of implementation of which the DSEJ should take note. Darling-Hammond et al. (2017: 21-22) discussed the obstacles to effective PD at a departmental level. The Education Department (DSEJ) must identify the needs for PD as very often the needs of teacher PD is decided without understanding the true needs of the teacher. The approaches used for PD should be effective in addressing the goal of student achievement. PD often does not meet these standards. The implementation approaches of the PD should come with quality and fidelity to minimise implementation obstacles that usually accompany PD. A final challenge that must be considered at a department level is assessing the outcomes of the PD to determine the impact and quality of the PD offered.

#### **2.4.2 School level**

Dimmock (2013:1) found that there is a correlation between effective school-based management and the quality of the curriculum implemented. It is therefore safe to believe that the school board or school governing body play a vital role in managing the implementation of teachers' PD in their schools.

The school management is faced with the challenge of providing high-quality professional learning activities that align with school goals, focus on core content, model teaching strategies and provide opportunities for active learning and collaboration that include follow-up and continual feedback (Archibald et al. 2011:3).

To ensure effective implementation of high-quality PD, the school management must plan for financing the costs and scheduling the required time needed for professional learning activities to take place (Archibald et al. 2011:8).

Professional development plans may depend on the training plan of the central educational authorities; however, principals are instrumental in planning choices and implementation of continuing PD programmes in their schools (OECD 2010:51). According to Mizell (2010:13), school leaders or principals encourage or direct teachers' PD to help the school meet its goals and may insist that a teacher participates in PD if his or her performance is inadequate.

Aside from providing teachers with long-term learning opportunities, studies conducted have indicated that teachers should also be engaged in collaborative inquiry to discuss PD initiatives in their own settings. Through this collaborative inquiry discussion, teachers will own their learning, develop accountability for their PD and reflect on their current experience to contextualize teacher-training programmes based on their unique environments (Darling-Hammond et al. 2010:8) Along the same line, Naseer and Romanowski (2010:166) advise school leaders to go beyond providing for teachers' technical competencies but give opportunities to reflect or rethink knowledge gained from PD so they can produce their own professional learning scheme applicable for their respective learning realities. All of these facilitate an increase in the exchange of information and expertise among teachers and help weaker teachers become more effective (OECD 2014:51). If teachers are actively involved in charting their own professional growth plans, they can choose the activities and help to carry out the initiatives for PD (Mosley 2015:10-11).

Managing PD at a school level comes with challenging barriers which must be considered when implementing PD. These barriers are discussed by Darling–Darling-Hammond et al. (2017: 20) highlighting the lack of time allocated to teaching the new curriculum and allowing teachers to use their newly acquired knowledge and skills. The school management needs to ensure resources are available for teachers to access and utilise in implementing their new skills and knowledge. Resources such as curriculum materials, technology science and other equipment must be provided for teachers to use during their lessons.

The literature study provided theoretical answers to the following objectives:

- To explore the perceptions of primary teachers regarding the extent of PD offered by the school to improve delivery of the new curriculum;
- To establish the critical issues experienced by the SMT when managing PD programmes at school; and,
- To determine the role of the Macau Education Department (DSEJ), with regard to the management of PD at a school level.

## **2.5 CONCLUSION**

This chapter unpacked and furnished a literature review on the meanings and theoretical background of PD, teacher professionalism and management of PD. The literature study also focused on the impact of PD on teacher self-efficacy and student achievement and the roles and challenges of participants and organisational structures in planning and implementation of teacher PD at MAC. The definition of PD by Darling-Hammond et al. (2017: 2) that describes PD as structured professional learning that leads to changes in teacher knowledge and practice and the improvement in learning outcomes of students is one that aligns with the views expressed in the studies of related literature.

The literature review led to the understanding that through PD teachers are given ongoing opportunities to improve knowledge and skills; in turn, helping students achieve learning goals. The literature study clarified the misconception that teacher professionalism is only based on behaviour. On the contrary, it revealed that it also reflected teacher competencies which included communication, knowledge, technical skills and reasoning. The conceptualised indicators of teacher professionalism was discussed and the literature study revealed that we are facing the post-professional phase of teacher professionalism where teachers are required to have many skills and

diverse knowledge, a high flexibility and a democratic professional background (Wardoyo et al. 2017:91).

The next chapter discusses the methodology used in conducting the research to examine the management of PD for the implementation of a new curriculum.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 INTRODUCTION**

The previous chapter presented an in-depth literature study on the meaning of PD and what constitutes effective PD. To gain an understanding for this study, the theoretical framework underpinning the study to evaluate the management of PD, was discussed in detail. The significance of teacher professionalism and its impact on teaching and learning, which has a bearing on the study, was brought into focus. The literature review also highlighted the impact of professional development for teacher efficacy and student achievement while looking into the challenges and responsibilities of school management and the education department in the management of professional development.

Chapter 3 presents a detailed description of the research methodology and strategies of the study. According to Lichtman (2013:324), research methodology is the collection of methods and procedure within a well-defined epistemology guiding a research. Epistemologically, as discussed in the previous chapter, this research made use of an interpretivist and a constructivist paradigm based on the interpretations made by all participants and the new knowledge that was constructed from the assumptions made from the study. This chapter covers the population and sampling techniques used and explains adherence to the ethical measures of informed consent, anonymity and confidentiality, trustworthiness, and measures to ensure validity and reliability. The process of data collection and analysis are also addressed.

##### **3.1.1 Research Paradigm**

This study was based on both an interpretivist and a constructivist paradigm. The researcher aimed to investigate how the participants understood and interpreted the

concept “Professional Development” (PD), leading to the construction of knowledge concepts to help address the research problem.

### **3.1.2 Interpretivist paradigm**

The interpretivist paradigm theoretically allows the researcher to view the world through experiences and perceptions of the participants. The researcher used these experiences to construct and interpret his understanding of the data collected (Nguyen & Tran 2015:24). The recognition of potential ‘multiple realities’ was emphasised and explained within the paradigm from the perspective of ‘lived experiences’ (Kelly et al. 2017). In essence the interpretivist paradigm reflects the acceptance of “subjective understanding and the need for interpretation”. To this extent, “explanation and understanding” reflect “the researcher’s understanding of the subjects’ understanding of experiences” (Hovorka & Lee 2010:3).

The interpretivist paradigm requires the interpretation of study elements by the researcher, leading to the integration of human interests into the study. Interpretivism therefore assumes that reality is accessed by social construction means such as language, shared meaning, consciousness and instruments (Dudovskiy 2018:53). Nguyen and Tran (2015: 25) supported this view and added that an interpretivist would seek understanding of a particular context supporting the core belief that reality is socially constructed. This study sought to investigate the experiences and perceptions of primary teachers at MAC in the management of their PD for the implementation of a new curriculum, with the purpose of understanding the reality of the learning development of teachers.

The interpretivist philosophy emphasises qualitative analysis and the qualitative case study and ethnography methods over quantitative analysis (Willis 2007:90). A qualitative approach often provides rich reports that interpretivists need to understand fully the context and the importance of differences between people. An interpretive study tends to be more subjective than objective (Nguyen & Tran 2015:25). Willis (2007:110)

posited that the purpose of interpretivism is to value subjectivity while shunning the possible notion of objective research on human behaviour. Willis (2007) viewed the researcher's role as an interpreter reflecting a subjective position. The interpretivist approach for data collection is a naturalistic approach which includes interviews and observations. This case study explored the interpretation of human interest in the PD of teachers in implementing a new curriculum. The data for the study was collected by conducting individual and focus group interviews. Data collected via interviews are associated with high levels of validity as the data collected tend to be trustworthy and honest (Dudovskiy 2018:56). It is, however, important to note the subjective nature of the interpretivist paradigm and the researcher's bias are seen as the main disadvantage of this approach. This disadvantage somewhat undermines the reliability and representativeness of the data (Dudovskiy 2018:56).

### **3.1.3 Constructivist paradigm**

The constructivist paradigm recognises reality as the product of human intelligence interacting with the real world experiences. A constructivist approach to teaching and learning postulates cognition as a result of mental construction (Bada 2015:66). Williamson (2003:85) states that constructivism is related to an interpretivist paradigm and is interested in the way in which people construct their worlds. It is the belief of a constructivist that the context in which an idea is taught, coupled with the beliefs and attitudes of the learner, affects learning. The learning theory of constructivism is grounded in psychology and explains how people learn and acquire knowledge which directly applies to education. The constructivist learning theory of Piaget has impacted widely on theories of learning, teaching methods in education and educational reform (Bada 2015:66). According to Dudovskiy (2018:57), the constructivist paradigm views a construct of the human mind as reality and therefore reality is perceived to be subjective. The constructivist grounded theory, according to Charmaz (2003), is not objective as it recognises the viewer creates the data and, subsequently, the analysis through interactions with the viewer. Therefore the data does not provide a window on objective reality (Charmaz 2003:273) as the researcher's background will influence their



interpretation of the data. The constructivist paradigm is basically an observation theory based on scientific studies of how people learn and construct their knowledge and understanding of the world through things experienced and reflect on those experiences (Bada 2015:67). Central to this theory is the idea that human learning and new knowledge is constructed and built on previous learning. In this study the researcher adopted the constructivist paradigm to explore how primary teachers at MAC constructed their knowledge, learning and real experiences through the school managed PD programmes for the implementation of a new curriculum.

### **3.2 RESEARCH QUESTIONS AND AIM**

This study aimed to answer the following main question: How is PD managed at MAC to capacitate primary teachers in the implementation of a new curriculum?

Arising from the research question, the following sub-questions were addressed:

- What are perceptions of primary teachers regarding the extent of PD offered by the school to improve their delivery of the new curriculum?
- What are the critical issues experienced by the SMT when managing professional development programmes at school?
- What role does the Macau Education Department (DSEJ) play with regard to managing PD at school level?

In this light, the study aimed to explore the matter of managing quality professional development at school level by determining:

- perceptions of primary teachers regarding the management of PD for implementing the new curriculum;
- the critical issues experienced by the SMT in managing PD programmes at school;
- the role of the Macau Education Department (DSEJ) with regard to the management of PD at school level.

The study therefore also aimed to make recommendations (chapter 5) on how Macau could improve the skills of its teacher corps through PD initiatives informed by the outcomes of the study.

### **3.3 RESEARCH APPROACH, DESIGN AND METHOD**

#### **3.3.1 Research approach**

The study adopted a qualitative research approach. Mertler (2016:111) defined qualitative research as a descriptive study whereby we are able to describe and interpret the current status of individuals, settings, conditions or events. The qualitative research approach was chosen for its compatibility with the research question that underpinned this study: *“How is professional development managed at MAC to capacitate primary teachers in the implementation of a new curriculum?”*

An advantage of the qualitative design is that it allowed the researcher to look at things in their real-life world in order to gain an in-depth understanding of phenomena of interest in terms of meaning ascribed by the participant and not a preconceived meaning which might be brought to the research (Lichtman 2013: 69). The empirical data for this study were collected under conditions which made it free from being contrived. Through the research literature it is clear that human behaviour is best understood when studied as it naturally occurs; without manipulation, control, intervention or externally imposed constraints (Lichtman 2013: 20). The study was therefore conducted in a setting where it naturally exists, the school and teachers' classrooms at MAC, without the manipulation of conditions, individuals, or events (Mertler 2016:111).

The qualitative research approach enabled the researcher to be the primary instrument in the collection of data and analysis, allowing for an in-depth understanding to be acquired (Stake 2010:15). The researcher immersed himself in the situation being

studied by interviewing participants, examining relevant documents, making interpretations and recording what transpired (Creswell 2009:175). The data were made up from rich descriptions of participants' meanings, thoughts, feelings, assumptions, beliefs and values. The data further expanded the role of the SMT and Education Department (DSEJ) in managing PD in the implementation of a new curriculum (Harwell 2011:148).

Another reason for using the qualitative approach was its belief in inductive reasoning whereby data collected would lead to the emergence of theories to answer the research question (Lichtman 2013: 19). Striving to ascertain the meanings of phenomena ascribed by the participants implied the use of an inductive process. By using a qualitative design, an analysis for the management of PD at MAC was made.

### **3.3.2 Research design**

The current study deployed a case study design. A case study is defined by Gustafsson (2017: 2) as an intensive study about a person, a group of people or a unit, aimed to generalise over several units. In this case, individuals within an organisation (MAC), were scientifically investigated in-depth within its environmental context as a real-life phenomenon (Ridder 2017:282). This study is further supported by Creswell's (2013:97) alignment with Ridder and Gustafsson, stating that a case study is a study method exploring a real-life, contemporary bounded system (a case) or multiple bounded systems (cases), through detailed, in-depth data collection and reports on case description and themes.

This study investigated how PD is managed at MAC and the role that the SMT and Education Department (DSEJ) played in managing PD to implement a new curriculum. The assumption was made that management and implementation are context specific and not always distinctive in life situations. Use of the case study method enabled the researcher to dig into contextual conditions believed to be important for the study. Various scholars concur that case study research allows for the adoption of multiple

data analysis methods to further develop and understand the case which is shaped by its context and emergent data (Hyatt, Kenny & Dickson-Swift 2014:2). This study therefore employed three data collection methods: individual interviews, focus-group interviews and document analysis.

