Exploring curriculum and instructional design in selected South African primary schools

by

AGNÉS HILDA THIART

Thesis submitted in accordance with the requirements for the degree

DOCTOR OF EDUCATION

In the subject

Curriculum and Instructional Studies

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: Dr J.M. (ONA) JANSE VAN RENSBURG 31-01-2020

DECLARATION

Name: Agnés Hilda Thiart	
Student number: 61958999	
Degree: Doctor in Education	
Exploring curriculum and instructional design in	selected South African primary schools.
I declare that the above thesis is my own work a quoted have been indicated and acknowledged	
I further declare that I submitted the thesis to or within the accepted requirements for originality.	riginality checking software and that it falls
I further declare that I have not previously submit at Unisa for another qualification or at any other	•
Attlind	<u>31 January 2020</u>
Δ H Thiart	Date

DEDICATION

This study is dedicated to:

My late parents, Rev. Hans and Esmé van Staden, for unconditional love and always reminding me of the power of prayer, faith and love.

My precious granddaughters, Milan and Alivia, to always remember them that successful people are not gifted. They just work hard, then succeed on purpose. I hope to encourage them in their studies one day.

ACKNOWLEDGEMENTS

I give all glory to my Heavenly Father for the abilities, strength and insight He granted me with throughout this journey to complete this study.

It is a privilege to appreciate the following people who encouraged me and have contributed in different ways to the completion of this study:

- My supervisor, Dr Ona Janse van Rensburg, for all her support, guidance and enthusiasm which inspired me to finish this study.
- My children, Jaco, Chantelle and Esméri Thiart, for all your love and support. Your belief in my abilities carried me through difficult times. I love you all dearly.
- My brothers, Herman and Phillip van Staden, family and friends for all their prayers,
 love and understanding. I am blessed to have you in my life.
- All the participants, without their assistance and involvement this study would not have been possible.
- I would also like to thank Dr Jackie de Vos for the proofreading and editorial layout. Your input is much appreciated.

ABSTRACT

In the last two decades, the South African educational system has undergone extensive changes. However, despite the South African government's efforts to improve educational processes, infrastructure and resources in the country, numerous problems and anomalies still litter the education landscape.

The researcher looked into the school system and teacher's training by exploring curriculum and instructional design in selected South African primary schools. The aim of this study was to explore and determine how the curriculum and instructional design of selected primary schools could give new insights into the school system and teacher's training in South Africa for the common good of learners in South Africa. The core of the research was that the researcher wanted to answer the question to herself: What could be done to enhance teaching and learning and to prepare primary school learners in South Africa for the demands of the 21st century.

First, a literature study was conducted to identify the current state of and also education problems different quintile primary schools representing the diversity of the contexts in South Africa in particular. The literature was also explored to get clear insights into the curriculum and instructional design of schools in South Africa and the Netherlands, teacher's training programmes, teachers' pedagogical knowledge and skills regarding curriculum implementation and instruction in the different primary school phases.

Bronfenbrenner's ecological model was used throughout the study to apply the literature and also the data findings and a qualitative-methods study located within interpretivism as a paradigm was conducted. Interpretivism as worldview emerge from the following categories: actions, circumstances (situations) and results (consequences) and exist in social, historical and political situations. Information-rich participants from pre-primary and primary schools were purposefully selected. A multiple case study design was employed. Five (n=5) selected teachers from the Netherlands and 23 (n=23) primary school teachers from South Africa, comprising ten (n=10) from selected primary schools from

Gauteng and 13 (n=13) and primary school teachers from the Eastern Cape. The selected primary schools in South Africa from different quintiles ensure a fair representation of the population in South Africa. In addition to the above selection, five teacher education lecturers from the Netherlands, and 13 departmental officials from the Eastern Cape (an underperforming province) and from the Gauteng Department of Education (a good performing province) were selected to participate. Semi-structured interviews, questionnaires and document analysis were employed as qualitative data gathering instruments. The researcher analysed and interpreted the data and came to the following main themes which included a number of sub-themes: determining factors of learners and context in selected South African schools, problems around proficient teacher's training for primary school teachers in South Africa, challenges in terms of curriculum and assessment, problems within the education system and a lack of 21st century skills and equipment. The themes with the most sub-themes were problems around proficient teacher's training for primary schools (11 sub-themes), problems within the education system (10 sub-themes) and challenges in terms of curriculum and assessment with 9 sub-themes. Finally, based on the findings, the researcher compiled a framework derived from her insights about primary school education and primary school teacher's training in South Africa. The suggested framework must be applied and upgraded to a model to enhance curriculum and instructional design in primary schools in South Africa.

Key terms/ key words:

Curriculum design; exploring; instructional design; primary schools; South Africa

LIST OF ACRONYMS AND ABBREVIATIONS

§: section

ABET: Adult Basic Education and Training

AIDS: Acquired immune deficiency syndrome

ANC: African National Congress

BIO-Act: Essence of the act

BRON: Basis Register Onderwijs

CAPS: Curriculum and Assessment Policy Statement

CHE: Council on Higher Education

CIE: Comparative and International Education

CITO: Centraal Institute Voor Toetsontwikkeling

CNE: Christian National Education

COOL: Cohort Onderzoek Onderwijsloopbanen

CPTD: Continuous Professional Teacher Development

CVTE: College Voor Toets en Examinering

DBE: Department of Basic Education

DEIC: Dutch East India Company

DHET: Department of Higher Education and Training

DIPS: Dutch International Primary Schools

DISS: Dutch International Secondary Schools

DoE: Department of Education

ECD: Early childhood development

ECEC: Early Childhood Education and Care

ELDAs: Early Learning and Development Areas

ELRC: Education Labour Relations Commission

EQF: European Qualifications Framework

ET: Education and Training

EU: European Union

FAL: First additional language

FEDSAS: Federation of Governing Bodies of South African Schools

FET: Further Education and Training

GET: General education training

Gr R: Reception year

HAVO: Senior General Education

HBO: Higher Education

HBS: Higher Commoner's School

HE: Higher Education

HEDCOM: Head of Education Departments Committee

HEI: Higher education institutes

HIV: human immunodeficiency virus

HL: home language

ICCS: International Conference on Cognitive Science

ICILS: International Computer and Information Literacy Study

IPC: International Primary Curriculum

IQMS: Integrated Quality Management System

JPON: Jaarlijkse Peilings Onderzoek

LoLT: Language of Learning and Teaching

LSEN: learners with special educational needs

LVS: Leerling Volgsysteem

MBO: Vocational training/diploma

MEC: Member of Executive Council

NAPTOSA: National Professional Teachers' Organisation of South Africa

NATU: National Teachers Union

NCS: National Curriculum Statement

NELDS: National Early Learning Standards

NECT: National Education Collaboration Trust

NLQF: Netherlands Qualification Framework (Dutch Qualification Framework)

NPDE: National professional Diploma in Education

NQF: National Qualification Framework

NR: Not Ready

NRF: National Research Foundation

NSA: Nederlandse Schoolleiders Academie

NSE: Norms and Standards for Educators

OBE: Outcomes-based education

OCW: Dutch Ministry of Education, Culture and Science

OECD: Organisation for Economic Cooperation and Development

PAM: Personnel Administrative Measures

PIRLS: Progress in International Reading Literacy Study

PISA: Programme for International Student Assessment

PPON: Peridodiek Peilings Onderzoek

REQV: Relative Education Qualification Value

RNCS: Revised National Curriculum Statements

PSA: Public Servants Association of South Africa

RP: Ready to Progress

SACE: South African Council for Educators

SADTU: South African Democratic Teachers Union

SAOU: Suid-Afrikaanse Onderwysers Unie / South African Teachers' Union

SAQA: South African Qualifications Authority

SASA: South African Schools Act

SBB: Samewerking Beroepsonderwijs Bedrijsleven

SBST: school-based support team

SGB: school governing body

SIAS: Policy on Screening, Identification, Assessment and Support

SLO: National Leerplanontwikkeling

SMT: school management team

SNAP: Advanced survey software and research expertise

TALIS: Teaching and Learning International Survey

TIMMS: Trends in International Mathematics and Science Study

TRC: Teacher Reference Centre

UNESCO: United Nations Educational, Scientific and Cultural Organization

UNICEF: United Nations International Education Fund

VMBO: Preparatory Secondary Vocational Education

VWO: Pre-university Education

WBO: Wet op het Basisonderwijs

WHW: Wet op het Hoger Onderwijs en Wetenschappelijk Onderzoek

WPO: Wet op het Primaire Onderwijs

WSF: Wet op het Studiefinanciering

TABLE OF CONTENTS

DECLARATION	I
DEDICATION	ii
ACKNOWLEDGEMENTS	iii
ABSTRACT	iv
LIST OF ACRONYMS AND ABBREVIATIONS	vi
CHAPTER 1: INTRODUCTION AND ORIENTATION TO THE STUDY	1
1.1 INTRODUCTION	1
1.2 CORE CONCEPTS and clarification of terminologies	3
1.3 RATIONALE	11
1.4 BACKGROUND TO STUDY AND PROBLEM STATEMENT	15
1.4.1 Education	15
1.4.2 South Africa	18
1.4.3 The Netherlands	22
1.5 RESEARCH QUESTIONS	25
1.6 PURPOSE STATEMENT	26
1.7 AN OVERVIEW OF THE RESEARCH DESIGN AND METHODOLOGY	27
1.7.1 Research approach	27
1.7.2 Research methodology and methods	30
1.7.3 Research methods	31
1.7.4 Population and sampling	32
1.7.5 Data collection instruments / methods in qualitative research	33
1.7.6 Data analysis	34
1.8 CREDIBILITY AND TRUSTWORTHINESS	34
1.8.1 Credibility	34

1.8.2 Dependability	. 34
1.8.3 Objectivity and conformability	. 35
1.8.4 Transferability	. 35
1.9 RESEARCH ETHICS	35
1.10 CHAPTER OUTLINE	36
1.11 CONCLUSION	37
CHAPTER 2: THE CONTEXT AND HISTORY OF EDUCATION IN SOUTH AFRICA	. 39
2.1 INTRODUCTION AND BACKGROUND	. 39
2.2 CURRENT CONTEXT OF EDUCATION IN SOUTH AFRICA	. 40
2.2.1 Teachers and learners	. 40
2.2.2 Socio-economic environment	42
2.3 CONCEPTUALISATION OF EDUCATION	. 43
2.3.1 Transformation since 1994	. 43
2.3.2 Schools: Law and governance	44
2.3.2.1 Constitution of the Republic of South Africa (1996)	.44
2.3.2.2 South African National Quality Framework (1995)	. 45
2.3.2.3 The Higher Education Act (1997)	. 45
2.3.2.4 The Constitution Act (1996)	45
2.3.3 Education management	46
2.4 DIFFERENT SCHOOLS IN SOUTH AFRICA	47
2.5 GOVERNING BODIES	. 48
2.6 HIGHER AND BASIC EDUCATION	. 49
2.6.1 Education reform	. 50
2.6.2 The Revised National Curriculum Statement (RNCS)	51
2.6.3 New strategies	. 53
2.6.4 Inclusive education in South Africa	. 55

2.6.5 Assessment	. 58
2.6.6 The National Curriculum Statement	. 59
2.6.7 Foundation for learning	60
2.6.8 The importance of early childhood development and economic growth	. 61
2.6.9 The National Curriculum Framework (NCF)	. 62
2.7 THE TEACHING CAREER AND TEACHER'S TRAINING IN SOUTH AFRICA	65
2.7.1 Education policy change and teacher context	. 65
2.7.2 Teacher qualifications and training	. 67
2.7.2.1 School-based educators	70
2.8 NATIONAL AUDIT	. 74
2.8.1 Implications of democracy	. 74
2.9 Bronfenbrenner's ecological system theory	77
2.10 CONCLUSION	. 82
CHAPTER 3: THE HISTORY AND CONTEXT OF EDUCATION IN THE NETHERLAN	DS
	84
3.1 INTRODUCTION	. 84
3.2 CONTEXTUAL BACKGROUND OF THE NETHERLANDS	. 84
3.2.1 History and education reform	. 84
3.3 GENERAL BACKGROUND TO EDUCATION IN THE NETHERLANDS	. 88
3.3.1 Learners and teachers	. 98
3.3.2 School governance	102
3.3.3 Financing of schools	103
3.4 EDUCATION PHASES IN THE NETHERLANDS	104
3.4.1 Pre-primary Education in the Netherlands	104
3.4.2 Primary Education in the Netherlands	105
3.4.3 Special Education in the Netherlands	109