The philosophical assumptions of this study were based on an interpretive and constructivist paradigm. This paradigm approach supports a more transactional method of inquiry which sees the researcher as having a personal interaction with the case. The case, in turn, contributed to develop relationships between the researcher and participants that endeavoured to engage the reader, and invite the reader to join this interaction in discovering and understanding of the case (Hyatt et al. 2014:2). The post-positivist approach involved developing study protocols with consideration to validity and potential bias ensuring all elements of the case are measured and adequately described (Hyatt et al. 2014:2). The adoption of a single case study design for the study brought along advantages in the detailed description and analysis used to gain a better understanding of “how” and “why” things happen (Ridder 2017:282). Another advantage was the opportunity to unlock a “black box” by looking deeper at the causes of the phenomenon. The data exhumed from this study led to the identification of patterns and relationships that created a new theory, but also extended and tested the old theory (Ridder 2017:282).

The case study design was also employed because of the assumption that it has the ability for allowing related researchers to use the multiple sources of data and data techniques (Robson 2011:135). However, case studies are often criticised for limitations in forming a base for scientific generalisation (Chadderton & Torrance 2011:54). In this study the emphasis was on the in-depth understanding of the dynamics of the case under examination from the viewpoint of the participants.

The case in this study concerned the management of PD for the implementation of a new curriculum. In this study the design allowed the researcher to collect in-depth data on the experience of the SMT members, teachers and the Education Department

(DSEJ) regarding the management of PD for the implementation of the new curriculum. The different perspectives and experiences of participants, their understanding of the concept of PD and the management thereof were highlighted. The case study design was flexible and accommodated changes in data, information received, changes in research problems, questions and outcomes (Botha 2019: 22). The case study enabled the researcher to engage directly with the participants in the data collection process.

### **3.3.3 Research method**

The study was applied research following an exploratory method. Stebbins (2001) cited by Hunter et al. (2019:1) defined exploratory research as a broad ranging, purposive, orderly prearranged endeavour intended to maximise the discovery of generalisations leading to an understanding of an area of psychological and social life. According to Polit and Beck (2012) cited by Hunter et al. (2019:1), exploratory research made lucid how a phenomenon was distinct and useful in revealing the full nature of a little understood phenomenon. A qualitative exploratory research method allowed the researcher to investigate the topic with limited literature coverage and allowed participants to contribute to the development of new knowledge on the topic (Hunter et al. 2019: 1). As an exploratory research method, the study was conducted to have a better understanding of the existing problem, *management of TPD for the implementation of a new curriculum*, and did not attempt to offer final and conclusive answers to the research question (Dudovskiy 2016:60). The exploratory research was conducted to determine the nature of the problem and was not intended to supply conclusive evidence. It did however provide an understanding of the problem. The research problem in this study was explored at varying depth levels (Dudovskiy 2016:80).

Use of the exploratory research method allowed the researcher flexibility and he could adapt to changes as the research progressed. It further laid the foundation of the research which could lead to future research and provide future researchers the opportunity to find out possible causes to the problem. A disadvantage of the method

stemmed from the interpretation of qualitative data as being judgemental and biased (Giordano 2012:20).

### **3.4 SAMPLING AND SAMPLING SELECTION**

A sample is defined as the portion of a population or universe (Etikan, Alkassim & Abubakar 2016:1). Dudovskiy (2016:114) explained that sampling is a specific principle used for selecting a subset of members from the population to be included in a study. In qualitative research sampling usually takes a purposive direction. Stebbins (2001) cited by Hunter et al. (2019:4) suggested that the aim of sampling is to maximise the representativeness of a population which might be achieved through purposeful sampling.

In this study purposive sampling was employed to provide an insight into the experiences of participants. This sample method was used to handpick the participants based on their involvement and importance to the management of PD at MAC.

The purposive sampling in this study was based on specific criteria for choosing participants; it was non-randomised and the criteria defining participants were set by the researcher (Etikan et al. 2016:2). Setia (2016) as cited by Botha (2019: 25) maintained that purposive sampling is a method that researchers use to select participants who have the potential to answer the research questions. It was therefore important to select individuals who were able to provide information that will answer the research questions.

According to Dudovskiy (2016:140) a purposive sampling technique is the deliberate selection of participants because of their qualities. It is a non-random technique that does not require any underlying theory or set number of participants, making the technique suitable for this study (Etikan et al. 2016:2). Purposive sampling therefore is a non-probability sampling method that happens when components selected for the

sample are chosen on the judgement of the researcher. Purposive sampling therefore may prove to be effective when a limited number of participants serve as the main source of data due to the nature of the research design and research aims and objectives (Dudovskiy 2016:140)

The participants were selected based on the researcher's judgement to ensure that the presence of maximum variability within the primary data was achieved (Dudovskiy 2016:141). It further involved selecting the participants across a spectrum relating to the study, for example, teachers, SMT members and the Education Department (Etikan et al. 2016:3). Using purposive sampling further enabled the researcher to best learn, explore, and understand the PD needs of teachers at MAC, which, in effect, would determine the method of managing PD in the school. The purposive sample selected for this study made up a representative sample of the given population (Mertler 2016:231).

The advantages of using purposive sampling in this study were the cost effective and time effective methods. The disadvantages of the purposive technique stems from its susceptibility to errors in judgement by the researcher, its low level of reliability and high levels of bias, and the inability to generalise research findings (Dudovskiy 2016: 142).

Because of the fact that this research is a dissertation of limited scope, the researcher was limited to only a small sample of eleven participants in total. The selected small sample comprised of six primary teachers, four members of the SMT and one Education Department (DSEJ) representative. Specifically, all teacher participants should have been at the school for at least two years to provide data rich information that would answer the research question (Creswell 2012:206).

**Table 3.4: Profile of participants**

<b>Participants</b>	<b>No. of Participants</b>	<b>Years of Teaching Experience at MAC</b>
Lower primary teachers	3	2 +
Upper primary Teachers	3	2 +
Head of primary	1	5+
Primary Cambridge examination officer	1	5 +
Primary Cambridge Curriculum officer	1	5+
Assistant principal	1	5 +
Education department /Direcção dos Servicos de Educação e Juventude official (DSEJ)	1	N/A

### **3.5 DATA COLLECTION METHODS**

The data collection process for this study took the form of collecting information from relevant sources to find answers to the research problem and to evaluate the outcomes of the research. The following data collection methods were applied:

#### **3.5.1 Document analysis**

Documents and records, including teacher lesson plans and evaluation reports, PD records and reports, student academic records and curriculum documents were used to



gather data from documents that already exist (Mertler 2016:209). Documents collected and analysed would provide factual evidence of TPD undertaken, the impact on teachers planning, teaching and student achievement. Curriculum documents would explain and outline previous TPD and align and support future TPD. Documents collected were analysed according to ethical standards of reliability, integrity, and 'representativeness' (Punch 2011: 160). This had to be done in order to provide the researcher with insight into the state of PD at MAC and the previously managed PD endeavours, if any. An account of the most important documents and their relevance to the study will be given in 4.

### **3.5.2 Individual interviews**

The flexibility of individual interviews as a tool for data collection, to 'establish rapport' and to understand a culture is an advantage of using interviews (Punch 2011: 148). Stebbins (2001) cited by Hunter et al. (2019:4) proposed the use of observation, but the use of interviews was considered more effective. The semi-structured individual interviews with six primary teachers and one department of education official were conducted over a four-week period. The hour-long interviews used open-ended questions to establish rapport and followed a 'broad-to-narrow' approach when responses needed deepening or clarification (Cresswell 2012:216). By conducting semi-structured interviews, the researcher asked base questions and facilitated by following up responses with additional questions when needed (Mertler 2016:204). This allowed the researcher to generate as much information from the participant as possible. Interview questions were kept clear, brief and worded in simple language (Mertler 2016:204). Interviews were conducted in the teacher's classroom and the office of the education official. All interviews were digitally recorded for accuracy using interview guides (Appendix F).

### **3.5.3 Focus group interviews**

A simultaneous interview of a few people making up a small group (6 to 12 participants) constitutes a focus group. For this study a focus group interview of four SMT members was conducted which lasted one and a half hours. The focus group was useful as there were time limitations and participants were more comfortable when speaking in a group than in one-one interviews (Mertler 2016:206). The interview was conducted in the conference room of the school and was digitally recorded for accuracy.

Questions for the focus group were open-ended following an interview guide (See Appendix F) to encourage participants to elaborate on their accounts, allowing the enquiry to be flexible and carefully adaptable to the problem at hand, while giving individual participants the ability to communicate their experiences (BERA 2011:150).

### **3.5.4 The role of the researcher**

The researcher within the qualitative paradigm is recognised as the instrument for data collection and analysis (Rager 2005:424). Maykut and Morehouse (1994) as cited by Rager (2005:424) further defined the researcher as “being at one with the persons under investigation, walking a mile in the other person’s shoes, or understanding the person’s point of view from an empathic rather than sympathetic position”.

It is essential for the credibility of a qualitative research that researchers following the qualitative methodology clarify their roles. The qualitative researcher when in the research setting takes on a variety of member roles. Adler and Adler (1994) stated that the researcher’s role can range from a complete member (insider) of the group to a complete stranger (outsider) of the group (Unluer 2012:1). A general definition for an insider-researcher is one who is able to study a group to which they belong, while an outsider-researcher does not belong to the study group (Unluer 2012:1). The insider role offers the researcher quick and complete participant acceptance. Participants are therefore more open with researchers, leading to greater and deeper data collection

(Dwyer & Buckle 2009:58). Bonner and Tolhurst (2002) identified key insider advantages, namely: (a) having a greater understanding of the culture studied, (b) not altering the flow of social interaction and (c) establishing intimacy which promotes judging and telling the truth (Unluer 2012:1). A further advantage is that insider researchers usually know the politics of the institution and how it functions.

Although there are various advantages, being an insider is not without potential problems. Insider researchers may experience a role conflict if caught between “loyalty tugs” and “behavioural claims” (Brannick & Coghlan 2007:70). While greater familiarity could lead to a loss of objectivity, insider bias does occur when wrong assumptions are unconsciously made based on prior knowledge (Unluer 2012:1).

As a principal/researcher, my case study research explored the management of TPD at MAC for the implementation of a new curriculum. The setting for the research was my work place, MAC. The data I collected was as an insider researcher. An insider researcher is considered the most challenging and important instrument in qualitative study (Unluer 2012:2). Further to the insider role, the researcher’s role included thematising the question of the study, designing the methodological procedure for the study, interviewing participants according to a structured interview guide, transcribing and interpreting recorded interviews, analysing and coding data using the computer-based analysis programme Atlas.ti, verifying the data analysis and writing a report to present the findings (Fink 2000:4-7).

### **3.6 ETHICAL MEASURES**

Ethical research at the most fundamental level ensures the participants’ informed consent, voluntary participation, confidentiality, avoidance of harm, and protection of vulnerable populations (Rovai et al. 2014: 8). For this study the researcher adhered to ethical requirements for a study involving people by securing an ethical clearance certificate issued by UNISA (See Appendix B). The researcher also obtained consent

(See Appendix A) from the school supervisor, who is the chairperson of the school governing body supervising the management of the school, to review the documents to conduct the interviews with the participants at MAC.

The interviewees were not deceived; they were protected from any form of mental, physical, or emotional harm and informed that they could end the interview if they did not feel comfortable with any of the questions in the interview schedule. The informed consent of participation was obtained honestly for each participant (Hancock & Algozzine 2011:45). For ethical reasons, the names of participants were withheld and the following ethical measures were undertaken.

### **3.6.1 Informed Consent**

The participants in the research gave their informed written consent before they participated in the research. Participants agreed to participate in the study and were informed of the study's purpose, procedures, risks, benefits, alternative procedures, and limits of confidentiality (Johnson & Christensen 2004:114-115).

The researcher obtained written permission from the institution involved (MAC) before conducting the study (See Appendix D). The written permission (See Appendix C) of all participants obtained included teachers, institutional management members and an Education Department representative. Participants were informed of the purpose of the study, their participatory roles as well as the following information:

- the purpose of the research;
- the procedures and activities to follow;
- the duration of study and interviews;
- the potential benefits, risks, or discomforts;
- the records to be maintained;
- matters of confidentiality or anonymity;
- the utilization of data; and

- the option of voluntary discontinuation of participation in the study (Rovai et al. 2014: 8).

### **3.6.2 Anonymity and confidentiality**

Participants were assured that their participation in interviews were anonymous and no data collected from the interviews would reveal their identity to any third party either presented on record or in a report (McMillan & Schumacher 2010:121). Anonymity was the best way of protecting privacy because the identity of the participant was not revealed to anyone, including the researcher (Johnson & Christensen 2004:116). As part of the confidentiality and anonymity clause, the research setting and participants were not identified in print but disguised to appear similar to several places and routine code names of people and places. Participants were given the opportunity to review the report on request in the presence of the researcher and correct any misrepresentations before it was finally released and submitted for publication.