3.5 TEACHER'S TRAINING	109
3.5.1 Teachers in Europe	112
3.5.2 Practical work experience	113
3.5.3 Professional development	114
3.5.4 Improvement of the teaching profession and schools	114
3.6 TWENTY-FIRST-CENTURY SKILLS IN THE NETHERLANDS	115
3.7 Conclusion	119
CHAPTER 4: RESEARCH DESIGN AND METHODS	121
4.1 INTRODUCTION	121
4.2 RESEARCH PARADIGM	121
4.3 RESEARCH DESIGN	129
4.3.1 Research methods	131
4.3.1.1 Qualitative research	132
4.3.2 Population and sampling	136
4.3.2.1 Population	136
4.3.2.2 Sampling and sample	137
4.3.3 Instrumentation and data collection	139
4.3.3.1 The process of data collection	142
·	
·	143
4.3.3.2 Phases of data collection for this research	
4.3.3.2 Phases of data collection for this research	144
4.3.3.2 Phases of data collection for this research	144
4.3.3.2 Phases of data collection for this research	144
4.3.3.2 Phases of data collection for this research 4.3.3.3 Questionnaires 4.3.3.4 Interviews 4.3.3.5 Field notes and research journal	144 145 147
4.3.3.2 Phases of data collection for this research 4.3.3.3 Questionnaires 4.3.3.4 Interviews 4.3.3.5 Field notes and research journal 4.4 DATA ANALYSIS	144 145 147 150

4.5.3 Anonymity and confidentiality	.152
4.5.4 Right not to harm	153
4.6 TRUSTWORTINESS	.153
4.6.1 Credibility	. 153
4.6.2 Dependability	154
4.6.3 Objectivity and conformability	. 154
4.6.4 Transferability	154
4.7 DATA TRIANGULATION	155
4.7.1 Data triangulation	.155
4.7.2 Investigator triangulation	155
4.7.3 Theory triangulation	. 155
4.7.4 Methodological triangulation	156
4.7.5 Environmental triangulation	156
4.8 THE RESEARCHER'S ROLE	. 156
4.9 CONCLUSION	. 157
CHAPTER 5: PRESENTATION AND DISCUSSION OF DATA	.158
5.1 INTRODUCTION	158
5.2 POPULATION AND SAMPLING	. 158
5.3 THE RESEARCH REPORT	. 159
5.4 THE NETHERLANDS – CONTEXTUAL BACKGROUND	161
5.4.1 Data-analysis: the Netherlands	. 164
5.4.2 Data from interviews in the Netherlands (Appendix D)	165
5.4.2.1 Curriculum design and instruction in the primary schools.	. 165
5.4.2.2 Primary school teacher's training.	. 166
5.4.2.3 Major changes during the last two decades (1997–2017).	166
5.4.2.4 In-service education to adapt to changes.	. 167

5.4.2.5 Monitoring system 16	7
5.4.2.6 Requirements of promotion	88
5.4.2.7 Requirements for a teacher to become a principal	39
5.4.2.8 Management of primary schools	i9
5.4.2.9 Prepare learners 0 – 12 years to meet the demands of the 21st century 17	0
5.4.2.10 Enhance teacher's training to meet the demands of the 21st century 17	0
5.4.3 Questionnaire: Primary school teachers in the Netherlands (Appendix F)17	1
5.4.3.1 Equipped to teach in the phase17	7 1
5.4.3.2 Trained for this specific phase	7 2
5.4.3.3 Assessment as an important part of the school day	72
5.4.3.4 Execution of assessment	72
5.4.3.5 Policy regarding second- and third-language learners17	7 3
5.4.3.6 Teaching and learning material 17	74
5.4.3.7 Resources available and accessible	74
5.4.3.8 Use of technology1	74
5.4.3.9 Inclusiveness in primary schools	75
5.4.3.10 Homework policy	76
5.4.3.11 Parents/guardian involvement17	76
5.4.3.12 Extramural activities	77
5.4.3.13 Structures needed to optimise the curriculum and instructional design 17	77
5.4.3.14 Current curriculum appropriate for the phase	79
5.4.3.15 Current system prepares learners (0–12 years) to meet the demands of the 21st century	
5.4.4 Field observations in the Netherlands (Appendix G1)17	9
5.4.4.1 Learning and teaching environment (classroom, primary school safety and ventilation)	9

5.4.4.2 Population in class (learner/teacher ratio)	180
5.4.4.3 Lesson plans/lesson preparation	180
5.4.4.4 Timetable /Formal primary school hours	180
5.4.4.5 Informal and formal assessment	180
5.4.5 Field observation sheet in the Netherlands (Appendix G2)	180
5.5 SOUTH AFRICA – CONTEXTUAL BACKGROUND	182
5.5.1 Data analysis: South Africa	184
5.5.2 Data from interviews in South Africa (Appendix D)	186
5.5.2.1 Curriculum design and instruction in the primary schools	186
5.5.2.2 Primary school teacher's training.	187
5.5.2.3 Major changes during the last two decades (1997–2017)	187
5.5.2.4 In-service training education to adapt to changes	188
5.5.2.5 Monitoring system.	188
5.5.2.6 Requirements of promotion.	189
5.5.2.7 Requirements for a teacher to become a principal	190
5.5.2.8 Management of primary schools	190
5.5.2.9 Prepare learners 0–12 years to meet the demands of the 21st century	191
5.5.2.10 Enhance teacher's training to meet the demands of the 21st century	192
5.5.3 Questionnaire: Primary school teachers in South Africa (Appendix F)	193
5.5.3.1 Equipped to teach in the phase	194
5.5.3.2 Trained for this specific phase.	194
5.5.3.3 Assessment as an important part of the school day	195
5.5.3.4 Execution of assessment.	195
5.5.3.5 Policy regarding second- and third-language learners	196
5.5.3.6 Teaching and learning material.	197
5.5.3.7 Resources available and accessible.	198

5.5.3.8 Use of technology	198
5.5.3.9 Inclusiveness in primary schools.	199
5.5.3.10 Homework policy.	201
5.5.3.11 Parents/guardians involvement.	201
5.5.3.12 Extramural activities.	202
5.5.3.13 Structures needed to optimise the curriculum and instructional design	203
5.5.3.14 Current curriculum appropriate for the phase.	204
5.5.3.15 Current system prepares learners (0–12 years) to meet the demands of century.	
5.5.4 Field observations in South Africa (Appendix G1)	205
5.5.4.1 Learning and teaching environment (classroom, primary school safety an ventilation)	
5.5.4.2 Population in class (learner/teacher ratio)	206
5.5.4.3 Lesson plans/lesson preparation	206
5.5.4.4 Timetable/Formal primary school hours	206
5.5.4.5 Informal and formal assessment	207
5.5.5 Field observation sheet in South Africa (Appendix G2)	207
5.6 COLOUR CODING OF THEMES AND SUB-THEMES	209
5.7 INTERPRETATION OF BRONFENBRENNER'S ECOLOGICAL SYSTEMS T	
5.8 CONCLUSION AND KEY FINDINGS	
CHAPTER 6: CONCLUSION AND RECOMMENDATIONS	231
6.1 INTRODUCTION	231
6.2 OVERVIEW OF THE STUDY	232
6.3 RESEARCH OBJECTIVES AS ATTAINED THROUGH THE STUDY	234
6.4 FRAMEWORK TO ENHANCE PRIMARY SCHOOL EDUCATION BY EXPLO	RING

CURRICULUM AND INSTRUCTIONAL DESIGN IN SELECTED SOL	JTH AFRICAN
PRIMARY SCHOOLS TO MEET THE DEMANDS OF THE 21 ST CE	NTURY238
6.5 RECOMMENDATIONS	247
6.5.1 Recommendation for future research	247
6.5.2 Recommendation for the Department of Basic Education	248
6.5.3 Recommendation for the Department of Higher Education	249
6.6 LIMITATIONS OF THE STUDY	249
6.7 DELIMITATIONS OF THE STUDY	250
6.8 CONCLUSION	251
REFERENCES	253

LIST OF APPENDIXES

APPENDIX A 1 Language editing2	73
APPENDIX A 2 UNISA College of Education ethics review committee	74
APPENDIX B Department of Education: Consent to do research in South Africa ar the Netherlands	nd 76
APPENDIX C Principals of the school: Consent to do research in South Africa and the Netherlands2	
APPENDIX D Teachers' training lecturers and departmental officials: Consent to departm	
APPENDIX E Teachers of the school: Consent to do research in the Netherlands	
and in South Africa2	:88
APPENDIX F Questions to teachers29	90
Appendix G1 Observation schedule (Field notes during observation in schools and classrooms)	
APPENDIX G2 Observation sheet (Field notes during observations in schools and	
classrooms)2	297
APPENDIX H Raw data 2	299
LIST OF FIGURES	
Figure 1.1: Twenty-first-century skills/competencies (Howie, 2016)	.5
Figure 2.1: The purpose of school governing bodies in public schools	49
Figure 2.2: Schematic diagram of Bronfenbrenner's Ecological System Theory7	79

Figure 3.1: The division in the education of the Netherlands to meet learners' needs and backgrounds99
Figure 4.1: A framework for philosophical worldviews126
Figure 4.2: The three-worlds framework
Figure 4.3: The inductive logic of research in a qualitative study
Figure 4. 4: Phases of data collection
Figure 5.1: Detailed map of the Netherlands
Figure 5.2: Detailed map of South Africa183
LIST OF TABLES
Table 1.1: Number of learners, teachers and primary schools in public-school sector
by province (adapted from Education Statistics SA, 2016/201820
Table 2.1: Education bands (phases) in South African schools (DBE, 2018)40
Table 2.2 Teacher Education Qualifications (adapted from RSA DBE 2015:14)68
Table 2.3: Personnel administrative measures (classroom teacher) (adapted from PAM, 2016:18)
Table 2.4: Personnel Administrative Measures (master teacher) adapted from PAM (2016:24)
Table 2.5: Personnel Administrative Measures (manager) (adapted from PAM, 2016:26)
Table 3.1: The main instruments used for evaluation and assessment in the Dutch
school system (adapted from the OECD, 2014) 92
Table 3.2: A simplified diagram of the Dutch NLQF
Table 4.1: Table of philosophical assumptions with implications for practice
(adapted from Creswell, 2009:66; Creswell & Poth, 2018:20)

South Africa and the Netherlands138
Table 4.3: A classification of data-collection methods (adapted from Mouton, 2012:105)
Table 4.4: Rubric/Scale for field observation sheet (Appendix G2) 147
Table 5.1: Criteria indicating the quantitative data interpretation (the Netherlands) as described in Table 4.4
Table 5.2: The criteria, rating code, percentage and description of competence (Appendix G2)
Table 5.3: Colour-coding of identified themes209
Table 5.4: Interpretation of Bronfenbrenner's ecological systems theory 214
Table 6.1: Curriculum and instructional design framework for South African primary schools

CHAPTER 1: INTRODUCTION AND ORIENTATION TO THE STUDY

1.1 INTRODUCTION

In the last two decades, the South African educational system has undergone extensive change. The government has tried to improve the curriculum, educational infrastructure and resources. According to Zimmerman and Van Staden (2007:14), the system is based on the principle of equity, quality and access. The changes reflect high aspirations from teachers that are challenging given the realities of the South African context and the after-effects of apartheid.

The elections of 1994 transformed South Africa into a democratic country, supported by the Constitution of the Republic of South Africa (1996) defining policies and procedures that have to be developed and introduced in schools. Since 1998, South African educators have been implementing a couple of new national curricula to accept diversity and address inclusive education. The transition from apartheid education to the present education system in South Africa has not been without problems (Msila, 2007:146). Debates on educational issues are always contentious because they involve many stakeholders, from politicians to local communities. Education as a means of undemocratic social control created individuals who were compartmentalised along racial and cultural lines. One of the continuing factors since 1998 is the fact that teachers have received little or no training in outcome-based education and other new curricula and therefore continuously had to implement new curricula with little insight and knowledge to execute this important task (Ladbrook, 2009:10). According to Dehaloo (2011:1) this is only one of the challenges for educators in South Africa. Education is therefore considered to be the fifth most stressful profession (Dehaloo, 2011:1). According to Msila (2007:146), the system also does not address the democratic principles based on access, full participation and equity.

Therefore, the education landscape in South Africa is currently littered with problems and anomalies. According to Howie, Combrinck, Roux, Tshele, Mokoena & McLeod (2017) some critical questions occurred about Grade 4 reading abilities of learners in South Africa. The Progress in International Reading Literacy Study (PIRLS) aimed to answer these

questions when South Africa participated in the 2016 PIRLS. The most critical questions were if Grade 4 learners can read for meaning by the end of their scholastic year and how well do they read when looking at internationally results. These pupils achieved the lowest scores in a literacy study compared to other Grade 4 learners from 50 education systems in different countries and was on average six (6) schooling years behind the top performing countries. These results are from the Progress in International Reading Literacy Study (PIRLS, 2016). This international comparative study was for the first time established in South Africa by the Centre for Evaluation and Assessment in 2004 after permission was granted by the Minister of Education and Head of Education Departments Committee (HEDCOM) early 2005 for the research to be conducted. Funding was acquired from the Royal Netherlands Embassy and the National Research Foundation (NRF) to formally embark on the study. The first study comprised 441 schools and learner testing occurred in all 11 official languages in Grades 4 and 5.

Conceptual questionnaires were completed by learners, parents, teachers and principals. The performance of the South African Grades 4 and 5 learners were compared to the performance in reading literacy of participating countries. In general, South African learners achieved the lowest score out of the 45 participating education systems. The South African Grade 5 learners did not reach the international average score of 500. There appears to be significant progression across all languages as the scores in Grade 5 were significantly higher than Grade 4, implying that learners may have made considerable progress since Grade 4, albeit on an assessment aimed at Grade 4 learners (Howie *et al.*, 2007:27). However, PIRLS 2006 and 2016 is a cross-sectional study involving two different cohorts – therefore, some caution is needed in the interpretation of the results. It is clear that there was a significant difference in performance between the two grades (Mullis, Martin, Goh & Cotter, 2016). The international study was directed by the PIRLS International Study Centre at Boston College in the United States.

In the international Trends in International Mathematics and Science Study (TIMMS) and PIRLS (2006) assessment, the Netherlands was among the top 15 out of 45 countries that participated. According to the United Nations Statistics Division (2016), the Netherlands has eight Millennium Development Goals and 18 targets to achieve universal primary education. These aims, goals and targets are focussed, amongst others, on developing global

partnership, gender equality, and physical and emotional wellbeing of learners in the Netherlands empowering them for the 21st century (§ 3.5.4; § 3.6).

According to Rotherham and Willingham (2009); Joynes, Rossignoli & Fenyiwa Amonoo – Kuofi (2019) a growing number of educators are united around the idea that students need 21st century skills to be successful today. The 21st century skills require keen attention to curriculum, teacher quality and assessment. We live in times that are so revolutionary and new and different abilities are being demanded in the commercial world. However, the skills students need in the 21st century are not new. Critical thinking and problem-solving, for example, have been components of human progress throughout history – from the development of early tools to agricultural advancements, the invention of vaccines and land and sea exploration. What is new is the extent to which changes in our economy and the world mean that collective and individual success depend on having such skills. Today, we cannot afford a system in which receiving a high-quality education is akin to a game of bingo. If we are to have a more equitable public education system, it should become universal. All learners should be prepared through their schooling system to be able to face and handle the demands of the 21st century.

Whittle (2018:1) mentioned the effort to ensure that all students – rather than just a privileged few – have access to a rich education that intentionally helps them learn to acquire 21st century skills. South Africa needs to adapt and reposition the curriculum to respond to the demands of the 21st century skills.

1.2 CORE CONCEPTS AND CLARIFICATION OF TERMINOLOGIES

To understand the context of this study, core concepts are now explained from the literature. Clarification of these terminologies are also essential for better understanding of the problem statement. As an interpretivist researcher I constructed the following to explain the relationship that exist between the different concepts / variables as background to the study and will eventually help to answer the research questions and aims:

Exploring; 21st century skills; assessment; education; educational system; lesson planning; policy; curricula/curriculum; school system; instructional design; learners; teacher training; primary schools

Exploring: Exploring promotes curiosity and discovery while limiting the fear of failure. According to Verma (2019) people who are permitted and encouraged to explore in order to advance their knowledge about a topic/theme can think more critically and approach content in a more interdisciplinary way. Exploration leads to knowledge and understanding, and means that you make the world a better place as you explore. Exploration is essential in education.

21st century skills: 21st century skills are important because they provide necessary skills to learners in a world where change is constant and learning never stops. The framework for 21st-century skills emphasises the four C's – communicating, collaboration, critical thinking, and creativity – skills that all learners need for success in school, work and everyday life. The empowerment of 21st century skills is important for a nation's wellbeing. These skills ensure that learners enter the world with an understanding of what it takes to be a good citizen – one who can be civically engaged, think critically, is digitally literate, globally aware and an effective communicator (Ross, 2017).

The youth of the 21st century is a new generation growing up with sophisticated technology providing information on any subject at any time (McMillan, 2018:4). Due to the availability of information at any time, the past and science have lost their trustworthiness. The generation of the 21st century maintains the emerging philosophy of the youth of the postmodern paradigm. Their foundation and attitude are based on *whatever*. The only truth is what the moment tells them, and the reality is whatever happens now.

According to Howie (2016), 21st century skills/competencies are the ways of thinking, the ways of working, the tools used for working and to manage live in the 21st century world.

Twenty-first-century skills/competencies can be best explained in Figure 1.1:

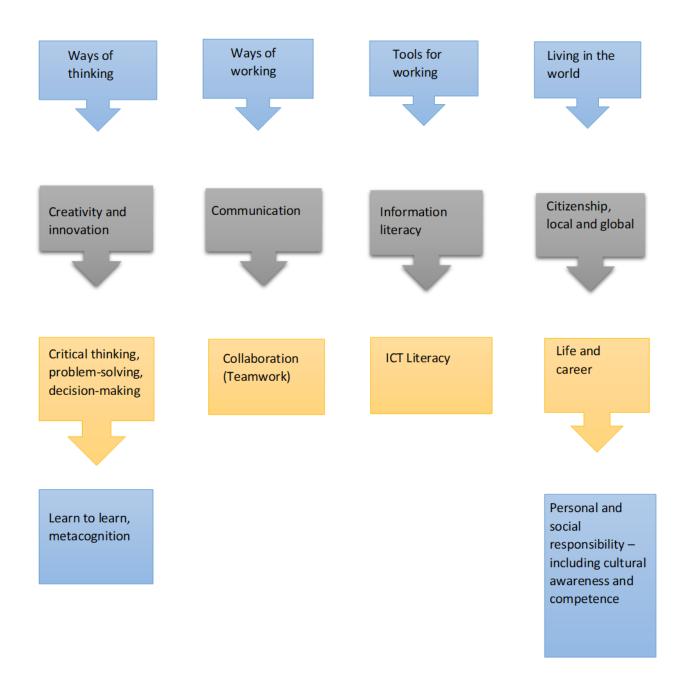


Figure 1.1: Twenty-first-century skills/competencies (Howie, 2016).

21st century teachers: 21st century teachers are teaching with recent technology. They utilize everything that is important in today's world so that learners will be able to live and prosper in today's economy, as well as to guide and prepare learners for the challenges of the future. The characteristics of a 21st century teacher is adaptiveness to whatever comes their way. Smartboards are replacing chalkboards and tablets are replacing textbooks. The teachers have to stay up to date with current educational trends and technology. The

teachers don't expect their learners to be lifelong learners, but they are as well. They have to adapt their lesson plans to make them more current. Technology is changing rapidly and an effective teacher knows that learning about the latest gadgets can improve learner's education. Collaboration and know how to work in a team is one of the characteristics of a 21st century teacher. They are always planning ahead to ensure that no learner gets left behind. The 21st century teacher pays close attention to what is going on in their profession. Effective 21st century teachers share their knowledge and expertise and act as a role model for their learners (Cox, 2019).

Assessment: Assessment refers to the evaluation process that aims to determine knowledge, skills, values and attitudes in contexts that represent actual situations in which the knowledge and skills, values and attitudes are used. Assessment is a method for analysing and evaluating learner achievement or learning success; therefore, building into lesson planning to find out whether what you aimed to teach has been learned. Assessment is an integral part of teaching and learning and can be either formative or summative. Formative assessment provides learners' progress and can also be of diagnostic use to provide feedback to teachers and learners. Summative assessment occurs at the end of a period or end of term to provides information about learners' progress in a grade (DoE, 2007:1). The three main purposes for assessment are as follows:

- to determine when learners have achieved specific requirements;
- · to determine the minimum levels learners should achieve in a specific grade; and
- to determine learners' level of achievement and progress in a specific grade.

Teachers make use of a school assessment plan, which includes the formal assessment tasks for all subjects to be undertaken during the school year. Continuous assessment refers to an ongoing informal process that measures a learner's achievement to support his or her development and enable improvements to be made in the learning and teaching process (DoE, 2008:1; Gunther, Estes & Mintz, 2010:58).

Education: Education is diverse and progresses from informal to formal, and from process to product. Education is fundamentally seen as essential for human development for both individuals and societies and has the power to empower, change lives, bring about greater

opportunities and enrich those who experience it. Education is schooling, which includes knowledge, morality, skills (informal and formal), learning and qualification (Marshall, 2018:2). Fomunyam (2016:47), suggests that quality education is not just instructional or teaching and learning activities, but is also concerned with how learners perform in the class. The pedagogical theory on education of Pestalozzi was discussed. Education is more broadly discussed in § 2.3.

Educational system: The term generally refers to public schooling. Schools or school districts are typically the smallest recognised form of an education system and countries are the largest. In line with the Constitution of the Republic of South Africa (1996), the provincial and national governments share the responsibility for all education, except for tertiary education (Organisation for Economic Cooperation and Development [OECD], 2008:19). In South Africa, learners are legally bound to attend school from the year in which the learner turns six or seven years old up until the end of the year in which the learner turns 15 or finishes Grade 9 (OECD, 2008:20). In Russia learners are bound to attend school at the age of six or seven years and normally finish general education at the age of 17 or 18 years. Learners in Australia normally begin primary school at the age of five years and finish high school around 17 to 18 years old (NORRIC, 2005:17). According to Bosland (2018) and De Jongh (2018), learners between the age of four years to 12 years attend primary schools in the Netherlands. Education in the Netherlands is compulsory for all nationalities from age five years; however, in South Africa, there were still more than 200 000 children between the ages of seven and 15 years who do not attend school (OECD, 2008:22).

Lesson planning: The activity of developing a set of guiding directions for a lesson (where you want to go with the lesson). According to Gunther *et al.* (2010:36), lesson plans are parts of a unit design, divided into units, and units are separated into lessons. The following guidelines can be used to develop effective lesson plans:

- the concepts and content in a lesson must be limited to allow time for the learners to review, practise and give feedback on what they have learned;
- new material must be connected to prior knowledge and the connections must be clear;
- the learners are acquiring the relevant knowledge, attitudes, skills and values;

 be prepared to reteach for clarity, and never accept the student's failure to learn as unavoidable.

Good lesson planning consists of objectives, standards, assessment procedures and instructional procedures (Gunther *et al.*, 2010:37).

Policy: Policy is a course or principle of action adopted or proposed by a country, an organisation or individual. The main goal of an education policy is that all citizens receive an equal opportunity to education regardless of financial situation, age domicile, gender, or mother tongue; this is the fundamental right of all citizens (Hörner, 2007:251). Another major goal of an education policy is for the entire population to receive the highest possible level of education (Hörner, 2007:252).