The confidentiality and anonymity of all participants, the information provided through interviews and documentation are protected in a password-protected file and locked cabinets as a measure of safekeeping for a period as required by UNISA policy. Participants' personal information was limited only to the researcher (Rovai et al. 2014: 9). Assigning letters and numbers to each respondent ensured the privacy and anonymity of all participants (Johnson & Christensen 2012:104) as cited in Van Tonder (2014:96). Teacher participants were identified as T1, T2, et cetera, while management participants were coded as SMT1, SMT2 et cetera. Participants were requested to refrain from disclosing any personal identifiable information during the interviews.

### **3.6.3 Maintaining openness and disclosure**

The voluntary informed consent of the participants was secured prior to the start of the research study (British Educational Research Association (BERA) 2011:6). The discretion and honesty of the researcher was essential due to personal involvement at

the researched institution. The researcher therefore avoided deception or subterfuge ensuring that collected data or the welfare of the researcher was not in jeopardy (BERA 2011:6). Protecting participants was a primary focus of the study where the character and integrity of the researcher was manifested in ethical honest methods for reporting the results (Creswell, 2012:279; Check & Schutt 2012:55).

Withholding information from participants would violate informed consent and privacy ethical codes, thus the researcher avoided withholding any information from participants (Johnson & Christensen 2004:114).

### **3.7 METHOD OF DATA ANALYSIS**

The data analysis of the study involved a process of inductive analysing, where patterns in the data were noted, and tentative questions of interest were formulated and general conclusions and theories developed (Mertler 2016: 212). The researcher made use of a Microsoft computer software programme for qualitative data analysis, Atlas.ti.8, to assist in analysing collected data and organising it into various categories (Mertler 2016: 214). This process involved coding of the theory and literature as well as the raw data from which themes and sub-themes were developed. The themes and sub-themes were then discussed in detail and linked by means of direct quotations from the verbatim transcribed interviews of participants to substantiate the arguments.

The collected data was systematically organised to present findings and to facilitate an understanding of the data collected. The analysis included organisation, description and interpretation of the data (Mertler 2016: 213). The voice recordings were transcribed verbatim and typed into text data using Microsoft word. The researcher repeatedly moved back and forth through the data, determining the type of data collected to establish which aspects of the collected data were important and appropriate to address the research question (Johnson & Christensen 2012:403) as cited in Van Tonder (2014:99) .

Concepts were condensed to identify related themes and sub-themes that appeared throughout the data (Johnson & Christensen 2012:403) as cited in Van Tonder (2014:99). The findings were compared to the research question in determining the reliability and trustworthiness of the study. The researcher re-checked data with the theory to eliminate mistakes, to ensure all themes and sub-themes were well developed and further data analysis would not add any new concepts (Johnson & Christensen 2012:404) as cited in Van Tonder (2014:99).

### **3.7.1 Trustworthiness**

Trustworthiness and data management were vital to the success of the study (White, Oelke & Friesen 2012:246). According to Lincoln and Guba (as cited in Creswell 2012:259), achieving trustworthiness involves the following steps that formed part of the study:

- *Credibility*, the truth of the data (Cope 2014:89) was indicated through the confidence of the data collected and its credibility of the findings; meticulous records were kept to demonstrate a clear trail of decisions and insured that the interpretation of data was consistent and transparent. Participants were invited to check interview scripts and the inclusion of rich verbatim accounts of the participants ensured the credibility of the study.
- *Transferability*, the generalisation of the inquiry (Nowell.et al. 2017:3) made the research applicable to other contexts and the data transferable to future studies and purposes; the researcher provided detailed descriptions of the research site, context and informants for future transferability to other settings, new groups or sites (Cope 2014:89).
- *Dependability*, the consistency of data over similar conditions in its replication of the findings in other contexts, settings and groups can be judged by the reader examining the detailed research process and descriptions to ensure

dependability (Cope 2014:89). The researcher ensured the research process was logical, traceable and clearly documented (Nowell et al. 2017:3).

- *Confirmability*, the degree of neutrality and objectivity of the findings were free of researcher bias and did not influence the findings, descriptions and interpretations of the study. The study was shaped by participants' involvement and the researcher engaged in checking data by submitting the transcribed data to participants for verification, accuracy and authenticity; and described how conclusions and interpretations were established and how findings derived from the data (Cope 2014:89).

### **3.8 CONCLUSION**

This study aimed to examine the effectiveness of the management of PD of teachers at MAC to establish the extent it provided teachers with effective professional growth and development that may equip them to fulfil classroom appraisal benchmarks. The research results also aspired to enlighten the SMT to address any expressed inadequacies in school managed PD initiatives. The researcher applied the qualitative research approach to determine general perceptions of primary teachers, the SMT and the education department on the impact of PD offered to teachers, especially in relation to the enhancement of their classroom practices.

On reflection, the researcher gained a deeper understanding of the research process, especially during the field study and the sourcing of data. Through the process, elements needed for effective PD could be identified and the shortcomings of the TPD programme at MAC were highlighted.

The findings and results of the study will be discussed in the next chapter (4).



## **CHAPTER FOUR**

### **ANALYSIS OF DATA AND DISCUSSION OF FINDINGS**

#### **4.1 INTRODUCTION**

The problem statement stated the study sought to investigate the management of effective TPD at MAC for the implementation of a new curriculum. The investigation was conducted through the study of relevant literature and the collection of data. Chapter 2 presented conceptual and theoretical frameworks, and a literature review that underpinned the study, while chapter 3 focused on research methodology which outlined the research approach and data collection methods used for the study.

This chapter discusses data collection and a detailed discussion of data analysis as outlined in chapter 3. The study explored the experiences of primary school teachers, the SMT and the education department's role in the management of PD in the implementation of a new curriculum. Individual and focus group interviews were conducted with ethical clearance submission for all participants.

On site individual face-to-face interviews with six primary teachers were conducted and a face-to-face focus group interview with four school management members were conducted at MAC, South East Asia. An individual face-to-face interview with a representative of the Macau Education Department (DSEJ) was also conducted at offices of the Department of Education in central Macau, South East Asia.

A data analysis of individual and focus group interviews was conducted. The document analysis from teacher lesson plans, training reports and teacher evaluations was undertaken before the actual interviews were conducted to extract relevant data to the study, but mainly gained an understanding of phenomenon of PD at MAC. This pre-knowledge assisted the researcher in understanding and establishing the extent to which the management of PD at MAC was linked to curriculum implementation.

Existing PD records, including participants' feedback reports, training programs, budget reports, attendance records and records of PD related to the implementation of the new curriculum were collected from the school management, analysed and evaluated according to ethical measures of reliability, integrity, and 'representativeness' (Punch 2011: 160).

## **4.2 DATA ANALYSIS PROCESS**

The researcher made use of the Microsoft Computer software programme, Atlas.ti8, to analyse and organise the data into various themes and sub-themes (Mertler 2016: 214). The voice recordings were transcribed and organised into MS Word text which was uploaded to the Atlas.ti8 software programme for coding. The data were subsequently systematically organised to present the findings and facilitated an understanding of themes. The purpose for the analysis was to organise, describe and interpret the data to draw conclusions that would answer the research question (Mertler 2016: 213). Concepts were condensed into themes and sub-themes to identify related themes that appeared throughout the data (Johnson & Christensen 2012:403) as cited in Van Tonder (2014:99).

## **4.3 PRESENTATION OF THE FINDINGS**

Qualitative data analysis, as described in 3.3.4, was applied and raw data collected were analysed to form themes and sub-themes grounded in a theoretical framework and literature study. The aim of the study, as discussed in 3.2, and the main research question directed the creation of the main and sub-themes below by which raw data were grouped, analysed and discussed.

The layout of the main and sub-themes were as follows:

- Teacher perceptions regarding PD
- The impact of school management on PD
- The role of the Macau Education Department (DSEJ)

Pertinent sub-themes emanating from the above themes were identified and described in table 4.3 below and in detail thereafter.

**Table 4.3**  
**Themes and sub-themes**

<b>MAIN THEMES</b>	<b>SUB-THEMES</b>
4.3.1 Teachers' perceptions regarding PD	4.3.1.1 Impact of PD on the implementation of the Cambridge Curriculum at Macau College 4.3.1.2 Meaningful PD for personal growth of teachers 4.3.1.3 Meeting PD needs 4.3.1.4 Implementing new skills 4.3.1.5 Deciding on appropriate PD programmes 4.3.1.6 Improving the provision and management of PD
4.3.2 The impact of school management on PD	4.3.2.1 Direction and choice of PD programmes. 4.3.2.2 Participant selection for PD 4.3.2.3 Monitoring and evaluation of PD 4.3.2.4 Success and satisfaction rates 4.3.2.5 Issues regarding implementation 4.3.2.6 Improvement to capacitate teachers
4.3.3 Role of Education Department (DSEJ)	4.3.3.1 PD at school level 4.3.3.2 Monitoring school based PD 4.3.3.3 Expectations from teachers 4.3.3.4 Expectations from school management 4.3.3.5 Extent of DSEJ support given to PD 4.3.3.6 Improving PD at school level

### 4.3.1 Teachers' perceptions regarding PD

The first objective of the study was to explore teachers' perceptions regarding the management of PD for the implementation of a new curriculum (1.5.2).

The analysis of collected data indicated the majority of participants had similar views regarding teacher's perceptions of PD for the implementation of a new curriculum. Participants viewed the PD as school and vision driven which expressed the need for more skills and content based development; (T6) *"I think more can be done with regard to skills acquisition."* (T3) *"While it provided me extensive theoretical background on the new curriculum, uh I still felt that the training fell short on practice, there was no coaching on actual classroom setting."* (T4) *"I think it will be better also if we can target some modern skills, for example, adaptability, how to train, how to help teachers to adapt to new changes, and also confidence."* (T5) *"I really want to enhance my knowledge in science, and then I can teach uh my students better, and then have more knowledge. I think if the school can try to have this kind of courses based on specific subjects."*

The following subcategories were taken from the participants' responses.

- PD offered for the implementation of Cambridge Curriculum
- Meaningful PD for personal growth
- Meeting PD needs
- Implementing new skills
- Deciding PD programmes
- Improving the provision and management of PD

#### **4.3.1.1 Impact of PD on the implementation of the Cambridge Curriculum at MAC**

During the investigation it became clear the majority of teachers were aware of the need to carry out PD for the implementation of the Cambridge Curriculum. With the implementation of the new Cambridge Curriculum most teachers felt the PD offered by the school to implement the curriculum was extensive and provided them with the content knowledge of the new curriculum which helped with implementation. As T4 stated, *“The school provided the needed professional development training to begin the curriculum.”*

However, the same teacher (T4) also indicated that it would have been better if the PD was done at the beginning of the school year or months before it started. In line with this statement T3 iterated, *“The school has given enough preparation necessary for the shift from the current curriculum to the new Cambridge Curriculum. However, the online training fell short on practice as there was no coaching on actual classroom setting.”*

#### **4.3.1.2 Meaningful PD for personal growth**

The research findings revealed the majority of participants viewed the PD offered by the school as meaningful for their professional growth and it benefitted their students. According to the adult learning theory as cited in 2.3.2, learning was encouraged when the learner recognised that existing knowledge was inadequate or inaccurate. By presenting new information to learners in the knowledge deficit context, learners would incorporate new information into existing concepts of knowledge and made sense of their learning experience (Laidley 2000:46).

T2 went on to express that PD *“is absolutely meaningful to my personal growth as a teacher. The school management gave careful thought in planning professional development courses offered every year that benefitted the teachers and students alike.*

*In fact there were already a wide variety of professional development courses that we have already attended.”*

T6 elaborated that the PD enhanced personal growth *“because a lot of the programmes that the school offered as a whole were geared towards a lot of the issues that globally, the professionals spoke about and kept us up to date with what’s happening outside of Macau, outside of school, so yeah that’s good and positive.”*

#### **4.3.1.3 Meeting PD needs**

During the interviews participants agreed that even though their PD needs were met for the implementation of a new curriculum there was, however, room for improvement. The adult learning theory cited in 2.3.2 stressed task relevance, active learner involvement in setting goals and the use of skill practice as an effective pedagogical technique for meeting the needs of PD (Laidley 2000:46).

T4 stated that PD needs were met *“...with room for improvement. It was enough for my basic needs as a teacher teaching the new curriculum but it would be better if the PD targeted some modern skills, for example, adaptability, how to help teachers adapt to new change and how to be confident.”*

T2 agreed by stating, *“PD enabled me to develop knowledge and skills I need to address my students’ learning challenges. It also helped me become more confident and effective in my teaching in the classroom”*

#### **4.3.1.4 Implementing new skills**

The empirical investigation showed that most participants interviewed indicated the skills learnt through the PD training were helpful, however, not all components of the training offered useful skills for the implementation of the new curriculum. The theory of transformative learning as cited in 2.3.1 was a deep structural shift in the basic assumption of a person’s thoughts, feelings and actions. Following the adult learning

theory paradigm as cited in 2.3.2, PD was able to incorporate action learning, experiential learning, self-directed learning and project-based learning in implementing new skills (Zepeda 2014:300). The PD did not fully achieve the structural shift of thought, feeling and action expected from teachers who underwent the Cambridge Curriculum training.