Curricula/curriculum: The term *curricula/curriculum* refer to the lessons and academic content taught in a school or in a specific course or programme. *Curriculum* also refers to the knowledge and skills students are expected to learn, which include the learning standards or learning objectives they are expected to meet, the assignments and assessment, and other methods used to evaluate student learning. The basic point of departure in curriculum design is the development level of the child (Carl, 2009:66). Curriculum design is about the material – the facts, concepts, modes, topics, vocabulary and standards that a student learns – including the order in which the material is presented. Instructional design focuses on how the material is taught, otherwise known as the pedagogical methodology (Carl, 2009:70-74; Roidi, 2015:7).

School system: The school system is an establishment, including the equipment for providing education from pre-school through high school, and school buildings. The school system is important in the process where learning, and development occurs within a particular social context (Donald, Lazarus & Moolla, 2014:119).

Instructional design: Instructional design is the systematic development of instructional specifications regarding learning and instruction. It is the entire process of analysis of learning needs and goals and the development of a delivery system to meet those needs. Previously it was called *methods* and currently it is called *teaching and learning strategies*. According to Schnellman (2019), all learners need to know how to read, write and do basic

arithmetic. That has not changed, but the difference is that, beyond acquiring content knowledge, it is equally essential that learners understand the mechanics behind these learning processes – in other words, they need to learn how to learn. The latter is an important skill to thrive in the 21st century, where lifelong learning is important.

Gagné's (2012) study has been the foundation of instructional design since the beginning of the 1960s when he conducted research and developed training materials for the military. Among the first to coin the term *instructional design*, Gagné developed some of the earliest instructional design models and ideas. Each of these models are based on a core set of learning phases that include:

- activation of prior experience;
- demonstration of skills;
- application of skills; and
- integration of these skills into real-world activities.

According to Dick (1987:54), instructional design is a process for improving student achievement through the systematic design, development and evaluation of instruction. The process is referred to as the systems approach, and those who use it are referred to as instructional designers.

Dick (1987:56) alleged that the instructional design process is a start to make an impact on the curriculum of public schools in the United States. Many components of the systems approach to the design of instruction were developed in conjunction with public school curriculum. There seems to be several reasons for their use:

- behaviourally stated instructional goals can be identified and agreed upon;
- it is critical that learners master whatever tasks they must perform;
- public schools typically have not employed persons who are trained to develop curriculum materials.

In South Africa, teachers have not had either the time or the training to engage in largescale curriculum development efforts. According to Christie (2008:2) and Okeke *et al.* (2016:50), the number of teachers in South Africa are appropriate to meet the needs of the education system but the quality of teachers is doubtful. Too many negative reports in daily newspapers, on social media and on television force the public to question the quality of teachers in South Africa. According to Okeke *et al.* (2016:108), instructional communication is how information is exchanged and meaning is made in an educational setting.

Learner: A learner is a person who is learning about a particular subject or skill. A learner obtains knowledge or information through study. Learners determine the way of implementing curriculum in schools (DBE, 2010c:69, Schunk, Pintrich & Meece, 2010:273).

Education in primary schools: Primary education is the initial stage of education and has as the basic aim creating, establishing and offering opportunities to learners up until the age of 12 years to achieve balanced cognitive, emotional and psychomotor development. Primary schools are organised by age in standards, making it possible for learners to compare their skills and abilities to other learners (Schunk, Pintrich & Meece, 2010:363). Grade R is a traditional year of learning before learners in South Africa start formal schooling in Grade 1. Since 1998 Grade R has been part of the General Education Training Band (GET) (Janse van Rensburg, 2015:1). Children can enter formal primary education in schools in South Africa during the year the child turns six, if it is before 30 June. Education is compulsory for all from the age of seven (Gr 1) to the age of 15, or the year which the learner completes Grade 9 (OECD, 2008:47).

Teacher: A teacher is a qualified person who teaches, especially one who teaches in a school and who helps others to acquire knowledge, skills and competencies. Formal teaching is conducted by paid professional teachers (OECD, 2008:298).

A primary teacher is one who has the following responsibilities: planning for lessons, personalize learning, planning assessment for learning, differentiation and implementing strategies (Dunn, 2011). The primary teacher's behaviour and attitude have a significant influence on the classroom atmosphere (Hannah, 2013).

Teacher's training: Teacher's training refers to the policies, procedures and provisions designed to equip teachers with the knowledge, attitudes, behaviours and skills they require to perform their tasks effectively in the classroom, school and wider community (OECD, 2008:296). In South Africa teacher's training takes four years of study for a B.Ed. In the Netherlands and other European Countries, it takes also four years to gain a mainstream teaching qualification (Boer, 2018).

The extensive literature study in chapters 1, 2 and 3 focuses on exploring curriculum and instructional design in selected primary schools and teacher's training in South Africa and the Netherlands as a multi case study. Gray (2018:101), Mouton (2012:87) and Yin (2011:62) recommend starting with a review of existing scholarship or the available body of knowledge to see how other scholars have investigated the research problem of interest. The assumption is to learn from other scholars as to how they have theorised and conceptualised on issues, what they have found empirically, what instrumentation they have used and to what effect. Mouton (2012:87) gives the following reasons why one must talk about a review of the existing scholarship:

- to ensure that one does not merely duplicate a previous study;
- to discover what the most recent and authoritative theorising about the subject is;
- to find out what the most widely accepted empirical findings in the field of study are;
- · to identify the available instrumentation that has proven validity and reliability; and
- to ascertain what the most widely accepted definitions of key concepts in the field are.

1.3 RATIONALE

As a former Foundation Phase teacher and Head of Department at a primary school, I developed an interest in exploring teachers and departmental officials' views on the curriculum and instructional design in primary schools in South Africa. My interest has increased since becoming a subject advisor in July 2018 and urged me to do the research. My intention by investigating and exploring curriculum and instructional design in selected South African primary schools was to get insights into the school system and teacher's

training, taking the contextual determinants into account as well as to explore how the system addresses the challenges of the 21st century in the different quintile schools.

In my initial teachers training we were introduced to the father of education in Primary schools, Pestalozzi. Through my career I still looked back and built on what I learnt from the pedagogue Johann H Pestalozzi. He was a Swiss educator (1746–1827), known as the father of modern education in primary schools (Pestalozzi, 1946). According to Puckett and Diffily (2003:42) and Thomas (1997), Pestalozzi believed that early education was the best way to eliminate the evils of society and that schools could play an important role in improving social conditions. Pestalozzi valued active involvement in the community and environment and also focussed on the welfare of poor children. Pestalozzi designed schools and curricula based on a holistic approach to teaching (Brewer, 2007:40; Follari, 2011:27). He designed an original method to teach children who lived in poverty. This method centred around several key beliefs:

- all children are capable of learning;
- parents are the first teachers and teaching should begin at birth;
- activities should focus on the manipulation of real objects;
- natural experiences every day are sources of learning;
- physical and arts education are essential for comprehensive education (Follari, 2011:27).

Pestalozzi believed that education should be based on children's psychology and that children develop mentally, physically and morally through experiences. Children should learn while being actively involved in the learning process. Their experiences should include observation, clear understanding and the application of the experiences through everyday activities. Children should be free to pursue their own ideas and interests and their readiness for further learning and teachers must respect their social and emotional needs. Learning progresses from the simplest to the complex, from concrete to abstract, and from experiences to conclusions and rules. Pestalozzi argued that when children are active and interested in their curriculum, harsh discipline would be unnecessary (Puckett & Diffily, 2003:43; Nutbrown, Clough & Selbie, 2008:27). Pestalozzi's method became widely

accepted, and most of his principles have been absorbed into modern elementary education (Pestalozzi:1946).

Wolhuter, Meyer and Steyn (2014:8) refer to teaching as the deliberate, purposeful and planned activities of the educator in the education situation whereby learners are assisted to acquire particular competencies (knowledge, skills and attitudes). Teaching strategy refers to an organised set of actions required to teach effectively – for example, the teaching aims, the content, the teaching methods and assessment procedures. Education, teaching and learning take place in a structured, planned and institutionalised form in an education system. Wolhuter *et al.* (2014:9) defined an education system as a structure for the effective supply of educational needs of a particular group of people in a particular geographical area.

The point of departure for this study was the results of TIMMS (2015 & 2019) and PIRLS (2016). This international systemic testing results show poor competencies in mathematics and languages. According to Howie (2016) and Letaba (2017), the release of the 2015 TIMMS reports for Grade 5 and Grade 9 learners provoked once more another storm of debates as South Africans struggle with the reasons behind the perceived poor performance in mathematics and science. At Grade 5 level, the national average score for South Africa is 38th out of 39 countries and in the last position for science. In Grade 5 mathematics (TIMMS Numeracy), South Africa ranked very low according to other countries. Howie (2016) reports only one third of South African learners manage to translate verbal graphic, or tabular information, into an arithmetic form in order to solve a given problem. According to Reddy (2021:4) "... South African learners have made strides in improving their educational achievement in mathematics and science. However, the rate of this improvement has thereafter again shown signs of slowing and there is much work to do especially after disruption caused by COVID-19 pandemic in 2020." The trend analysis of TIMMS 2019 shown that South Africa improved in mathematics achievement by one standard deviation or just over 100 TIMMS points. Although South African educational mathematics performance outcomes have improved, they are still low and unequal. Reddy (2021:6) stated that changes could be due to improved home conditions, school resources and instructional materials, improved teacher knowledge, and changes inside schools and classrooms.

According to Fraser (2023:1) Grade 4 learners in South Africa have the worst reading ability in the world. This statement made by Fraser (2023:1) was due to the latest results of PIRLS 2021. A major concern for South Africa is that its achievement score has dropped from PIRLS 2016, where South Africa reported 78% of learners in Grade 4 could not read for meaning in any language. The biggest area of concern is that 81% of learners in PIRLS 2021 study were below the study's low international benchmark, meaning that 81% of learners in South Africa cannot read with meaning (Maynier, 2023).

Most South African learners cannot manage more demanding skills of reading and mathematics. South African learners are benchmarked equivalent to the lowest of Grade 8 learners internationally. Learners of the Netherlands, on the other hand, rank significantly higher than South Africa (Mullis *et al.*, 2016).

A teacher does not function in isolation in a classroom with his or her learners but faces ethnic and language diversity, children with special educational needs and single-parent families (Okeke, Abongdia, Adu, Van Wyk & Wolhuter, 2016:16; Fullan, 2018:99) to name but a few challenges. According to Fullan (2018:97-98) and Wolhuter *et al.* (2014:1), the teacher functions as part of an education system, which he or she should thoroughly know and understand within its unique context. The national education system does not have an incidental structure but acquired its present state over the course of a long history within a particular societal and political context.

The above-mentioned factors offer not only a neat encapsulation and fresh packaging of the theoretical and practical functions of education and educational systems but also resonate well with the role of the professional teacher in South Africa. Using the knowledge that could be gained from studying and exploring curriculum and instructional design in selected South African primary schools for guidelines of an education system can serve South African society best in coming to terms with and taking advantages of 21st century challenges and opportunities.

My research is therefore confined to explore curriculum and instructional design in selected South African primary schools. The main reason for the research was to explore education in a historical context to enhance education as science with a focus on 21st century skills. Education as science in South Africa, comprises a collection of part-disciplines, such as

Curriculum Studies, Philosophy of Education, and Comparative and International Education. Another part-discipline is History of Education, which includes the establishment of schools and teacher training. As a researcher my area of knowledge and expertise and therefore focus of this research is on curriculum studies and instructional design in primary schools.

I find the ecological systems theory of Bronfenbrenner (§; 2.1; § 2.9) appropriate for this research. This system's theory consists of the micro-, meso-, exo-, macro- and chronosystems. The systems include the child, his family, the school, neighbourhood, socioeconomic factors, instruction and government of schools, history and changes over time. My experience as teacher and subject advisor is that when the relationships and cycles within the whole system are in balance, the system can be sustained. If major disturbances in one part of the system occurs the whole system is affected. Using the Interpretivist paradigm will enable me to interpret the literature and empirical data relevant to this research as interpretivism focus on actions, circumstances (situations) and results (consequences) and exist in social, historical and political situations.

The literature study in chapters 2 elaborate on and cover numerous aspects by exploring curriculum and instructional design in selected South African primary schools. The researcher used electronic databases – for example, *Sabinet Online, EBSCOhost, SA ePublications, Eric* and *Teacher Reference Centre* (TRC) – to gain better insights from the literature by exploring curriculum and instructional design in South African primary schools.

1.4 BACKGROUND TO STUDY AND PROBLEM STATEMENT

1.4.1 Education

The education of youth is a universal human phenomenon, regardless of whether it occurs through an informal or institutionalised mode of delivery. According to Booyse, Le Roux, Seroto and Wolhuter (2011:57), several events, as evidenced in the country's recorded history, have influenced the process of education. Education, as it exists at any point in time and place, is the outcome of the interplay of contextual forces: demographic context, economy, political context, social context, and religion/ideology (Booyse *et al.*, 2011:11).

UNESCO (1997) describes education as an activity comprising organised and sustained communication designed to bring about learning. Teaching is nourished by research and allows teachers to discriminate as to what to emphasise more in their classes so that the learners achieve better learning (Foster, 2017:2). Deliberate, purposeful and planned activities are used by teachers to support learners to acquire the required knowledge, skills and attitudes/values in order to fulfil their role in life (Wolhuter, 2011:35).

In 2012, the United Nations Educational, Scientific and Cultural Organization (UNESCO) calculated that, in order to provide quality education for all the continent's primary school children, an additional 993 000 teachers will be required (Wolhuter *et al.*, 2014:109). Booyse *et al.* (2011:279) mentioned that this worldwide problem has not escaped South Africa. Economic and social commentators frequently identify the shortage of trained, skilled human resources as a major barrier hampering economic growth. Becoming acquainted with and critically reflecting on the recent history of education in South Africa as well as beyond Africa will give insights and contribute to an informed discourse towards an education system that is based on quality for the common good of all learners. To move into a knowledge climate, and to determine curriculum and school systems, it was necessary to undertake a research study to explore, investigate and get better insights into the curriculum and instructional design in selected primary schools in South Africa as a developing country.

Slattery (2006:21) claims that the world is an organism rather than a machine, the earth is a home rather than a resource to exploit or a possession to horde, and persons are interdependent and not isolated and independent. Postmodernism has immense implications for education, particularly the way that curriculum is understood in the new millennium. Curriculum scholars and teachers have much to gain from engaging in the postmodern dialogue and they have much to lose by ignoring postmodern philosophy. Engaging the conversation does not mean embracing all proposals or all practices. The goal is deeper understanding and fresh new possibilities. The postmodern worldview allows educators to envision an alternative way out of the turmoil of contemporary schooling, which too often is characterised by violence, bureaucratic gridlock, curricular stagnation, depersonalised evaluation, political conflict, economic crises, decaying infrastructure, emotional fatigue, demoralisation, and despair (Slattery, 2006:21).

According to Wolhuter et al. (2014:16), the political views of the ruling party in a particular country dictate the education policy and national education system. Whether a country is a democracy or not, has a centralised or decentralised education system, all have an influence on its education system. The political views of the ruling party determine how society should be organised in order to achieve a safe community, and education will be used or misused to achieve their aims. Rakometsi (2008:2) emphasises that the educational system of any country cannot be studied for any purpose without due regard to the people and history that have helped to shape it. All nations have distinctive educational systems linked to some representative education pattern. Each pattern has a dominant educational objective, specific administration, an organisational and institutional structure, with the latter informed by the political overtones of the ruling party. Political views have affected the whole national educational system, educational policy, control structures, the type of education institutions, the curriculum structure, and the support service to learners. Slattery (2006:21) explains that this is not to imply that every teacher or every school is immobilised by these problems. There are countless outstanding teachers, programmes, and curriculum innovations. The struggles are sometimes embellished and distorted for political power or economic gain.

Education is, at the same time, determined by the values, implicit and explicit, embodied in all the activities by all parties involved in education provision. Values of the involved individuals and groups determine the whole education system, education provision, and teaching activities. According to Wolhuter *et al.* (2014:17-21), values: are determined by a person's world- and life view; are personal; have a universal character; are subjective but may also be objective; provide guidance; are ideal; determine decision-making; and are influenced by culture.

According to Wolhuter *et al.* (2014:1), education can be described as an act whereby an educator guides a child or learner into adulthood. Education is unique to the human species. Any human being is dependent on education in order to become an adult. Education, according to Msila (2007:146), is always about a process of being who and what a person is. The legislators or others who formulate education policies always have certain goals in mind, which can be political, social, or cultural in nature. Historically, it can be assumed that education is not a neutral act – it is always political. South Africa comes from a past in which apartheid education was used as a tool to divide society as it constructed certain forms of

identity among learners. Under apartheid education, schools were divided according to race and enhanced the divisions in society. These divisions reinforced the inequalities of a divided society.

According to Le Grange (2013) the foundations of the modern era including modern educational institutions are under examination, the fragmentation of nature, society and self are evidence of the cracks in the foundation. As environmental problems reach unequalled levels the question exists of how we should live is emerging once more. So too are educational questions such as what and how we should learn.

One of the determining factors of effective education is class size. Class size has an effect on quality and therefore attention should be given to the size of the classroom and the learner-teacher ratio (Excell & Linington, 2011). This notion is supported by UNESCO (2012) indicating that teachers are not able to cope with the workload when classes are overcrowded. In South Africa most of the classes are overcrowded some with 50 to 60 learners.

1.4.2 South Africa

To understand the complexity of the South African education system, the following background knowledge will contribute to the understanding of the current context and research. The background also gives information about all the levels of Bronfenbrenner's ecological systems used in the research as the relevant theory (§ 1.3; § 2.9; § 5.7).

South Africa consists of nine provinces. The nine provinces in South Africa have their own education departments that are responsible for implementing the policies of the national department as well as dealing with local issues in 11 official languages.

In South Africa, a former minister of Higher Education published the White Paper for Post-School Education and Training (Nzimande, 2014:3). This policy statement represents government's vision for an integrated system of post-school education and training, with all its institutions playing their role as parts of a coherent but differentiated whole. The White Paper seeks to set out a vision for the type of post-school education and training system to be achieved by 2030 (Nzimande, 2014:4). The strategies are set out to improve the capacity to meet South Africa's needs. It outlines policy directions to guide the Department of Higher

Education and Training (DHET) and the institutions for which it is responsible in order to build a developmental state with a vibrant democracy and flourishing economy. Its main policy objectives are:

- a post-school system that can assist in building a fair, equitable, non-racial, non-sexist and democratic South Africa;
- a single, coordinated post-school education and training system;
- expanded access, improved quality and increased diversity of provision;
- a stronger and more cooperative relationship between education and training institutions and workplaces;
- a post-school education and training system that is responsive to the needs of individual citizens, employers in public and private sectors as well as broader societal and developmental objectives.

Education in South Africa, according to the Department of Basic Education (2013:7), is governed by two national departments, namely the Department of Basic Education (DBE), which is responsible for primary and secondary schools, and the Department of Higher Education and Training (DHET), which is responsible for tertiary education and vocational training. The DHET deals with Further Education and Training (FET) colleges, Adult Basic Education and Training (ABET) centres, and Higher Education Institutions (HEI). Prior to 2009, these two departments were represented by one DoE.

The DBE deals with public schools, private schools (also referred to by the Department as independent schools), Early Childhood Development (ECD) centres, and Special Needs schools. Public and private schools are collectively known as ordinary schools and comprise roughly 97% of schools in South Africa. The South African primary school system consists of different phases; namely the: Foundation Phase (Grades R-3) and Intermediate Phase (Grades R-3), Senior Phase (Grades R-3) and Further Education and Training (Grades R-3). The focus of this study is on primary school phase which accommodates learners from Grade R-3 to Grade 6. According to Padayachee (2013:4), the number of learners, educators and schools in the ordinary public-school sector, by province, are as follows:

Table 1.1: Number of learners, teachers and primary schools in public-school sector by province (adapted from Education Statistics SA, 2016/2018).

Province	Learners	Teachers	Schools
Eastern Cape	1 175 147	61629	5 468
Free State	4 173 66	23 523	1 214
Gauteng	1 389 093	82 078	2 083
KwaZulu-Natal	1 606 333	89 799	3 867
Limpopo	941 761	54 418	3 867
Mpumalanga	613 416	34 404	1 725
Northern Cape	177 450	9 136	544
North West	499 868	26 108	1 472
Western Cape	689 042	37 518	1 450

According to Gustafsson (2017:3) if a study includes more than one single case, a **multiple case study** is needed for the understanding of a phenomenon. Multiple cases allow wider exploring of research questions and theoretical evolution. Empirical data in this research was therefore collected by using a multiple case study that included selected primary schools in the Eastern Cape and Gauteng in South Africa and selected primary schools in the Netherlands to investigate the same phenomena and will be described in chapter 4 and chapter 5. Though the numbers in table 1.1 reflects on all public primary schools, learners and teachers, table 1.1 gives relevant information regarding numbers in South Africa.

According to Küsel (2017:3), in South Africa, 5 100 educators have inappropriate training, do not stay abreast of development in their field and experience a lack of resources and support from school management. Christie (2008:2) and Human (2016:14) mention that many current teachers, especially in the Foundation and Intermediate Phase of primary

school, struggle with content knowledge and may even perform worse than their students in national tests. They also struggle to teach reading skills – which are essential for primary school learners – as they first learn to read and then read to learn. This is a time when outdated institutions, values, and systems of thought and their associated dogmas are ready for predominance by more relevant systems, organizations and knowledge (Le Grange, 2013).

More than two decades after the first democratic elections in 1994, the education problems are acute, and to realise South Africa's promise of becoming a global player, education will have to rise to the occasion (Wolhuter *et al.*, 2014:109). The ongoing struggle with content knowledge to teach reading skills and higher mathematical performances need a solution (Le Cordeur, 2018:9; Monama, 2018:1). Other serious challenges in the current system are the following (Carl, 2009:11; Wolhuter *et al.*, 2014:108):

- Quality of education: The quality of education in South Africa is, measured by international standards, are very low;
- The indigenisation of education: Adapting education systems to the national contexts in Africa and incorporating the African heritage in curricula;
- The alignment of education with economy market: In view of the growing unemployment problem, this is a growing problem;
- The role of leadership in the empowerment process;
- Shortage of teachers: Despite commendable effort, there is still a shortage of teachers.

According to Booyse *et al.* (2011:279), teacher's training in South Africa took place before 1994 in universities and in teacher's training colleges. In a wake of a growing teacher surplus, even before 1994, government started to close down some teacher's training colleges. After 1994, a policy of moving towards an all-graduated training force was implemented. The present position, however, is that there has been a serious teacher shortage of up to 94 000 teachers since 2015. In the post-1994 context in **South Africa**, the Minister of Education declared norms and standards for teacher's training in a document entitled *Minimum Requirements for Teacher Education Qualifications* (Nzimande, 2011:3).

The first minimum requirements for teacher's training appeared in 1995 as the National Qualifications Framework (NQF). The National Qualification Framework Qualifications Act (1995) has been developed and implemented to provide for: the NQF; the responsibility of the Minister of Education and the Minister of Labour; the South African Qualification Authority; quality councils; transitional arrangements; to repeal the South African Qualifications Authority Act (1995); and to provide for matters connected therewith (RSA, 2009:2).

The NQF is a comprehensive system approved by the minister for the classification, registration, publication and articulation of quality-assured national qualifications. According to Motshekga (2016:3), it determines and consolidates the terms and conditions of employment of educators. A relative value (REQV) is attached to an approved qualification or combination of qualifications. The education qualifications required for appointment in education is discussed in chapter 2.7.2.

1.4.3 The Netherlands

Compulsory education in the **Netherlands**, by law, applies to learners of all nationalities from five to 18 years who are living in the Netherlands (Boer, 2018). Learners are under a learning obligation from age five for 12 years of full-time education (until 16), plus one or two years part-time until the attainment of a diploma (until 18). In the Netherlands, most learners start primary school (*bassisschool*) the day after their fourth birthday, with many learners transitioning from Dutch childcare or preschool centres, for which most parents can receive government childcare allowance (Bosland, 2018).

According to Visser (2018), the Netherlands is among the world's top countries for equity in education opportunities, which means anyone can open a school based on their personal beliefs, provided they meet Dutch education system standards. Additionally, private schools following particular religious or pedagogic principles receive equal state funding as public schools since 1917. The number of private schools is more than double that of the public schools in the Netherlands.