T3 explained, *“I’m using and applying the skills and knowledge I got from the training. As mentioned, the training provided by the school was practical and relevant, very useful to my teaching in the classroom and topics addressed specific concerns over a period of time. For example, before the Cambridge Curriculum was implemented I underwent training months before the implementation and now, of course, the concern was handling inclusive students. We just recently had that kind of training.”*

Participants who had previous knowledge regarding the new curriculum found the online PD training was not particularly useful for them. In the opinion of T1, the training was not anything new to what was already being done in the classroom.

T1 stated, *“I didn’t think it was particularly anything new that I was doing. It perhaps reinforced that which I felt I was doing with the children in class.”*

The findings went on to reveal that participants agreed the skills received during the PD training for the implementation of the Cambridge Curriculum impacted on their students’ learning, skills and achievement.

T5 said, *“From the progression test we found that, uh, they learnt how to answer the questions or recorded observations, recorded the experiments that they did with logical thinking.”*

T3 supported this view and stated that *“The training has impacted student learning and achievement. I was able to align the Cambridge test or assessment with my classroom practices that students would be on par with international standards, so without the*

*preparatory training I don't think I would be confident enough to teach the Cambridge way."*

During the interview T6 stated that *"We could definitely see that there was an improvement in the results. I mean, because now you're looking at ,uh ,checkpoint and a checkpoint has two standardised tests and you could compare them. When you see the results and you can actually see it's on a curve and you can actually see the comparison that's when it becomes clear what I'm doing in my class is working."*

#### **4.3.1.5 Deciding on appropriate PD programmes**

The interview data showed that the analysis of student academic data and the assessment of the needs of teachers helped the school management determine the direction for designing PD initiatives. Participants' responses clearly indicated that the school management made the decisions for PD programmes, although with a certain amount of consultation with staff members and by aligning the PD with the vision and mission of the school. The transformative learning theory as cited in 2.3.1, however, stated a learner's exposure to a learning process was an important consideration when deciding on appropriate PD as it leads to a subsequent change in the life of the learner (Izmirli & Yurdakul 2014:2294). According to the adult learning theory cited in 2.3.2, for adults the main motivation factors for learning were success, volition, value and enjoyment (Zepeda 2014:300).

T3 explained: *"I know the management team met regularly and they developed and decided on professional development plans. The principal took the lead on what specific training should be given and got the consensus from the management team. Management also identified teachers who could be sent to training to ensure the maximisation of learning."*



T1 said, *“I think it’s possibly top-down, so I think probably management had meetings and obviously they looked at the budget to know how much they could afford to have a whole school development.”*

T6 stated, *“We did a SWOT analysis. Teachers then highlighted the weaknesses and, based on the weaknesses, then saw what training we could do. I assumed that management sat and then looked at the strengths and weaknesses within the school, the staff and curriculum and then saw where the gaps were and tried to match professional development opportunities with those gaps...”*

During the interviews some participants mentioned that decisions regarding TPD should involve the participation of teachers or have a “grassroots” level approach and involvement.

T1 explained, *“Sometimes at grassroots level you could recognise training needs across the school.”*

#### **4.3.1.6 Improving the provision and management of PD**

The participants revealed that improving the provision of PD required a grassroots approach, equitability of PD opportunities, creating opportunities for sharing of good practices, sharing skills and knowledge on completion of PD training and creating learning communities within the school.

T6 stated that *“A lot of the same people were going on training outside of school professional development courses, and not a lot of sharing. I also question the equitability of it because some people were going to all training and other people were not.”*

In response to T6, T1 shared tha *“Possibly the bottom up and probably sort of looking from the bottom up, maybe like the grassroots, having discussions within a team, either*

*a subject team or year group team, that sort of thing, we've never had discussions, you know."*

Improving PD provision and management could be done by using certain assessment tools to determine areas of strength and development.

T3 clarified this point and stated that *"For management to track the definite impact of professional development to teachers and student's achievement ... it is ideal to have a tool where teachers can do self-assessment, an instrument in a form of reflection log or survey that outlines specific implications of teachers training to classroom situations may be useful."*

The adult learning theory as cited in 2.3.2 posits that when organisational managers present new information to learners in a knowledge deficit context, learners incorporate compelling new information and make sense of their learning experience (Laidley 2000:46). The theory further stated that adults tend to learn best what they found subjectively meaningful, a necessity for them to learn or an important experience (Zepeda 2014:300). Thus, it is important for managers to provide meaningful PD to meet the authentic needs of teachers.

#### **4.3.2 The impact of school management on PD**

The study argued that effective management of TPD warrants a thorough knowledge of the roles to be filled by those in charge of implementing a new curriculum. The second objective of the study was to establish the role of the SMT in the implementation of a new curriculum. This objective was met through the study of related literature and discussion with participants of the following sub-themes:

- direction and choice of PD programmes
- participant selection for PD
- monitoring and evaluation of PD

- success and satisfaction rate
- issues regarding implementation
- improvements needed to captivate teachers.

#### 4.3.2.1 Direction and choice of PD programmes

According to Mizell (2010:15), how PD was planned and implemented mattered most. The SMT decided on implementing a new curriculum based on the direction that the school had taken to have only one curriculum functioning throughout the school. This decision had given rise to the selection of the Cambridge Curriculum as a new curriculum for implementation in the primary school. TPD was arranged to complement this direction. The adult learning theory cited in 2.3.2 stated that learning was encouraged when the learner recognised existing knowledge was inadequate or inaccurate (Laidley 2000:46) and further learning was needed.

SMT 4 elaborated that *“The school had direction because we placed all our teachers first into the introductory course for about six full weeks, and before the implementation of the Cambridge Curriculum the primary curriculum team went on the core advance training”*.

SMT 3 shared the view: *“It was a good programme to implement primary Cambridge in our school because in the past there were always gaps in student knowledge between the primary and secondary section.”*

SMT 4 said, *“The direction of training, the teachers’ professional development training, the timing of implementation in my opinion has been perfect and because we are still moving towards the advance level of training. “*

SMT 3 stated, *“The curriculum team in the primary school first attended the course in order to be familiar with and understand the requirements or the set-up or how to set up the curriculum in primary.”*

SMT 1 concluded that *“The professional development was tied to the Cambridge Curriculum. I agree that with the systems in place, the online training courses, actually going to physical training...I do see how it is beneficial to teachers.”*

#### **4.3.2.2 Participant selection for PD**

The aim of transformative learning theory cited in 2.3.1 is for individuals to challenge current assumptions on which they act and to change them, which meant a mental and behavioural shift (Christie et al. 2015: 11).

To meet the educational goals for the implementation of the new curriculum the school required teachers to participate in PD set by the SMT (Mizell 2010:13). Strategic planning regarding the selection of participants included selecting lead teachers and curriculum team teachers for training before other primary teachers were selected.

Regarding the participant selection, SMT 2 stated that *“It depended on which subject they are teaching ... it depended on the previous training that they’ve already undertaken; if they have taken the introductory training, then they do the advanced... Depending on the availability of the courses.”*

SMT 3 elaborated that *“Core lead teachers of subjects were selected because it was very important for them to understand the curriculum before formally implementing. Lower primary teachers teach all the subjects, so they needed to be trained in all three core subject curriculums first and within three years they would be trained in all core subjects.”*

SMT 4 explained: *“We encouraged all teachers to take the courses when they were available ... after the training they had more understanding about the curriculum and they could use or implement and, sometimes ,even explain to parents.”*

#### 4.3.2.3 Monitoring and evaluation of PD

DeMonte (2013:20-22) stated that there must be structures in place for high-quality professional learning in schools to take place as part of regular teaching work. These included strong evaluation systems that identified strengths and weaknesses in teaching practice and curriculum implementation. The study revealed that the school had various structures in place to evaluate and monitor the programmes related to the implementation of the Cambridge Curriculum. Submission of lesson plans, unit assessments and standardised progression assessments were instruments used by the SMT in monitoring and evaluating the implementation of the new curriculum.

Regarding monitoring and evaluation, SMT 2 said that *“Teachers have to submit their planning every Friday to the Head of Section... the Subject Lead Teacher also had access to grade level folders in the school’s centralised data system, so we can access and see whether teachers are really doing their planning correctly.”*

SMT 1 explained that *“Teachers now created unit assessments or exams; it’s actually now uniformed because we all followed the same progression format ... we could see that progression was standardised which was better... It’s also easy to monitor and gave better guidelines to the teachers as well.”*

SMT 3 explained that *“Teachers must submit their short term six-week plans and the year plan was provided to them by the curriculum team. Based on the year plan, they do short term planning and weekly planning.”*

SMT 1 elaborated: *“Through monitoring we could also assess how many continuous assessments were completed which counts for 70%, so I am monitoring it every week ... through class observation, we could also check whether the teacher really followed the plan, so made sure the lesson was up to standard. For implementation we did book checking and randomly go through students’ work books and learning materials, and check for consistency among the grade level teachers.”*

#### 4.3.2.4 Success and satisfaction rate

Archibald et al. (2011:3) cited in 2.6.2 stated that the SMT was faced with the challenge of providing high-quality professional learning activities which were aligned with the school's goals, a focus on core content as well as modelling teaching strategies and providing active learning and collaboration opportunities. The adult learning theory, cited in 2.3.2, indicates that the effectiveness and success of adult learning is built on ownership, appropriateness, structure, collaboration, internalisation, reflection and motivation (Zepeda 2014:300).

The data collected indicated the SMT members were satisfied with the implementation of PD aimed at providing for the new curriculum.

Regarding the success of PD, SMT 3 commented that *“When we implemented, and the teachers started doing their work, and then went for introductory training, all the questions died down; now we have not heard any concerns regarding the curriculum implementation from teachers and from parents. I think it’s a very good evaluation. The implementation of the curriculum was hit on the spot.”*

SMT 2 stated: *“I’m also very satisfied in terms of school support to the teachers but a bit distracted by the course offered by Cambridge because after introductory there’s the extended but then goes back to the introductory. “*

SMT 4 said: *“I’m quite satisfied; most primary teachers completed the introductory level training ... after one year of implementation it seemed that they understood more and the feedback from teachers and parents was more positive.”*

SMT 1 commented: *“I agree; it was hard to take some teachers out of their comfort zone... So I’m very happy compared to the past.”*

#### 4.3.2.5 Issues regarding implementation

Knowles (1980, 1992) as cited in 2.3.2 stated that adults are independent learners and are goal and relevancy directed practical people who gain knowledge through past experiences. For adults, therefore, the main motivation factor for learning is success, volition, value and enjoyment (Zepeda 2014:300).

The data revealed various issues encountered during the provision of teacher PD for the implementation of a new curriculum. These included PD training that was too basic, too focused on implementation and how to unfold the curriculum, but that did not include strategies and activities to teach the skills. The study further highlighted budget shortages, strong teacher beliefs and educational backgrounds that led to teacher resistance to change, and restrictions from the education department (DSEJ) regarding PD requirements. To ensure effective implementation of high-quality PD, as cited in 2.6.2, Archibald et al. (2011:8) states that SMT's must have a plan for financing the cost and for scheduling the required time needed for professional learning activities to take place

SMT 3 shared that *“The introductory training or even the advance training only gave teachers how to implement and then how to unfold the curriculum, it’s just very basic. Teachers still needed some more support in strategies and activities to fulfil the skills ... Teachers who were not very open to the implementation of this curriculum were not interested in these trainings ... teachers’ attitude still matters a lot.”*

SMT 2 said, *“Management faced some budget shortages because they couldn’t say yes to the other areas teachers wanted to do, like assessment.”*

SMT 1 explained: *“There were teachers who came here with different backgrounds, you know, experiences, strong beliefs, so they were resistant to new ways..... Where behind closed doors, you know, they still continue with their own ways. They’re not implementing how it should be, so there are some inconsistencies.”*

SMT 4 said, *“The DSEJ had criteria for professional development training as well; according to their requirements 30 to 70 percent of training must be organised by the DSEJ.”*

#### **4.3.2.6 Improvement to capacitate teachers**

In section 2.2 the OECD (2014:49) stated that effective PD for teachers is an ongoing process that includes training, practice and feedback, providing adequate time and supportive follow-up. The data of the study highlighted the fact that the improvement of PD requires the sharing of good practices through learning communities, impartiality in the selection of teachers for PD, the encouragement of peer observation and exchange of experience and the sharing of physical materials. An essential tenet of adult learning theory states that to captivate teachers, PD is more effective when directed towards educational needs identified by the adult learners who should be prepared and motivated to learn (Laidley 2000:46).

SMT 2 stated that *“Having a community of learners like what they are doing in the secondary, bringing it to primary, I think that would help”*.