International education is available at both local Dutch and private schools in the Netherlands (De Jongh, 2018). Some Dutch schools have recently introduced the theme

based International Primary Curriculum (IPC). In 2013, there were 965 primary schools in the Netherlands that offered English classes, and a further 100 schools taught German, French, and Spanish. By law, all schools in the Netherlands are obliged to start teaching English as a subject by group seven (about age 10) at the latest. An increasing number of schools are deciding to start English earlier, sometimes even from group one. Foreign learners aged six and older usually must follow a Dutch immersion programme (*schakelklas* or *nieuwkomersklas*) before starting regular education in the Netherlands.

According to Boer (2018), many schools combine groups one and two (ages four and 5). The learners in this group are called *kleuters*, and the group is known as the *kleuterklas*. In the *kleuterklas*, the focus is on learning through play, social skills, fine and gross motor skills, structure and gradual preparation for reading and writing. Formal reading and writing start in group three (age 6). Group one (4 years) to group eight (12 years) have only one class teacher per year who is responsible for all the subjects in the specific group.

Free primary and secondary state education in the Netherlands is available to everyone (Visser, 2018). Parents are only asked to pay a voluntarily contribution to certain special activities and events. Additional costs include lengthier school trips, lunchtime supervision (tussenschoolse opvang/overblijven) and after-school care (buiteschoolse opvang), which the school provides or subcontracts to an external day-care organisation.

According to De Jongh (2018), the Ministry of Education, Culture and Science sets quality Dutch education standards, attainment targets and social objectives that apply to all types of schools "fill in the details" of the curriculum and budget allocation. Education policy includes increasing bilingual opportunities, connecting education with job market and managing the quality of schools that do not meet the Education Inspectorate's standard. Since 2015, the Dutch school system has allowed primary schools to teach 15% of courses in English, French, or German. This means that learners do not only learn a second language, such as English, but they can also learn other subjects, such as biology or history, in one of these languages.

Primary Dutch education (*primair onderwijs* or *basisonderwijs*) sets attainment targets in six curriculum areas for the education system of the Netherlands (Visser, 2018). The curriculum areas are Dutch, English, Arithmetic and Mathematics, Social and Environmental studies,

Creative Expression, and Sports and Movement. There are eight years of primary Netherland's education. At the end of the eighth year, the learners are exposed to the CITO test. The CITO test is a standardised aptitude test with questions testing Dutch language and comprehension skills, mathematics, study skills and (optionally) world orientation, which is a combination of history, geography, biology, and world religions. All primary schools are obliged to take part in the end exam (Bosland, 2018).

Before the end exam takes place, group-eight teachers assess which level of secondary school education would fit each learner best (Boer, 2018; Bosland, 2018). They base their recommendations on several factors, including learner's test scores from their whole school career, intelligence, attitude towards learning, eagerness to learn, interests and motivation. Based on the end exam results and the teacher's opinions, each learner gets a recommendation for the appropriate level of secondary school education. The assessment of the teacher is generally the decisive factor.

The Netherlands is a highly developed country with a sophisticated teacher's training sector consisting of both university and college education institutes (De Muynck, 2011:55). It takes four years in the Netherlands to obtain a mainstream teaching qualification (Boer, 2018; Bosland, 2018; Patrinos, 2009). Primary school teachers' study at higher education institutes (HEIs). They are trained to teach all curriculum subjects but also a specialist subject. The initial teacher's training includes an introduction to educating learners with special needs. Current government policy requires more knowledge of educating learners with special needs within teacher's training, but the programme is already oversubscribed and adding special needs programmes contributes to the complexity of teacher's training with a specialised field like special needs. De Muynck (2011:55) mentions the concern to convince particularly young men to become primary school teachers. The government of the Netherlands consequently began making education more attractive by announcing higher salaries for teachers to improve the image and quality of teachers.

Patrinos (2009) reports that supplementary training for teachers in special education is optional. Most special teachers undertake two-year part-time training. The course assumes the students are already working in education and focuses on both theory and practice. There are several specialist fields, including visual impairments, behavioural problems,

intellectual disability, remedial teaching, and peripatetic teaching. Although not obligatory, a growing number of mainstream teachers have a special-education certificate. The Dutch government has the constitutional duty to provide high-quality education for everybody. The educational staff – teachers, assisting staff members and school managers – must not only be qualified but also competent (Boer, 2018; De Jongh, 2018). Sets of competence requirements for teachers are accepted by the government and have already been operational since August 2006. Schools are obliged to take competent staff into their employment and subsequently enable them to keep up their competences at a high level and further improve them. Teacher's training colleges use these competences as a guideline for their educational programme. The framework of competence requirements specifies four professional roles that teachers have:

- interpersonal role;
- pedagogical role;
- organisational role; and
- the role of an expert in subject matter and teaching methods (Patrinos, 2009).

1.5 RESEARCH QUESTIONS

The core of the research was that the researcher wanted to explore to be able to answer the question to herself: What could be done to enhance teaching and learning and to prepare primary school learners in South Africa for the demands of the 21st century?

Main research question:

1.5.1 How do teachers implement curriculum and instructional design in selected South African primary schools?

Secondary research questions:

1.5.2 What are the different teacher education programmes in the mentioned countries?

- 1.5.3 How should the teachers be skilled and trained in order to meet curriculum and instructional demands for the different primary school phases?
- 1.5.4 What suggestions can be proposed to enable teachers and learners in South Africa to meet the demands of the 21st century?

1.6 PURPOSE STATEMENT

The purpose of the research aims is to find answers to the questions asked, as the aims provide the direction and depth of the study (Creswell, 2014:138; Dudovsiy, 2018:1). The outcome of the main aims will be discussed in chapter 6. The objectives of the study are:

Main objective:

1.6.1 to explore and determine how teachers implement curriculum and instructional design in selected South African primary schools;

Secondary aims:

- 1.6.2 to explore and determine the different teacher education programmes of the mentioned countries;
- 1.6.3 to explore and determine how teachers should be skilled and trained in order to meet curriculum and instructional demands for the different primary school phases;
- 1.6.4 to explore and determine what suggestions can be proposed to enable teachers and learners in South Africa to meet the demands of the 21st century.

Research findings were explored to get clear insights on the effectiveness of implementing curriculum, instructional design and teacher's training for children and learners in selected primary schools. Based on the findings, a framework is suggested for exploring the curriculum and instructional design in selected South African primary schools and their teacher's training to meet the demands of the 21st century. Suggestions will also be made to the Departments of Basic and Higher Education in chapter 6.

According to Donald, Lazarus and Lolwana (2006:37) and Marshall (2018:143), the notion of balance is a central ecological concept. When the relationships and cycles within the whole system are in balance, the system can be sustained. In addition, while systems interact and are interdependent, each level of system also functions in particular ways, as outlined in Bronfenbrenner's ecological systems theory. The systems of Bronfenbrenner's ecological theory are discussed and applied in the research but especially in chapter 2, chapter 3 and chapter 6.

1.7 AN OVERVIEW OF THE RESEARCH DESIGN AND METHODOLOGY

1.7.1 Research approach

In order to achieve the above aims and objectives, a preliminary literature review is provided as a literature basis on curriculum development, instructional design, teacher's training in South Africa, and 21st century skills and will be expanded in chapter 2 and 3.

Creswell (2014:1) refers to research approaches as plans and procedures "...for research that span the steps from broad assumptions to detailed methods of data collection, analysis, and interpretation". It involves the overall decision of which approach is to be used to study a topic. This decision will inform the philosophical assumptions the researcher will use for the study, the procedures of inquiry (research design), and specific research methods of data collection, analysis, and interpretation. The research approach that has been decided on is also based on the issue being addressed (research problem), the researchers' personal experiences, and the audiences for this study.

Mouton (2012:55) refers to a research design as a *blueprint* of how the researcher intends to conduct the research. According to Janse van Rensburg (2016), a research design is an overall plan for the research and consists of five key elements, namely methodology, philosophy/paradigm, sampling methods, methods of data collection, and methods of data analysis. Nieuwenhuis (2019:58) concurs that "paradigms represent what we think about the world (but cannot prove). Our actions in the world, including the actions we take as inquirers, cannot occur without reference to those paradigms, as we think, so do we act."

The researcher's framework is based on a distinction between three *Worlds* as explained by Mouton (2012:137) and Yin (2011:7-285) and can be explained as follows:

World 1: This world consists of the world of everyday life and lay knowledge

Human beings are different due to their different backgrounds and set of circumstances. The day-to-day life of human beings in different contexts – like tradition, family, workplace, the church and society around us – are part of the everyday living in World 1. In everyday life, humans reflect non-scientifically about the world. In the process, they create lay knowledge to deal with crime, unemployment, stress, violence, corruption, etc. Lay knowledge refers to the human being's common knowledge due to experiential- and self-knowledge to gain insight into everyday life (Mouton, 2012:138-141; Yin, 2011:7). The phenomenon that will be investigated in this research is based on the researcher's concern about primary school learners in South Africa. Therefore, exploring curriculum and instructional design in selected South African primary schools will assist the researcher to get insights and to make recommendations about the poor performance of learners in PIRLS and TIMMS assessment and how learners are prepared in the current school system for the 21st century (§1.1; §1.3; § 2.1; § 2.2.1).

World 2: This is the world of science and scientific research based on epistemic interest

The researcher selects situations through a theoretical lens that exist or happen in World 1 and makes these situations objects of inquiry. The focus of science is to search for meaning through "truth" or "truthful knowledge" to create valid and reliable outlines, results and theories of the world. The world of science consciousness gives a mode of reflection about the world by using a research process, including the problem statement, research design, methodology and conclusions (Mouton, 2012:138-142; Yin, 2011:8). The ecological system theory of Bronfenbrenner will be applied during this research to interpret the phenomenon under investigation. According to Marshall (2018:143), Bronfenbrenner developed an ecological framework in 1989 for human development. The various layers from the environment affect a child's development and learning process. Bronfenbrenner's ecological framework consists of the microsystem and mesosystem (family, school and community), the ecosystems (economic-, political-, education, government- and religious system), the macrosystem (beliefs and values of the culture), and the chronosystem (changes that occur over time) (§ 2.9; § 5.7). Early intervention to shape the microsystem is

necessary to lower the possibility of a child becoming deprived. Bronfenbrenner distinguishes between a micro-, macro-, meso- and chrono systems in every person's life. Bronfenbrenner's ecological framework identifies how the aspects of the microsystem impact on learners' development – it is applicable to low performance of South African learners in general and for example mathematics in Grades 5 and 9, and science in Grade 9 due to factors at home, school and the community environments (Donald, Lazarus & Lolwana, 2009:40). Poor communication skills, poor relationships with peers/parents and teachers, low expectations of the learner, low self-efficacy, behaviour problems at home, parent issues, parental stress and single parents deprive the wellbeing of learners (Marshall, 2018:142). The worst affected learners are those from non-fee public schools attending quintile one, two and three schools (Follari, 2011:14; Hendrick & Weissman, 2010:12; Letaba, 2017) (§ 2.2.1). According to UNICEF (2012) children born into poverty face a range of challenges that their wealthy peers do not. Emergent literacy and numeracy skills are key challenges. While ECD centres has increased since 2001, the quality of early learning and development of programmes remain a challenge.

• World 3: The world of meta-science is based on critical interest

Epistemologists are philosophers who are interested in questions such as whether it is possible to have knowledge, what kind of knowledge there is, and how people come to know things (Fouché & Schurink, 2012:308). The researcher as scientist must constantly propose research decisions to critically consider what theory to use for specific research to ensure quality checks in order to manage truthful and valid outcomes. The meta disciplines – such as philosophy of science, research ethics, research methodology the social and history of science – are located in World 3. World 1, World 2 and World 3 cannot operate independently but they are intertwined (Mouton, 2012:138-142; Yin, 2011:9).

Creswell (2014:5) and Yin (2011:285) chose to use the term *worldview*, meaning "a basic set of beliefs that guide action". A worldview is a general orientation about the world and the nature of research that a researcher holds. Worldviews are shaped by the discipline area of the student, the beliefs of the advisers and faculty in a student's area as well as post research experiences. The worldviews, the strategies and the methods all contribute to a research design that tends to be quantitative or qualitative by nature, and if both are used,

it is called mixed-methods designs (Creswell, 2009:16; Creswell, 2014:11). Interpretivism as a worldview is used in this qualitative research and arises out of actions, situations and consequences (Creswell, 2014: 7; Mouton, 2012:139). According to Pham (2018:3) Interpretivism is an educational philosophy based on education should be about life and growth. With the research goal of interpreting a phenomenon in the social world, the research method includes interacting with people in their context and talking with them about their perceptions. The interpretivist researcher tends to focus on in-depth interactions with relevant people in several sites by observing, asking questions, and interact with research participants (Glesne, 2016:9). The three worlds as applied in this research are further discussed in chapter 4 (§ 4.2).

1.7.2 Research methodology and methods

The research methodology for this study is qualitative research. According to Hesse-Biber (2010:3), McMillan and Schumacher (2010:397) and Nastasi and Hitchcock (2016:19), educational researchers need modes of inquiry to advance their understanding in social sciences like teaching, learning, and other human phenomena. Qualitative researchers collect data by means of an instrument or test (e.g., a set of questions about attitudes towards self-esteem), or gather information on a behavioural checklist (e.g., observation of a worker engaged in a complex skill) (Nieuwenhuis, 2019:91). Collecting data might involve visiting a research site and observing the behaviour of individuals without predetermined questions or conducting an interview in which the individual is allowed to talk openly about a topic, largely without the use of specific questions (Creswell, 2009:14; Creswell, 2014:202). According to Leavy (2014:278), a conversational process of knowing has been conceptualised as *interviewing*.

Qualitative studies, provide the researcher with in-depth knowledge, and this qualitative research explored phenomena in specific contexts, articulates participants' understanding and perceptions and generated tentative concepts and theories that pertain to particular environments (Dehaloo, 2011:7; Locke, Silverman & Spirduso, 2010:94).

1.7.3 Research methods

According to De Vos *et al.* (2012:446) and Machi and Mc Envoy (2009:5), the researcher should select the most appropriate research design. When choosing the design, the following must be considered: the purpose of the study; the researcher's expertise; the available resources; the audience's expectations; the timing of data collection and analysis (De Vos *et al.*, 2012:446). The major element in the framework is the specific research methods, which involve the forms of data collection, analysis and interpretation that the researcher proposes for the research (Creswell, 2009:15; Creswell, 2014: 221; Kabir, 2016:202).

The methods that were used for the qualitative empirical investigation of the phenomenon as a multiple case study was the following:

- Observation and reflection of selected primary schools and classes during school visits.
 According to Creswell (2009:89), Creswell (2014:222) and Mouton (2012:196), a period of time should be spent with participants. In this study, time was spent with selected teachers at primary schools during visits to explore and gain first-hand information about curriculum and instructional design and teacher's training in these primary schools in South Africa and the Netherlands.
- Semi-structured interviews were arranged with selected lecturers in the Netherlands and selected departmental officials in South Africa. Semi-structured interviews were used to emphasise the active participation of the interviewer, and the importance of giving the interviewee a voice.
- Semi-structured interviews were conducted with participants of the same selected schools where observations were made and included open-ended questions with teachers in the different phases in these primary schools in South Africa and the Netherlands. Document analysis of teacher's preparation and planning were done.
- Qualitative data collection methods in this research involved the use of a questionnaire for the same above-mentioned selected teachers in South Africa and the Netherlands.

Methodological triangulation therefore could be done in chapter 5 and 6. This was done to explore and get in-depth clarity on the interpretation of data. (McMillan & Schumacher, 2010:401). A further discussion on research methodology will be done in Chapter 4.

1.7.4 Population and sampling

Population of a study refers to the entire group of people who the researcher wants to explore and gain in-depth knowledge of, whereas the term "sample" refers to a specific group of individuals who will be used to gather data (McCombes, 2020:1). Sampling is done selectively for the simple reason that it would be impossible and also too expensive to gather data from every single person in a specific population (McCombes, 2020:1).

Population refers, for the purpose of this study, to the number of learners 0–12 years in primary schools and their teachers that live in the same or particular country, for example South Africa and the Netherlands. Sampling takes place when a smaller number or a set of individuals is drawn from the population (De Vos *et al.*, 2012:223; Patton, 2008:458). The researcher used **purposeful** sampling to select information-rich participants for this study because they could understand and contribute to the solving of the research problem (Creswell, 2009:147; Creswell, 2014: 209; Gay, Mills & Airasian, 2011:142).

In this multiple case research teachers from selected pre-primary and primary schools were purposefully selected to participate in the research as the sample group. These participants were selected from pre-primary and primary schools that had a cosmopolitan staff composition, that is a fair representation of the population of each country (South Africa and the Netherlands). Various racial groups and males and females were selected to participate: Five teachers (n=5) from the Netherlands and 23 (n=23) teachers from South Africa included – 10 (n=10) teachers from Gauteng and 13 (n=13) teachers from the Eastern Cape. Teachers from these selected pre-primary and primary schools were also purposefully selected from different school phases (0–4, 5–9, and 9–12 years) and different quintiles to participate in the research. All participants had to have been part of the South African and Netherlands primary school system during the last two decades.

Twelve selected departmental officials in South Africa and five selected lecturers of the Netherlands that were part of the past two decades in education of selected South Africa

and selected Netherlands' schools and education system were interviewed by means of questionnaires, and Governmental documents and records of both countries were analysed by means of document analysis. (The Netherlands do not have departmental officials like South Africa therefor the semi structured interviews with the lecturers in the Netherlands). All of the selected participants were information-rich because they had all experienced teaching in pre-and/or primary schools.

1.7.5 Data collection instruments / methods in qualitative research

According to Mouton (2012:104) and Yin (2011:131), data may be gathered by means of various data collection methods and data can be classified into various categories. The classification of data sources is observation, self-reporting, archival/documentary sources, and physical sources. Observation takes place under a controlled experiment, while participant observation takes place in natural field settings. Self-reporting refers to personal and group face-to-face interviewing, telephone interviewing, mail, and electronic surveys (Creswell, 2014:211). Archival or documentary sources refer to historical documents, reflective journals, letters, speeches, literacy texts, narratives, official memoranda, business plans, annual reports, medical records, etcetera. Physical sources are the collecting of blood samples, cell tissue, chemical compounds, and other material (Creswell, 2009:217; Creswell, 2014: 214; Mouton, 2012:104).

According to Ladbrook (2009:79) and Yin (2011:136), the researcher is the primary instrument for both collecting and analysing data. The researcher had to undergo personal change in order to acquire skills like interpreting and listening. Describing and interpreting are difficult skills to develop and hold the challenge of excluding bias. The researcher made use of subjective experiences to make proper sense of the phenomenon to be studied (Creswell. 2014:27).

De Vos et al. (2012:446), recommended that a pilot study should be conducted by the researcher before collecting the data for the main study. A pilot study is the stage of a project in which the researcher collects a small amount of data to "test" the research procedures, identify possible problems in the data collection protocols, and set the stage for the actual study. It is imperative that the researcher documents his or her data collection process as accurately and in as much detail as possible (Maree, 2019:109; Mouton, 2012:104).

Therefore, a pilot study was conducted with a few participants in South Africa to determine if each question of the interview as well as the questionnaire was clear and understandable.

The semi-structured interviews with the selected participants were undertaken by means of an interview schedule. Selected participants were given the interview schedule beforehand so that they could prepare and consider their participation and input during the semi-structured interviews. The researcher made field notes that were written in a reflective journal after each school's visit (Creswell, 2014: 209).

The theoretical framework that I intend to interpret the data for this study will be based on the Social Ecological Model of Bronfenbrenner as described in § 2.9. This model will be further discussed and applied in chapter 2, 3, 4, 5, and 6.

1.7.6 Data analysis

Data analysis entails analysing the qualitative data using qualitative methods and procedures (Creswell, 2009:218; Creswell, 2014:215; De Vos *et al.*, 2012:447). According to Nieuwenhuis (2019:118) and Mouton (2012:108), the aim of analysis is to understand the various constitutive elements of one's data through an inspection of the relationships between concepts, constructs or variables, and to see whether there are patterns or trends that can be identified or isolated, and to establish themes from the data (Bryman, 2016:382).

1.8 CREDIBILITY AND TRUSTWORTHINESS

1.8.1 Credibility

Leedy and Ormrod (2010:97), McMillan and Schumacher (2010:136) and Potgieter (2013:19) refer to **internal validity** as the degree to which findings correctly map the phenomenon in question (Creswell, 2014:265).

1.8.2 Dependability

Dependability refers to the stability over time, the consistency through repetition and extending which findings can be replicated or reproduced by another inquirer (Creswell. 2014:221; Leedy & Ormrod, 2010:28).

1.8.3 Objectivity and conformability

Objectivity and conformability mean that the influence of the researcher's judgement is minimised (Poggenpoel & Myburg, 2004:421).

1.8.4 Transferability

Transferability refers to the extend which the researcher's findings of the study cab be applied to other situations (Nieuwenhuis, 2019:92).

The above-mentioned credibility and trustworthiness concepts will be discussed in chapter 4.

1.9 RESEARCH ETHICS

Ethical principles should be applied throughout the research process.

Ethical clearance was obtained from UNISA for the project and the proposal was accepted to execute all the phases of the research. The ethical clearance number is 2019/02/13/61958999/29 MC (Appendix A 2). Thereafter, formal written consent from participants was obtained (Appendix E).

According to De Vos et al. (2012:113) and Leedy and Ormrod (2010:103), research should be based on mutual trust, acceptance, cooperation, promises and well-accepted conventions and expectations between all parties involved in a research project. On this basis, relatively few limitations and many options for action are available that offer the best opportunities for answering research questions and contributing to society. For the purpose of the research, the following ethical issues were identified: avoidance of harm; voluntary participation; informed consent; avoidance of deception of subjects and/or respondents; respect for the individual and their views: avoidance of violation privacy/anonymity/confidentiality; compensation; and debriefing of participants (Creswell, 2014:104; Leedy & Ormrod, 2010:101; Lichtman, 2010:54).

Furthermore, principles that apply when working with texts, according to Booyse *et al.* (2011:34) and Creswell (2014:109), include the following:

- Plagiarism: Plagiarism means using someone's ideas or words without appropriately acknowledging the source. It is an infringement of the right to intellectual property.
- Falsification and fabrication of data: Falsification means the distortion of data, while fabrication is the act of creating data that never existed.
- Misrepresentation of data and biased writing: Data should never be reported selectively because the data can be misrepresented. Omitting information to make one's story seem better and/or distortion of data serve as examples of biased reporting.

An ethical obligation rests with researchers to ensure that they are competent and adequately skilled to undertake the investigation they have in mind. In research across cultural boundaries involving sensitive investigations, this requirement is even more important. Value judgements should not be made on cultural aspects of communities (De Vos, *et al.*, 2012:124; McMillan & Schumacher, 2010:136).

Validation in research relates to whether the findings in studies are true and certain (Gray, 2018:198; Guion, 2017:1; Yin, 2011:198). Triangulation is a method use by researchers to check and establish validity in studies (Creswell, 2014:221; Nieuwenhuis, 2019:143). According to Guion (2017:1), five types of triangulations are used to check the validity of findings and to have confidence in evaluation results. These types are data triangulation, investigator triangulation, theory triangulation, methodology triangulation, and environmental triangulation. These five types will be discussed in Chapter 4.6.

1.10 CHAPTER OUTLINE

Chapter 1: Introduction and background

Chapter 1 provided the introduction and background to the investigation to justify the research. The problem statement and aims, an overview of the research design and methodology, and explanation of concepts were provided.

Chapter 2: Review of scholarly literature of South Africa

Chapter 2 provides a review of the history and factors that had influenced the curriculum and instructional design from 1997 to 2017 in South African primary schools.

Chapter 3: Review of scholarly literature of the Netherlands

Chapter 3 provides a review of the history and factors that had influenced the curriculum and instructional design from 1997 to 2017 in primary schools in the Netherlands.

Chapter 4: Research design and methods

In chapter 4, the research design and methods that were applied to conduct the empirical investigation are discussed.

Chapter 5: Discussion of research results

In chapter 5, the empirical data are presented and discussed.

Chapter 6: Findings and recommendations

Chapter 6 provides the summary, the conclusions and highlights and also the limitations of the study. Recommendations are also made for improvement based on the research findings on the curriculum and instructional design in selected South African primary schools and teacher's training to meet the demands of the 21st century.