SMT 4 commented: *“Teachers also felt there was favouritism from the management’s side because those teachers were in the favourite line of management, so to have an impartial idea. We need to first identify good practices in every teacher. We could have a discussion forum where teachers came and shared good practice.”*

SMT 1 elaborated: *“Having a meeting was not just an exchange of dialogue, but actually physically bringing materials for each teacher to share.”*



### 4.3.3 Role of Education Department (DSEJ)

The third objective of the study determined the Education Department's (DSEJ) role in the provision of effective TPD for schools. As discussed in section 2.6, central educational authorities such as the DSEJ need to determine the extent to which the goals of TPD are prioritised in schools, then plan and develop high-quality PD programmes aligned with set priorities of the education department (Archibald et al. 2011:3). This theme gave rise to the following sub-themes:

- PD at school level
- monitoring school based PD
- expectations from teachers
- expectations from school management
- the extent of DSEJ support given for PD
- improving PD at school level

#### 4.3.3.1 PD at school level

In section 2.7.1 of this study, the general provisions for teachers in Macau were discussed as well as how DSEJ formulated their provision of TPD at schools. An important point to note was that the DSEJ was responsible for funding TPD in schools (Education and Youth Affairs 2012:31-34).

The DSEJ representative stated that *"We supported the school for some development which was good for the staff to enhance their teaching and...ah...help student learning. DSEJ provided different professional development; we subsidised or supported schools to have their own professional development plan. When they gave us the plan and then we saw whether it would be good for the school development."*

#### **4.3.3.2 Monitoring school based PD**

According to the DSEJ, the purpose of PD, as discussed in 2.7.1, was to improve the career qualifications of in-service teachers and improve the educational needs of those who had already met the standards (Education & Youth Affairs 2012:31-34). In order to monitor and evaluate the school-based PD, the DSEJ representative stated that

*“Schools needed to submit their proposals about the training and professional development at school to receive approval and funding. After training, schools needed to give back the report and invoicing, so we can check and make sure they would have done it and occasionally tried to visit the school to see the progress with development plans. Schools needed to provide photos and some feedback from the staff to let us know that it was effective for running that professional development.”*

#### **4.3.3.3 Expectations from teachers**

Discussing the expectations from teachers in section 2.7.1, it was clear that the teachers decided on how they wanted to participate in PD, for example, self-learning, research and practice, and training (Education & Youth Affairs 2012:31-34). Macau measured PD based on the number of hours educators spent on training (Education & Youth Affairs 2012: 31-34). The DSEJ strictly imposes a thirty-hour PD requirement for teachers a year (Education & Youth Affairs 2012: 31-34).

The DSEJ representative stated that *“Each year we required teachers to complete thirty hours of professional development. Every teacher needed to submit a professional development form and tell us what he/she has done and mention the name of the course and the area that it covered.”*

#### **4.3.3.4 Expectations from school management**

According to the guidelines of the DSEJ regarding the expectations from the school management in providing PD, schools were responsible for recording the hours of training successfully undertaken by their teachers. These records were submitted to the DSEJ for record keeping (Education & Youth Affairs 2012:31-34). With reference to the expectations from the school management regarding PD in schools, the DSEJ representative stated that *“To monitor teachers, make sure that they really have some professional development and help teachers grow. To help the staff fulfil the requirement of the education development of Macau. As the management they must know well what the strengths and weaknesses of the teachers or the team was and then how they could develop to help the students develop.”*

#### **4.3.3.5 Extent of DSEJ support given to PD**

As discussed in section 2.7.1, the DSEJ also offered sabbatical leave and off-the-job training to assist teachers who would like to improve their qualifications (Education & Youth Affairs 2012:31-34). To encourage educators to take up PD, the DSEJ provided a subsidy to teachers with clear guidelines for schools and teachers on how the PD subsidy for teaching staff could be utilised (Education & Youth Affairs 2012: 31-34). The PD subsidy was available to teachers irrespective of their different qualifications and rankings, although some teachers with a higher teaching qualification received a higher subsidy per month (Education & Youth Affairs 2012:31-34). Regarding the support given for PD, the DSEJ representative explained that *“DSEJ ran courses and tried to provide professional development courses. Funds for school based professional development training were also provided. The DSEJ would try to organise and run a course, not only for one specific school, but maybe for some schools with similar characteristics...We tried to provide most of the funding that schools requested for professional development...so they may try to run some programme or development based on their need instead of only from us.”*

#### 4.3.3.6 Improving PD at school level

Regarding the improving of PD at school level, the DSEJ representative stated:

*“We tried to support PD in a way to have staff, not only teachers or even other ways, infrastructure, to see how it can align with the curriculum. We have different kinds of application for the leave so that they could join the off the job...uh...training and other kind of things, so teachers may get a better environment to know, to acquire the knowledge. They can take one-year leave for more extensive course so that they can [develop] in a professional way.”*

#### 4.4 CONCLUSION

In this chapter the research question as discussed in section 3.2 was addressed. The chapter identified various factors and challenges impacting the management and implementation of PD at MAC. The researcher explained the use of a software programme (Atlas.ti) to analyses collected data into themes and sub-themes. The research findings were discussed using *verbatim* accounts and responses from study participants. The findings were compared to the research question in determining the reliability and trustworthiness of the study.

The next chapter provides a summary of the research findings and an overview of chapters in the study.

## **CHAPTER FIVE**

### **SUMMARY OF RESEARCH FINDINGS AND OVERVIEW OF PRECEDING CHAPTERS**

#### **5.1 INTRODUCTION**

This chapter presents a summary of the research findings and a general overview of the preceding chapters. It summarises the research results analysed from the research data presented in the previous chapter.

#### **5.2 SUMMARY OF RESEARCH FINDINGS**

The aim of the study evaluated the management of TPD at MAC and how it capacitated primary teachers in the implementation of a new curriculum. Based on an interpretivist and constructivist paradigm, this study further investigated participants' understanding, experiences and interpretation of the concept of PD, which led to the construction of knowledge concepts to help address the research question. The theoretical framework that underpinned the study was the transformative learning theory and the adult learning theory.

A qualitative design and methodology was employed to investigate the management of PD and how it was managed at MAC in South East Asia. The data collection for the study comprised of individual and focus group interviews with teachers, SMT members and an Education Department representative. Relevant school administrative documents such as TPD records and reports, student academic records and teacher evaluation reports were analysed as a method of the data collection. The data revealed that managing PD at MAC is influenced by several factors namely: (1) teachers' perceptions regarding PD; (2) school management and PD; and (3) the role of the

DSEJ. Each theme further produced sub-themes presenting factors impacting the management of PD at MAC.

Theme one, teachers' perceptions regarding PD, has six sub-themes expanding the theme, namely: (1) PD offered to implement the Cambridge Curriculum; (2) meaningful PD for personal growth; (3) meeting PD needs; (4) implementing new skills; (5) deciding on PD programmes; and (6) improving the provision of PD.

Theme two, the impact of school management on PD, was influenced by six sub-themes: (1) direction and choice of PD programmes; (2) participant selection for PD training; (3) monitoring and evaluation of PD; (4) success and satisfaction rate; (5) Issues regarding implementation; and (6) Improvements to capacitate teachers.

Theme three, the role of the DSEJ, has six sub-themes, namely: 1) PD at school level; 2) monitoring school-based PD; 3) expectations from teachers; 4) expectations from school management; 5) the extent of support given to PD; and 6) improving PD at school level.

After presenting the summary of research findings on the management of TPD for the implementation of a new primary curriculum at MAC, the study concluded that the school-based PD offered by the school was satisfactory for the implementation and management of a new curriculum. However, it did not fulfil the need for skills and content-based development. The improvement for the provision of PD included adopting a grassroots approach, equitability of PD opportunities, subject-based knowledge training and sharing of good practices.

### **5.3 OVERVIEW OF CHAPTERS ONE TO FOUR**

Chapter one provided the basis, introduction and argument for the study (1.1), the background (1.2), the motivation of the study (1.3), the statement of the problem (1.4), the aims and objectives (1.5), the significance of the study (1.6), the delimitations of the

study (1.7), the limitations of the study (1.8), the research methodology and design (1.9), the ethical considerations (1.10), the trustworthiness (1.11) and the chapter layout of the dissertation (1.12).

In chapter two a more comprehensive literature review on TPD for implementation of a new curriculum was presented. The chapter started with a literature review on the meaning of PD and what constitutes effective PD (2.2). This section discussed the theoretical frameworks underpinning this study, the transformative learning theory and the learning network theory (2.3), teacher professionalism (2.4), the impact of PD on teacher efficacy and student achievement (2.5). The chapter concluded with a discussion on the management of PD at school and education department level (2.6).

Chapter three discussed the research design and methodology used in obtaining the empirical data to address the study question. A qualitative case study was adopted (3.2). The method of sampling and sample selection (3.4), data collection methods (3.5), the process of data analysis (3.7), ethical measures (3.6), reliability (3.7.1) and trustworthiness (3.7.2) were discussed.

Chapter four presented and discussed the key findings of the study. A recap of the data analysis process used in this study was discussed in 4.2 as well as the presentation of findings (4.3) which centred on the research question (3.2) and themes (4.3). Three themes emerged from the data analysis. The first theme highlighted teachers' perceptions regarding PD (4.3.1); the second theme presented the role of the SMT and PD (4.3.2) and the third theme looked at the role of the Education Department (DSEJ) in the provision of TPD (4.3.3). A discussion of each theme and emerging obstacles were presented in keeping with the aim of the study (1.5.1).

Each chapter included its own introduction and conclusion, linking chapters throughout the study. The next section is a summary of important findings drawn from the literature and the empirical investigation.

## **CHAPTER SIX**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **6.1 INTRODUCTION**

This chapter presents a summary of the empirical investigation, its conclusions and its recommendations for managing effective TPD for the implementation of a new curriculum. Important limitations of the study are identified and areas for further research bring the chapter to a close.

#### **6.2 SUMMARY OF EMPIRICAL INVESTIGATION**

The literature study in chapter two provided a conceptual framework for the study presented in chapters three and four to determine the impact of the research question. The study followed an interpretive approach to a qualitative case study research. The researcher aimed to gain an understanding of teachers', school management's and the Education Department's opinions, perceptions, experiences and concerns regarding their real conditions in the management of implementing a new curriculum in the primary section of MAC.

Data literature sources were collected, face-to-face individual interviews and a focus group interview were conducted using semi-structured questions, and documents from teacher evaluations. School evaluation reports were also analysed. The individual and focus group questions were open-ended to encourage participants to elaborate on their accounts (3.5.2).

Ethical measures such as informed consent, confidentiality, maintaining openness, disclosure, anonymity and maintaining honesty were considered during the study. The researcher adhered to legal and ethical requirements for research involving people



(3.6). Data analysis followed the steps as presented in section 3.7. Data were analysed to ensure trustworthiness and accuracy as identified by Lincoln and Guba (3.7.2)

The raw data collected were analysed and organised to identify themes and sub-themes (4.3). The main objective of the study was to investigate the following:

- Primary teacher perceptions regarding PD offered by the school to improve the delivery of the new curriculum;
- To establish the critical issues experienced by the SMT when managing PD at school;
- To determine the role of the Education Department (DSEJ) with regard to the management of PD at a school level.

### **6.3 CONCLUSION OF THE STUDY**

Based on the findings in literature on managing PD and findings of the study, the following conclusions were presented.

#### **6.3.1 Conclusions from the literature study**

##### **6.3.1.1 The meaning of PD**

PD is about learning for students, teachers and other professionals who support children. TPD is considered essential for deepening educators' skills and knowledge to develop their instructional practices (2.4.1). Research has highlighted the benefits of teacher PD and emphasises the importance of PD for teachers to succeed in their duties. The importance thereof is contributed to the fact that the PD focuses on how teachers learn new methods and skills to meet learning needs of students (2.4.1). It is therefore seen as an appropriate process to increase teacher knowledge and skills (Bachitar 2019:67). PD activities that focus on teacher knowledge, teacher skills and

teacher attitudes impacts the quality of a teacher which in turn is linked to increases in student learning (Abbot et al. 2018:2).

### **6.3.1.2 Effective PD**

According to many researchers, innovative forms of PD are more effective in meeting the needs of teachers as the approach includes forms of collaboration while grounded on teachers' classroom practice. It further enables teachers to reconstruct knowledge and skills and try new ideas. All these are instrumental in improving teaching practice and teacher knowledge (Bachtiar 2019: 68) (2.4.2). Effective PD should comprise of active learning features and robust content focus. It should be collaborative and align with the relevant curriculum and policies being followed and provide ample learning and practice time for participants (Darling-Hammond et al. 2017: 4) (2.4.2).

### **6.3.1.3 Theoretical framework for PD**

The transformative learning theory explains how adult learners make sense of their experiences and how social and other structures influence the interpretation of experiences.

Mezirow's transformative learning model has ten phases; (1) A disorienting dilemma, (2) self-examination (3) a critical assessment of epistemic and socio-cultural assumptions, (4) recognition of one's discontent and process of transformation are shared, (5) exploration phase, (6) planning a course of action, (7) acquisition of knowledge and skills for plan implementation (8) provisional trying of roles, (9) building of competence and self-confidence, and (10) a reintegration into one's life on the basis of conditions dictated by one's perspective. The aim of transformative learning is for individual's to challenge the current assumptions on which they act, and to change it would include both a mental and behavioural shift (2.3.1).

Learning according to adult learning theory is encouraged when the learner recognises existing knowledge is inadequate or inaccurate. By presenting new information in the knowledge deficit context, learners will incorporate new information into existing knowledge, thus providing new information which is compelling and makes sense of their experience (Laidley 2000:46) (2.3.2).

Knowles (1978) formalised adult learning theory and the concept of andragogy, which sets out six assumptions of adult learning, which are distinct from pedagogy: (1) the adult self-concept moves from a dependent personality toward a self-directing human being, (2) an adult accumulates a resource of rich experiences for learning, (3) adults have a readiness to learn which relates to their development (4) an adult is more problem-centred than subject-centred (5) motivations are internal rather than external, and (6) adults need to know why they required to learn something (Malik 2015:49) (2.3.2).

#### **6.3.1.4 Teacher professionalism**

As stated in the literature, teacher professionalism is interpreted as a professional work field with sociological, ideological and educational dimensions aiming at achieving the highest standards in the teaching profession, based upon professional formation, knowledge, skills and values (2.4.3). The literature revealed that teacher professionalism refers to a set of educative standards aligned to proficiency and not only based on behaviour but it also reflects professional competency which includes communication, knowledge, technical skills and reasoning. Professional competence goes beyond factual knowledge and includes the ability of problem solving with solutions, managing problems and making decisions (2.4.3).

#### **6.3.1.5 The impact of PD on teaching and learning**

It is evident from the literature study that the delivery of high-quality PD has a direct impact on teacher practice to influence student achievement and student learning at a

higher level. Another high-quality PD goal is to increase student engagement which may or may not result in improved academic achievement (2.4.4). The literature study further shows that PD results in teachers learning new skills and knowledge because of participation, and the newly learnt knowledge improves teaching and student achievement (2.4.4).

#### **6.3.1.6 Teacher self-efficacy**

The self-efficacy theory as discussed in section 2.4.4.1 defines self-efficacy as a person's belief about their capabilities to produce levels of performance that would influence events in their lives. Teacher self-efficacy therefore conceptualises the teachers' beliefs as their ability to plan, organise and carry out activities required to attain educational goals. It could also be interpreted as the teacher's belief that he or she can influence a student's achievement even if he or she is difficult to teach or unmotivated (2.4.4.1)

#### **6.3.1.7 Student achievement**

The literature study in section 2.4.4.2 revealed student achievement as a main factor influencing students' academic learning and teachers are considered as the main influence on student performance. The study also indicated teachers will adopt learning experiences which can directly be applied to teaching practice and promote students' learning. A study conducted found that teachers' teaching variables like teaching plan, teaching strategy and teaching attitude were important factors affecting student performance (2.4.4.2). However a contrary study conducted in China revealed that teachers participating in a mathematics PD programme had no positive influence on their students' achievement.

### **6.3.1.8 Management of PD**

The study revealed that to meet the educational goals for existing programmes or introduction of new systems, schools may decide to require teachers to participate in PD set by the management or school community (2.5). The analysis of student academic data and teachers' needs helps determine the direction the school management will take when designing PD initiatives (2.5). PD on a cheaper scale will certainly have little or no impact, while more expensive PD does not guarantee greater effectiveness. How PD is planned and implemented matters most (2.5). The literature study indicated that school-based PD is designed so that learning happens at the school which allows colleagues to learn from each other and support one another. Training plans in most cases are developed at local levels as part of schools' development plan. The literature study indicates that it is essential for the school management to ensure the resources are available for teachers to access and utilise in implementing their new skills and knowledge (2.5).

### **6.3.2 Conclusions from the empirical data of the study**

Three themes emerged from the empirical study namely: (1) teacher perceptions regarding PD, (2) school management and PD and (3) the role of the Education Department (DSEJ).

#### **6.3.2.1 Teacher perceptions regarding PD**

Teachers viewed PD as school and vision driven and expressed the need for more knowledge based development (4.3.1). Regarding the implementation of the new Cambridge Curriculum most teachers' felt that the PD offered by the school to carry out the curriculum was extensive and provided them with the theoretical background on the new curriculum which helped with the implementation of the new curriculum (4.3.1.1). All teachers interviewed felt that the PD offered by the school was meaningful for their professional growth and benefited students (section 4.3.1.2). Teachers further agreed

(4.3.1.3) that their PD needs were being met, however there is room for improvement. Although most teachers indicated that the skills learnt through the PD training were helpful, not all training offered useful skills for implementation (4.3.1.4). The response from teachers clearly indicated that the decisions for PD programmes were decided by the school management, albeit with a certain amount of consultation with staff and alignment of its development with the vision and mission of the school (4.3.1.5). Improving the profession of PD included a grassroots approach, equitability of PD opportunities, subject based knowledge training, sharing of good practices, sharing knowledge on completion of PD training and creating learning communities within the school (4.3.1.6).

### **6.3.2.2 The impact of school management on PD**

The SMT felt that the move to implement the Cambridge Curriculum in the primary school was a wise choice and the PD was arranged to complement the implementation (4.3.2.1). All teachers were encouraged to take courses when available (4.3.2.2). The study revealed that there were various structures in place to evaluate and monitor the programmes related to the implementation of the Cambridge Curriculum (4.3.2.3). The data collected indicated that all management members were satisfied with implementation of the new curriculum and PD provided thus far (4.3.2.4). The collected data further revealed various critical issues faced in provision of PD and with implementation of a new curriculum and PD surrounding the implementation (4.3.2.5). The study highlighted the improvement of PD shows the need for sharing of good practices through learning communities, impartiality in the selection of teachers for PD, encouragement of peer observation and dialogue concerning experience of exchange and sharing of physical materials (4.3.2.6).

### **6.3.2.3 Role of Education Department (DSEJ)**

The DSEJ is responsible for funding TPD (4.3.3.1). The purpose for PD is to improve career qualifications for in-service teachers and improve the educational needs of those who have already met the standards (4.3.3.2). In Macau, teachers decide on how they want to participate in PD, through, among others, self-learning, research and practice, and training. Professional development is based on the number of hours educators spend on training. Macau strictly imposes a requirement of a thirty-hour PD per teacher a year (4.3.3.3). Schools are responsible for recording the hours of training successfully taken by their teachers, and which should be reported to the DSEJ (4.3.3.4). The DSEJ has created clear guidelines on PD subsidy for teaching staff. The subsidy is available to teachers irrespective of their various qualifications and rankings, though a teacher who has higher teaching qualification receives a higher subsidy per month (4.3.3.5). To improve the provision of PD the DSEJ has different kinds of leave applications that will enable teachers to join off the job training for teachers to experience a different learning environment and acquire new knowledge (4.3.3.6).

## **6.4 RECOMMENDATIONS**

The following recommendations were derived from research findings and experiences of teachers, school management and the DSEJ as reported in this study:

- clarify areas for improvement in meeting TPD needs for implementation of a new curriculum to ensure optimum results. This could be achieved through consultation with teachers and structured self-assessment modes (4.3.2.1/4.3.1.3).
- Evaluate teacher training courses and workshops to determine which PD initiatives benefit teachers most, specifically those linked to the implementation of the Cambridge Curriculum in the primary section of MAC, and possibly

rethink, if not completely exclude, training that may be irrelevant (4.3.2.1/ 4.3.1.4).

- Provide clear guidelines on formulating decisions for PD programmes to clarify the participation of school management and staff alike, so that both parties take accountability for decisions made (4.3.2.1/ 4.3.1.5).
- Clarify the various critical issues faced during the provision of PD in line with implementation of the new curriculum that they may be addressed by the management of future PD plans (4.3.2.2/ 4.3.2.5)

## **6.5 RECOMMENDATIONS FOR FURTHER STUDY**

The findings of the study gave rise to the following recommendations for further study.

- Explore the extent of the impact that PD has on the actual implementation of a new curriculum or academic programme by means of a structured instrument for assessment aside from only interviews (4.3.2.2/ 4.3.2.1).
- Probe the satisfaction level and specific areas of interest among the members of school management regarding the implementation of a new curriculum and PD provided for teachers (4.3.2.2/ 4.3.2.4).
- Replicate the study to a larger group of respondents to validate findings for this research and find new areas of reflection that can guide schools in crafting PD plans in the endeavour of implementing a new curriculum.
- Conduct a similar study in a different school setting and compare and contrast old and new findings that may inform school managers on how to design professional development programmes while or before introducing and implementing a new curriculum aside of the Cambridge programme.



## **6.6 LIMITATIONS OF THE STUDY**

Limitations of the study included the following:

- The study focused on participants that represented only one section of the school, limiting participants and giving rise to a small teacher sample group.
- Participants' personal background and beliefs may affect the attitude and perception of participants towards the PD.
- The study focused on only one institution in Macau, thus limiting the scope for the collection of data, the use of a bigger sample and the opportunity for comparison.

## **6.7 CONCLUSION**

The study set out to explore the management of PD for the implementation of a new Cambridge Curriculum in the primary section of MAC. A qualitative design and methodology was used to investigate PD and how it is managed at MAC. The study used individual and focus group interviews which allow the researcher to explore the expectations and experiences of six teachers, four school management members and one representative from the DSEJ. The research study adhered to ethical principles and was evaluated for trustworthiness.

The study revealed that most participants were satisfied with the extent and management of PD offered by the school for implementation of a new Cambridge Curriculum. The PD which was school and vision driven, however, lacked the need for skill and content development. It highlighted improvements for the provision of PD which included: adopting a grassroots approach, equitability of PD opportunities, skills and content-based training and the sharing of good practices. By conducting this research study, it was found that all management members were satisfied with the implementation of the new curriculum and that various structures were in place to

evaluate and monitor the implementation thereof. The study further revealed that the purpose of the DSEJ is to improve career qualifications for in-service teachers and improve the educational needs of those who have already met the teaching standards required through its PD provision.

The comprehensive literature study indicated that PD is learning for students, teachers and professionals supporting children and that teacher development is a mechanism for supplementing educator content and knowledge. Recommendations, with possible further studies and limitations of the study, were presented.

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## APPENDICES

### APPENDIX A: CONSENT LETTER FROM SCHOOL SUPERVISOR



聖公會中學(澳門)  
Macau Anglican College

Appendix A – Consent letter from School Supervisor

July 2018

Dear Sirs / Madam

As school supervisor for Macau Anglican College I grant the permission for Mr. Robert Alexander to conduct his master studies research at our school. He has the permission to conduct focus group and individual interviews with selected staff members. He has permission to view and analyze school documents relevant to his area of research and study.

The information and data collected are classified as confidential and remained intellectual properties of the school.

Sincerely

Mr. Michael Lai  
School Supervisor



## APPENDIX B: UNISA ETHICS APPROVAL LETTER

Appendix B



### UNISA COLLEGE OF EDUCATION ETHICS REVIEW COMMITTEE

Date: 2018/09/12

Ref: 2018/09/12/36103691/42/MC

Dear Mr Alexander

Name: Mr RR Alexander

Student: 36103691

**Decision:** Ethics Approval from  
2018/09/12 to 2021/09/12

**Researcher(s):** Name: Mr RR Alexander  
E-mail address: Ralex101@hotmail.com  
Telephone: +85 36 630 1756

**Supervisor(s):** Name: Mr K Prins  
E-mail address: Eprinsk1@unisa.ac.za  
Telephone: N/A

**Title of research:**

**Managing Teacher Professional Development in Macau, South East Asia**

**Qualification:** M. Ed in Educational Leadership and Management

Thank you for the application for research ethics clearance by the UNISA College of Education Ethics Review Committee for the above mentioned research. Ethics approval is granted for the period 2018/09/12 to 2021/09/12.

*The low risk application was reviewed by the Ethics Review Committee on 2018/09/12 in compliance with the UNISA Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment.*

The proposed research may now commence with the provisions 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 should be communicated in writing to the UNISA College of Education Ethics Review Committee.



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3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
4. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing.
5. 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. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data requires additional ethics clearance.
7. No field work activities may continue after the expiry date **2021/09/12**. Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

*Note:*

The reference number **2018/09/12/36103691/42/MC MC** should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.

Kind regards,



**Dr M Claassens**  
**CHAIRPERSON: CEDU RERC**  
mcdtc@netactive.co.za



**Prof V McKay**  
**EXECUTIVE DEAN**  
Mckayvi@unisa.ac.za

Approved - decision template – updated 16 Feb 2017

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## **APPENDIX C: PARTICIPANT CONSENT LETTER**

23<sup>th</sup> June 2018

Title: How is professional development managed at MAC?

### **DEAR PROSPECTIVE PARTICIPANT**

My name is Robert Alexander I am doing research under the supervision of Mr. K. Prins, a senior lecturer in the Department of Education Management towards a MED degree at the University of South Africa. We have funding from. We are inviting you to participate in a study entitled: How is professional development managed at MAC.

### **WHAT IS THE PURPOSE OF THE STUDY?**

This study is expected to collect important information that explains how professional development is managed at MAC and identifying ways of improving the management of professional development programs of the school. Through the study teachers', parents, school management and education department perceptions are identified and should be considered when planning and implementing future professional development programs at the school.

### **WHY AM I BEING INVITED TO PARTICIPATE?**

You are invited because you are a teacher at the school/ parent of the school / school management member/ representative of the education department. I obtained your contact details from the school principal. Approximately 15 participants will participate in this study.

### **WHAT IS THE NATURE OF MY PARTICIPATION IN THIS STUDY?**

The study involves semi-structured interviews and a focus group interview with audio taping. Interviews should last for approximately 1 to 2 hour and will focus on the following questions.

- What are the perceptions of teachers regarding the extent of professional development offered by the school to improve classroom appraisal?
- What are the critical issues experienced by the SMT when implementing professional development programs to assist teachers at school?
- What role does the department of education play with regards to professional development at school level?
- How can parents support teachers in carrying out their professional duties at the school?

### **CAN I WITHDRAW FROM THIS STUDY EVEN AFTER HAVING AGREED TO PARTICIPATE?**

Participating in this study is voluntary and you are under no obligation to consent to participation. If you do decide to take part, you will be given this information sheet to

keep and be asked to sign a written consent form. You are free to withdraw at any time and without giving a reason.

**ARE THERE ANY NEGATIVE CONSEQUENCES FOR ME IF I PARTICIPATE IN THE RESEARCH PROJECT?**

There are no potential risks in carrying out this research. Interviews will be arranged at a time convenient to the participant and at an agreed safe location.

**WILL THE INFORMATION THAT I CONVEY TO THE RESEARCHER AND MY IDENTITY BE KEPT CONFIDENTIAL?**

Your name will not be recorded anywhere and no one will be able to connect you to the answers you give. Your answers will be given a code number or a pseudonym and you will be referred to in this way in the data, any publications, or other research reporting methods such as conference proceedings.

Your answers may be reviewed by people responsible for making sure that research is done properly, including the transcriber, external coder, and members of the Research Ethics Review Committee. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.

Your anonymous data may be used for other purposes, such as a research report, journal articles and/or conference proceedings. A pseudonym will be used and you will be referred to in this way.

A simultaneous interview of a few people making up a small group of usually no more than 10 to 12 people and last between 1 and 2 hours will be conducted as a focus group interview. While every effort will be made by the researcher to ensure that you will not be connected to the information that you share during the focus group, I cannot guarantee that other participants in the focus group will treat information confidentially. I shall, however, encourage all participants to do so. For this reason I advise you not to disclose personally sensitive information in the focus group.

**HOW WILL THE RESEARCHER(S) PROTECT THE SECURITY OF DATA?**

Hard copies of your answers will be stored by the researcher for a period of five years in a locked cupboard/filing cabinet at the records department of MAC, for future research or academic purposes; electronic information will be stored on a password protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. Hard copies will be shredded and/or electronic copies will be permanently deleted from the hard drive of the computer through the use of a relevant software programme.

**WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?**

No reward or financial payments will be made to participants for this study.

**HAS THE STUDY RECEIVED ETHICS APPROVAL**



This study has received written approval from the Research Ethics Review Committee of the CEDU, Unisa. A copy of the approval letter can be obtained from the researcher if you so wish.

**HOW WILL I BE INFORMED OF THE FINDINGS/RESULTS OF THE RESEARCH?**

If you would like to be informed of the final research findings, please contact Robert Alexander on 66301756 or email [ralex101@hotmail.com](mailto:ralex101@hotmail.com). The findings are accessible for six months after completion of the research.

Should you require any further information or want to contact the researcher about any aspect of this study, please contact Robert Alexander on 66301756 or email [ralex101@hotmail.com](mailto:ralex101@hotmail.com).

Should you have concerns about the way in which the research has been conducted, you may contact Mr. K. Prins, email [eprinsk1@unisa.ac.za](mailto:eprinsk1@unisa.ac.za)

Thank you for taking time to read this information sheet and for participating in this study.

Thank you.

\_\_\_\_\_  
Robert Alexander  
UNISA Student

-----  
**CONSENT TO PARTICIPATE IN THIS STUDY (Return slip)**

I, \_\_\_\_\_ (participant name), confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree to the recording of the semi-structured interview.

I have received a signed copy of the informed consent agreement.

Participant full name (please print) : \_\_\_\_\_

\_\_\_\_\_  
Participant Signature

\_\_\_\_\_  
Date

Researcher's full name (please print): \_\_\_\_\_

\_\_\_\_\_  
Researcher's signature

\_\_\_\_\_  
Date

## **APPENDIX D: PERMISSION LETTER TO SCHOOL SUPERVISOR**

### **Request for permission to conduct research at MAC**

Title of the research: How is professional development managed at MAC?

Mr. XXXXXX

School Supervisor

MAC

853 28850000

Date: 23<sup>rd</sup> June 2018

**Dear Mr. XXX**

I, Robert Alexander am doing research under supervision of Mr. K. Prins, a senior lecturer in the Department of Education Management towards an M.Ed degree at the University of South Africa. We are inviting you to participate in a study entitled: How is professional development managed at MAC?

The aim of the study is to establish how professional development is managed at the school, what are teachers' perceptions regarding the extent of professional development offered by the school, what are the critical issues faced by the school management when implementing professional development programs, what role does the education department play regarding professional development at school level, and how can parents support teachers in carrying out their professional duties at the school. Your school has been selected because of its diverse cultural community and academic excellence.

The study will entail conducting face-to-face individual interviews with selected teachers and parents, and a focus group interview with school management. Interviews will be recorded and written notes will be taken to accurately record data. The benefits of this study are identifying ways of improving the management of professional development programs at the school, teachers' perceptions are considered when planning and implementing professional development programs at the school. There are no potential risks in carrying out this research.

There will be no reimbursement or any incentives for participation in the research. Feedback procedure will entail providing verbal feedback to the school management on the research findings and a copy of the research paper and its findings to the school.

Yours sincerely

---

Robert Alexander

UNISA MED Student

## APPENDIX E: FOCUS GROUP CONSENT AGREEMENT

### FOCUS GROUP CONSENT AND CONFIDENTIALITY AGREEMENT

I \_\_\_\_\_ grant consent that the information I share during the focus group may be used by Robert Alexander for research purposes. I am aware that the group discussions will be digitally recorded and grant consent/assent for these recordings, provided that my privacy will be protected. I undertake not to divulge any information that is shared in the group discussions to any person outside the group in order to maintain confidentiality.

Participant's Name (Please print): \_\_\_\_\_

Participant Signature: \_\_\_\_\_

Researcher's Name: (Please print): \_\_\_\_\_

Researcher's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## APPENDIX F: INTERVIEW SCHEDULE QUESTIONS

### Focus Group Interview Question:

Focus Research question: What are the critical issues experienced by the School Management Team (SMT) when managing professional development programs at school?

- How is the direction and choice of professional development programs related to the implementation of Cambridge curriculum decided at the school?
- How are participants of professional development training selected?
- How is implementation of new skills learnt from professional development programs done, monitored, and evaluated at school?
- Are you satisfied with the current management of professional development with regard to the implementation of the new Cambridge curriculum? Why?
- As school leaders, what critical issues do you experience or you think the management faces regarding the implementation of professional development programs to assist teachers at school?
- What improvement/changes would you bring about to improve the management of professional development in the school to capacitate teachers in delivering the new curriculum?

### Individual Teacher Interview Questions

Focus Research Question: What are the perceptions of teachers regarding the extent of professional development offered by the school to improve their delivery of the new curriculum?

- What is your perception regarding the extent of professional development offered by the school to help you carry out the Cambridge curriculum?
- Are professional development initiatives offered by the school meaningful to your career growth? Why?
- Do you feel that your professional development needs are being met? Why?
- Do you use or implement the skills learnt from professional development training in your teaching? Have they impacted on student learning and academic achievement?
- How do you think professional development activities decided at school?
- As a member of the teaching staff, how do you think the provision and management of professional development at the school be improved?

### Interview Questions - Direcção dos Servicos de Educação e Juventude (DSEJ)

Focus Research Question: What role does the Direcção dos Servicos de Educação e Juventude (DSEJ) play with regards to management of professional development at school level?

- What role does DSEJ play with regards to professional development at the school level?
- How does DSEJ monitor and evaluate professional development at schools?
- What does DSEJ expect from teachers regarding their professional development?
- What does DSEJ expect from the school management regarding teachers' professional development?
- What is the extent of support given by DSEJ in relation to teachers' professional development?
- What improvement/changes would you bring about to improve the management of professional development at MAC in relation to the implementation of Cambridge curriculum?

## APPENDIX G: TURNITIN REPORT



### Digital Receipt

This receipt acknowledges that Turnitin received your paper. Below you will find the receipt information regarding your submission.

The first page of your submissions is displayed below.

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File size: **590.36K**  
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Word count: **30,363**  
Character count: **178,342**  
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Submission ID: **1478533294**





MANAGING TEACHER PROFESSIONAL DEVELOPMENT IN MACAU  
SOUTH-EAST ASIA

by

ROBERT RICHARD ALEXANDER

submitted in accordance with the requirements for  
the degree of

MASTER OF EDUCATION

in the subject

EDUCATION MANAGEMENT

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: Dr K Pines

November 2020

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## APPENDIX H: EDITORS CERTIFICATE

20 November 2021

### CERTIFICATE OF EDITING

To Whom It May Concern:

This is to confirm that I have edited the language segment of the following M. Ed. (Educational Management) dissertation of limited scope: **MANAGING TEACHER PROFESSIONAL DEVELOPMENT IN MACAU SOUTH-EAST ASIA** by R. R. Alexander. The layout of the thesis remains the responsibility of the student.

Yours faithfully



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## **APPENDIX I: TRANSCRIBED INTERVIEW WITH TEACHER 2 (T2)**

**Interviewer:** Thank you so much for agreeing to do this interview this morning. Ah to get started maybe you can introduce yourself ah, tell us a little bit how long you've been at the school, your area of teaching, Uhm, where you from.

**T2:** I've been here at this school for about 13 years, and ah this year I teach primary 2 children.

**Interviewer:** So Uhm, so you've been here for quite a while. So we going to be interviewing regarding the ah professional development ahm within the school and how it's implemented over the years. Uhm. So what is your perception regarding the extent of the professional development, Uhm being offered by the school Uhm to help you carry out the Cambridge curriculum, Uhm specifically?

**T2:** Yes, well I can say it is extensive. Macau Anglican College is very supportive in providing professional development courses to us teachers, to equip us in carrying out the Cambridge curriculum. In fact we have had our first round of Cambridge courses last year which helped us understand the Cambridge way of teaching and learning. Next year, we are again given the opportunity to enroll in another Cambridge professional development course to further our knowledge and skills, so the school engages in continuous professional learning and applies that learning to increase student achievement.

**Interviewer:** uhm, ok, that that that's good. Uhm, what are the ah professional development initiatives auhm offered by the school, Uhm, how is it meaningful to your career growth and why? Overall, what is...

**T2:** Yes, it is absolutely meaningful to my growth as a teacher. The school management gives careful thought in planning professional development courses offered every year that would benefit the teachers and students alike. Before each academic year, teachers attend the PD courses offered by the school. There's also a separate workshop for for leaders like like me. Although the year, or throughout the year rather, there are seminars, talks and workshops also available to to teachers to



participate in. In fact there were already a wide variety of professional development courses that we have already attended - like lesson differentiation, classroom management, teaching methods and strategies, teamwork and collaboration, using technology in the classroom, learning through storytelling, special needs education and so many more. Professional development will ensure that we will continue to strengthen our practice throughout our career.

**Interviewer:** Very good! Uhm, do you feel that ah your professional development needs are being met ah at the school and why?

**T2:** Yes, I do. Professional development enables me to develop the knowledge and skills I need to address my students' learning challenges. It also helps me become more confident and effective in my teaching in the classroom.

Mr. A: Uhm, is there any specific uhm, you know development that you found really uhm, that you would sort of highlight as as one that was really meaningful to you from all the development that you've done?

**T2:** Ok, I think personally I would say the special education needs

Interviewer: Is it?

**T2:** of the children so because ah in Macau, I mean in our school, there's, we have quite a few uhm special education needs students, so I really ah feel like that we need to be ah having more of the professional development training to really address the students' need for them to also have success in their in their education. So this is the area where ah I think ah is very meaningful for me.

Interviewer: Uhm, do you use or implement the skills learnt from your various professional development training in your teaching? uhm, and how have, how has that impacted on your students' learning, ah and the academic development?

**T2:** Yes, I do. Most of them I implement in my classroom and ah, it really addresses the needs of students. In fact, that I can see that you know the low ability children even, and also those with special needs, they really find success in the in the academic side. They might not be like going from low to high, but I can find success in them and then they gain the confidence that they need, and then they feel that they belong in the classroom. They don't feel like ah, they are out, I mean ah, way below other children so they are happy.

**Interviewer:** So you would say that the skills that you've learnt, ah and by implementing uhm, definitely impacts your teaching and students'?

**T2:** Yes it does.

Interviewer: You've seen that?

**T2:** Yes, I've seen, I've seen in my classroom.

**Interviewer** Uhm, how do you think ah professional development activities ah is decided at the school? What how do think? What do you think? How is it being decided at the school?

**T2:** Well I think the school decides on professional development that engages teams of teachers to focus on the needs of the students. Ok this is the priority that I think that school is uhm going for. And uh I believe the effective professional development affects the students most importantly. There, the students' learning and achievement increase when educators engage in effective professional development ah focused on the skills educators need in order to address students' major learning challenges, so I think this is how the school ah decides on which professional development courses that ah will be offered to the teachers.

**Interviewer:** Uhm, ok uhm. Do you think there's a a better way that they could be ah, or as a member of the teaching staff, how do you think the provision and the management of professional development at school can be improved? Uh, from your perspective?

**T2:** Yes, so ah, as a member of the teaching staff here, and I've been working here for for quite some time, okay I have I have a few suggestions for for the school. So firstly, is to involve teachers in professional development courses decision making as well because you know, we are the front liners, we are the ones ah dealing with the students on a daily basis, right? And then secondly, is to provide novice teachers with intensive mentoring and I should say also that teachers that come to our school, like with no background on Cambridge, and that I'd say that for them to have intensive mentoring, and set them on the path to becoming effective teachers. And then thirdly, I I should say that ah we should promote more informal informal professional development activities such as seeking, providing or receiving feedback from a colleague, as well on teaching practice or new teaching materials, reading relevant educational research and

discussing with colleagues different teaching strategies to use with students. So we already have the formal side of the professional development that we do every year, so I think we need to focus more on the on the informal way of ah learning. And then lastly, I'd say that ah we should have opportunities more to visit and learn from other schools as well that have new and best practices.

Interviewer; Okay, ah, alright, is there anything else that you that you think you would want to mention ah regarding ah professional development within the school - how it's running, how it can be implemented, how it can be improved? Any other comments that you have just general comments?

**T2:** Yeah, I think that we are really moving forward right? We've been here for quite some time. And I know that ever since, uhm if I look back thirteen years ah ago, that we always have professional development and I think now more, that we are identifying yeah, our needs especially that we have already ah changed our curriculum , that we are adopting the Cambridge curriculum , I think that we are, you know , I mean, moving on this ah, you know, new curriculum that we have, I think that we are providing the teachers with ah, the basic at least, you know the training to to guide us, to help us understand the Cambridge teaching and learning more. I think that we are in the right path. Right? Of course we can do more, maybe identify the areas where the teachers like, you know the teachers' needs, say for example ah, the the the teachers who teach in upper primary maybe they could clearly focus more on their ah craft, on their subject, and they can probably also go to the schools, maybe observe and then, and just improve their skills.

**Interviewer:** Okay. Alright, well thank you so much for

## APPENDIX J: TRANSCRIBED INTERVIEW WITH FOCUS GROUP

### TRANSCRIBED INTERVIEW WITH FOCUS GROUP – SCHOOL MANAGEMENT TEAM (SMT)

**Interviewer:** So first of all, thank you so much for agreeing to do this focus group interview on managing professional development within Macau Anglican College. So to get started, maybe you can just introduce yourselves – your name, your position at the school, and how long you've been here with the school, and then we can get started with a few guided questions.

**SMT1:** I've been at MAC since 2003. I'm a P4 class teacher, teaching subject English. And I'm also the head of English for Primary section. It's been three years, I think, in this position.

**Interviewer:** Thank you.

**SMT2:** I started teaching at Macau Anglican College since 2009. Yeah, this is my 9<sup>th</sup> going to 10<sup>th</sup> year. And I am the P6 grade level coordinator. I'm also a P6 teacher and the examination officer for primary.

**SMT3:** I'm, the assistant principal of MAC. I joined MAC in 2011, and I have complete seven years here, and last year I was promoted to be the assistant principal of the school. Before that, I'm the head of secondary section, and when I joined MAC, I was a Math teacher.

**SMT4:** I'm working here for ten years. I'm a Science teacher and then head of Science department in primary section, and also head of primary to overlook all the curriculum function and everything in the primary section.

**Interviewer:** Thank you so much. To get started, we have a few questions that we gonna go through this afternoon. You can just respond to them accordingly. The first one is, how is the direction and choice of professional development programs related to the implementation of the Cambridge Curriculum decided at the school?

**SMT1:** Can I go first?

**Interviewer:** Sure! Yeah.

**SMT1:** To be honest, I don't know how is the professional development selected in our school. I don't know if there's a team, maybe I'm missing something. But I don't really see it currently any direct link with, for example, the English primary curriculum with what's going on with the professional development selection.

**Interviewer:** Okay!

**SMT2:** For me, I think since we moved from IPC to Cambridge, I find it better because like I know in the primary in the IPC curriculum, you have to be self-directed. But with the Cambridge curriculum, they have levelled professional development. Like let's say for example, they have the introductory course. You have the, I'm only talking about the curriculum, the Cambridge curriculum. Not any other professional development, but it's only related to the curriculum. Now it's more, for me, it's more standardised like introductory, you need to know all of these things, and then you move on to the next level. And then so on and so forth. And then we also have the option whether you want to do it online or one on one. So for me it's more standardised.

**SMT1:** Can I cut? In that aspect, yes. We're talking about the professional development that is tied to the Cambridge curriculum, yes I agree that with the system in place, with the online you know courses, actually going to the physical workshop, I do see how it is beneficial to teachers but I thought you also meant at school professional development. For curriculum, I don't see any professional development.

**SMT4:** The direction of this professional development, of course, how it was selected because I'm one of the member of the curriculum team in primary section, and then when we look at it, that when school decided to take the step to, take the Cambridge curriculum to support high school because we, our students sit for Igc and A levels. So it was a very crucial step to get into but bringing the whole primary and about thirty-four or thirty-five teachers into this, school had direction because we place all of our teachers first to the introductory course. So at least, they will, before it was last year in September, when we started in September and October, they had about full six weeks of professional development, where they learnt the ABC of what the curriculum is. But before the formal implementation of the Cambridge curriculum, the curriculum team went to the core advance training to Shanghai, which was school-organised of course. It was very helpful because before they could sit for the introductory program or

introductory training, the curriculum team already discussed the core areas of the curriculum with the teachers, the resources, how the planning is need to be done, how the Cambridge terms are divided into short term and long term planning, and all that. So I think, with the direction of training, the teacher training professional development, the timings of implementation of curriculum has been, in my opinion, has been perfect and because we are still moving to the advance direction now. This is one year of implementation done. Now we have collected enough evidence to see what is further needed of the professional development.

**SMT3:** I think, it's a good program to implement the Cambridge primary in our school because in the past, there's always a gap between the primary section and the secondary section. We as the curriculum team in the primary first attend the courses in order to be familiar and understand the requirements or the set up or how to set up the curriculum in the primary. I think, the direction or the selected group of the student is a good selection. So it will be easier for the curriculum team or the head of sections to pass the message on to plan for the rest for the implementation of the curriculum.

**Interviewer:** Okay, so how, how are the participants for your professional development training get selected? Because you mentioned that the direction was to follow the Cambridge, right? So how did you then select applicants or participants, not applicants, participants for the training?

**SMT2:** Actually, it depends on which subject they are teaching. So let's say they are teaching English, then they go into the English curriculum training. Then they go for, if they're teaching science, then they go to the Science curriculum, and then same goes for Maths. And it also depends on the previous training that they've already undertaken. So let's say for example, they've already taken the introductory, then they do the advance and so on, depending on the availability of the courses.

**SMT4:** All of us have to really select the core lead teachers of the subjects because it was very important for them to understand the curriculum before formally implement, before the formal implementation. And then for the continuation, for the lower, because for the lower primary, our teachers teach all the subjects. So they're supposed to be trained in all three core subjects curriculum. So what we, we took the first step. The first year, we asked them that you focus on the area you are planning, because one

teacher plan for whole year group for Maths, English or, so they focus on their planning areas. But the second year, we would like them to take the interest one, that what is their interest. And then the third year, whatever is left, they have to. So that's how for the lower primary, we have suggestion and recommendations for teachers to follow, and within three years, they would be trained in all core subjects. However in upper primary, because it's teachers are focused on specialised subjects, so we would like them, they have done, they have done the introductory courses in their specialised subjects, and then will go for advance training in the same subject areas.

**SMT3:** I think we encourage all the teacher to take the courses when it is available. Certainly we will not force them. But if the courses are available, we always encourage the teacher to register as many as they can to have more ideas about the curriculum. Because they can benefit from the training. After they train, and they have more understanding about the curriculum and they can use or implement and sometimes even explain to the parents because parents have concern about the first state of the implementation of the curriculum. So when they are more familiar with the curriculum, and they can explain to those parents easily.

**Interviewer:** So how is the implementation of the new skills that teachers learn through the professional development programs within the school or out of school, how is it done? How do you monitor and evaluate it at school level?

**SMT2:** Different ways, Let's say for example, in terms of planning, the first step, if you attend the introductory course, they will teach you exactly how to do the planning and so teachers have to submit their planning every Friday to SMT4. And then aside from that, the lead teachers, the subject lead teachers, we also have access to grade level folders in tdata, so we can actually access, and see whether teachers are really doing the planning correctly. As to the use of the resources, the use of codes, there you'll be able to see whether teachers have really learnt that they need in that particular area because everything is there in the planning – the codes, the skills, the activities from beginning of the lesson, the lesson itself, and then the ending of the lesson plus the usage of the resources and all.

## **OPSOMMING**

Hierdie studie wil die bestuur van onderwyserprofessionele-ontwikkeling (OPO) vir die implementering van die Primêre Cambridge-kurrikulum by Macau Anglikaanse Kollege in Suidoos-Afrika ontgin. Professionele ontwikkeling (PO) in hierdie navorsingstudie behels leer vir onderwysers en studente en word beskou as 'n proses om onderwyserkennis en -vaardighede uit te brei. Die literatuur verwys na professionele ontwikkeling as 'n gestruktureerde, professionele manier van leer om onderwysers se kennis, vaardighede en praktyke te verryk en om die studente te help om die leeruitkomst te bereik. Die teoretiese raamwerk wat hierdie studie onderlê, is op die transformatiewe en volwasseleerteorieë gegrond.

'n Kwalitatiewe gevallestudie-navorsingsontwerp is gebruik en data is ingesamel deur middel van sewe individuele onderhoude, 'n fokusgroeponderhoud met vier deelnemers en die ontleding van institusionele dokumente soos onderwyserevalueringsverslae, OPO-rekords en studente se akademiese rekords. Die studie het aan die lig gebring dat onderwysers professionele groei ervaar en dankbaar is vir professionele ontwikkelingsopleiding. Die behoefte om aandag aan inhoud en vaardighede in professionele ontwikkeling te gee, die gebrek aan 'n voetsoolbenadering, die behoefte aan regverdigheid by professionele ontwikkeling, die behoefte aan vaardighede en inhoudsopleiding en die deel van goeie praktyke, is egter as tekortkominge geïdentifiseer. Die studie het nietemin tot die slotsom gekom dat professionele ontwikkeling bevredigend bestuur word.

## **SLEUTELTERME**

Professionele ontwikkeling; onderwyserprofessionalisme; studenteprestasie; kurrikulumimplementering; professionaliteit; bestuur



## ISISHWANKATHELO

Esi sifundo sizama ukuphonononga ulawulo lophuhliso lobungcali bobutitshala (iTPD) ukuze kuqhutywe ikharithulam eyi *Primary Cambridge Curriculum* kwikholeji eyi *Macau Anglican College (MAC)*, ekummandla okuMzantsi Mpuma waseAsia. Uphuhliso lobungcali (iPD) kwesi sifundo lumalunga nokufunda kootitshala nabafundi kwaye lubonwa njengenkqubo yokongeza ulwazi nezakhono zootitshala. Uncwadi kubhekisa kwiPD njengendlela yobungcali yokufunda eyandisa ulwazi nezakhono zootitshala nokukhulisa iziphumo zokufunda zabafundi. Isakhelo sengcingane esisekele olu phando sithathelwe kwiingcingane zenguqu kwizifundo zabantu abadala.

Kusetyenziswe indlela yophando yokuzathuza kwisifundo esingumzekelo. Kuqokelelwe idatha ngokuqhuba udliwano ndlebe nganye nganye kubantu abasixhenxe nakwiqela logxininiso elinamalungu amane, kwaphengululwa imiqulu yeziko lemfundo efana neengxelo zovavanyo lweetitshala, iingxelo zeTPD neengxelo zeziphumo zemfundo yabafundi. Esi sifundo sifumanise ukuba ootitshala bazifumana bekhula kubungcali babo kwaye banombulelo ngokufumana uqeqesho lwePD. Noxa kunjalo, kufumaniseke ukuba kukho ukusilela ekufezekiseni izidingo malunga neziqulatho nezakhono kwiPD, ukungaqali ezantsi xa kuqeqeshwa, ukungalingani kwiPD, uqeqesho ngokomxholo nezakhono nokwabelana ngamacebo okusebenza awakhayo. Ngaphandle koko, isifundo sigqibe kwelokuba iPD ilawulwa ngokwanelisayo.

## AMAGAMA APHAMBILI

Uphuhliso lobungcali; ubungcali bobutitshala; inzuzo yabafundi; ukusetyenziswa kwekharithulam; ubungcali bomsebenzi; ulawulo