1.11 CONCLUSION

This chapter provided an introduction to and background of the research study. The central problem highlighted focuses on exploring curriculum and instructional design in selected South African primary schools to meet the demands of the 21st century. In § 1.3 (Rationale) it was mentioned that the researcher as a former Foundation Phase teacher, HOD and currently subject advisor, asked questions based on the poor performance of learners in South Africa in the International PIRLS and TIMMS assessment and also how learners in South Africa are prepared for the challenges of the 21st century.

To this end, the particular purpose of the study is exploring selected schools and collect literature and empirical data to answer the following research questions:

Main question:

(a) How do teachers implement curriculum and instructional design in selected South African primary schools?

Secondary questions:

- (b) What are the different teacher education programmes in South Africa and the mentioned countries?
- (c) How should the teachers be skilled and trained in order to meet curriculum and instructional demands for the different primary school phases?
- (d) What suggestions can be proposed to enable teachers and learners in South Africa to meet the demands of the 21st century?

CHAPTER 2: THE CONTEXT AND HISTORY OF EDUCATION IN SOUTH AFRICA

2.1 INTRODUCTION AND BACKGROUND

Chapter 1 offered an introduction to and background of the research study. In this chapter I investigated the existing literature on the history of education in the South African school system and teacher training.

Teaching is part of an education system, which a teacher should thoroughly know and understand within its unique context (Wolhuter *et al.*, 2014:1). In South Africa the national education system does not have a subordinate structure but acquired its present state over the course of a long history within a particular societal and political context. According to Janse van Rensburg (2006:114), education and an education system can only be understood when the prior knowledge of a country is defined. Socio-economic factors that play a significant role in the context in the current teaching and learning system of South Africa are poverty, illiteracy, gangsterism, school dropouts, street children, rape, sexual abuse, harassment, unemployment, human immunodeficiency virus (HIV) or acquired immune deficiency syndrome (AIDS), and all of these contribute to poor matric results (Donald *et al.*, 2014:208) (§ 1.7.1).

Malaika (2017:10) highlighted that the basic education system in South Africa remains one of the worst in the world. The TIMMS results show that South Africa's performance is very close to the bottom of the surveyed countries. South Africa's performance in Maths is so low that, when TIMMS's assessments were administered to Grade 9 learners, it was found that they could not write the Grade 9 tests and were therefore made to write the Grade 8 test. Even then, the South African learners performed lower than Grade 8 learners from other countries (§ 1.3).

According to Booyse *et al.* (2011:1), both the history of education as a discipline and the historiography of South African education are controversial. The historiography of South African education shows that a huge percentage of people remain in the narrow furrows of the past, are immensely impoverished, having not lived up to the challenges of the

millennium and having not benefited from international developments in education. There is therefore a need to enhance the present state of education as a discipline.

Based on the chronosystem of Bronfenbrenner's theory (§ 1.3; § 1.7.1; § 5.7) it is imperative to look back on education in South Africa since 1994 to eventually understand the current curriculum and instructional design in South Africa.

The purpose of this chapter is to investigate and explore the literature about the context and line of historical evolution of curriculum and instructional design in South African primary schools for learners aged 0–12 years and their teacher's training since 1994.

2.2 CURRENT CONTEXT OF EDUCATION IN SOUTH AFRICA

2.2.1 Teachers and learners

According to Sterne (2021:1) the education system is the biggest system in the country. South Africa has nearly 26 000 schools, 400 000 teachers and close to 13 million learners. Of these, 24 900 were ordinary schools and 4 307 were other educational institutions namely, ECD centres and special schools. The 24 900 for ordinary schools comprised the following:

- 14 795 primary schools, with 6 929 834 learners and 203 139 educators;
- 6 186 secondary schools, with 3 989 236 learners and 140 532 educators; and
- 4 593 combined and intermediate schools, with 2 013 465 learners and 74 942 educators.

According to the DoE (2018) schools in South Africa are divided into different education bands (phases). The following table indicates the different education bands (phases) in South African schools:

Table 2.1: Education bands (phases) in South African schools (DBE, 2018)

Education band/phase	Grades/Years
Further Education and Training (FET)	Grade 10 – Grade 12

Senior Phase	Grade 7 – Grade 9
Intermediate Phase	Grade 4 – Grade 6
Foundation Phase	Grade R – Grade 3
Pre-school (ECD)	3 – 5 years

A recent survey on learner experiences in South Africa public schools, indicate that the most significant problem learners are currently facing in schools, is the overcrowded classrooms in quintile one, two and three schools (Education Statistics, 2020) (§ 1.7.1). This problem was rated higher than a shortage of writing – and textbooks as well as poor quality teaching. This makes it difficult for teachers to invest in, support and nurture all their learner's wellbeing (Handbook for teachers' Rights, Responsibilities and Safety, 2020:8).

In South Africa, the national matric (Grade 12) pass rate is used to indicate the success of the school system from Grade R to Grade 12. The national matric pass rate dropped slightly in 2017 from the previous year to 75,1% owing to the poor outcome of the controversial progressed learners (Monama, 2018:1). Learners were not allowed to fail an education band (phase) more than twice, and if they did, they were progressed to the next phase. The number of progressed learners had increased by over 65% in 2016, which means 100 000 learners were progressed in 2016 (Malaika, 2017:10).

According to Küsel (2017:3), 5 100 teachers in South Africa are underqualified, or unqualified. Sixty percent of the underqualified teachers are from KwaZulu-Natal. Eighty percent of schools in South Africa are underperforming schools (Küsel, 2017:3). Fraser (2023:1) further reports that 80% of Grade 4's in South Africa read without basic reading knowledge, according to the results of the 2016 and 2021 PIRLS. Research done included for example the basic reading knowledge for learners in USA, Canada, and Germany. Only 4% of learners in the USA and 3% of learners in England read without basic reading knowledge (§ 1.1; § 1.3).

South Africa is currently experiencing a shortage of 15000 teachers due to overloaded work expectations, poor teaching conditions and above all a lack of resources and overcrowded classrooms (Miya, 2017:1). After the implementation of white paper 6 in 2001, starting the rise of inclusive education, which allows all learners equal access to education regardless of their race, gender and learning barriers, schools across the nation have received an increase of 33679 learners with special needs (RSA, 2015:8).

2.2.2 Socio-economic environment

Recent statistics on unemployment paint a gloomy picture, placing the number of discouraged jobseekers at 2.8 million, a growth of 22,4% or 510 000 compared to the same period last year (2018). According to Felix (2018:4), the number of unemployed people would easily outstrip those in formal employment if the more than 700 000 matric learners of 2017 joined the jobseekers' queue of 9.4 million. In 2016, Statistics South Africa (Stats SA) indicated that while unemployment declined by 3,8% to 234 000, youth unemployment increased to 52,40% (Statistics South Africa, 2018). There is an increase in South African graduates who have decided to cast their nets wider in search of a better life. These are people in their 20s with university degrees, but cannot find jobs in South Africa (Mooki, 2018).

For the first time in history, the RSA released a protocol document in 2019 on how schools and officials must deal with learners who commit rape, sexual abuse, and harassment (Govender, 2019b:6). The protocol document referred to the unacceptable elevated level of sexual abuse and harassment at schools. The high prevalence of violence and particularly sexual abuse and harassment made going to school terrifying for affected learners. Sexual assault and rape must be reported to police and will result in a seven-day suspension. Terrified learners are referred to a rehabilitative programme and the school governing body (SGB) may recommend that the culprit be expelled from school.

Farber (2019:8) reveals that terrified people live in gangster hotspots and have given up hope in the gang-infested Cape Town suburb of Lavender Hill, where drug addicts are the modus operandi. Gangsters are recruiting children as young as seven years old. These children do not attend school and are made to sell drugs, carry weapons, and are even trained to shoot. Nombembe and Hyman (2019:6) say that hopelessness is the only

certainty for people doomed to live in shacks between gangsters in "Tin-Can Town" in Delft, between the city of Cape Town and Cape Town International Airport. A familiar face of everyday living is learners and adults hanging around in the streets, smiling toothlessly in the sun while the air smells of dagga; everyone seems sedated. A strong likelihood is death by drug overdose, disease, or a bullet. They get caught in gangster crossfire on a daily basis and have to teach small children to sprint or lie flat on the ground if they hear shooting.

According to Govender (2019a:8), the DoE is concerned about the escalating violence involving learners and educators in schools. Several violent attacks against teachers and learners caused that one male teacher and three female teachers at St Philomena School in Onseepkans, near Pofadder, have vowed not to return to class unless the Grade 6 learner is expelled. The violence has left both learners and educators deceased, others injured, and perpetrators facing lengthy jail terms.

According to Makhubu (2014:10) teachers in South Africa make a difference by changing their mind sets. Teachers are inspirational role models in a community by creating a conducive environment where learners can learn and work in a peaceful and joyful manner. An open-door policy has been adopted in many schools to allows the staff to express their ideas to improve the school.

2.3 CONCEPTUALISATION OF EDUCATION

2.3.1 Transformation since 1994

In 1994, South Africa held its first election and the transformation of society commenced formally. Since the constitutional amendment in 1994, the federal republic of South Africa has consisted of nine provinces. The official name of the republic is the Republic of South Africa. Each province has a premier and an executive council consisting of 10 persons. The administrative capital of South Africa is Pretoria. It is the seat of the central government and the ministry's central government is responsible for education in South Africa as a whole and issues national education guidelines, while each of the nine provinces has its own education department which enjoys a reasonable degree of autonomy and implements national policy (Anon, 2015).

According to Rakometsi (2008:9), the history of the established and conservative teacher unions was reviewed and contrasted with that of the emergent and militant ones. The attempts of the Congress of South African Trade Unions (COSATU) to merge all teacher unions into one organisation, were considered. The merger process failed, and South Africans looked forward to an egalitarian lifestyle with better living conditions, better education, and better opportunities for employment (Ladbrook, 2009:30).

Several new teacher unions were formed to champion the rights of teachers – for example, SADTU, the National Professional Teachers' Organisation of South Africa (NAPTOSA), and the National Teachers Union (NATU), while the Federal Council of Teachers carried on, but excluded black and coloured teachers.

In the next part of the chapter the current laws and government of schools will be discussed.

2.3.2 Schools: Law and governance

The first White Paper on the education policy of the new dispensation appeared in 1995 and announced the dawn of the new era in South African education. Wolhuter *et al.* (2014:151) state that education and training are basic human rights, and it is a responsibility to protect those rights. The main challenge was to provide affordable education to a broad spectrum of the community without sacrificing quality and standards. The White Paper was followed by different laws (Steyn *et al.*, 2003:78-82). These different laws are discussed next.

2.3.2.1 Constitution of the Republic of South Africa (1996)

The Constitution of the Republic of South Africa (1996) provides guidelines for the organisation, management and financing of schools and minimum standards for the provision of education (Federation of Governing Bodies of South African Schools [FEDSAS], 2009:5). This Act was promulgated to provide for a uniform system for the organisation, governance and funding of schools (Steyn *et al.*, 2003:70). According to Wolhuter *et al.* (2014:150), the principles of this policy – the *intrinsic* goals of the post-1994 education system – were the following:

- democratisation
- desegregation

- decentralisation
- equal educational opportunities
- · multicultural education.

According to FEDSAS (2009:95), the Minister of Education, in those years, Sibusiso Bengu, determined norms and standards for language policy in public schools in terms of section 6(1) of the Constitution of South Africa (1996). The language in education have been the subject of discussions and debate with a wide range of education stakeholders and role players.

2.3.2.2 South African National Quality Framework (1995)

The South African National Quality Framework provided for the development and implementation of the National Qualifications Framework. Curriculum changed in post-apartheid. South Africa started immediately after the election in 1994 when the National Education and Training Forum began a process of syllabus revision and subject rationalisation (RSA, 2002c:1). The purpose of this was mainly to lay the foundations for a single national core syllabus.

2.3.2.3 The Higher Education Act (1997)

This Act regulates higher education and a separate national Department of Higher Education was established in May 2009 (Wolhuter *et al.*, 2014:153).

2.3.2.4 The Constitution Act (1996)

The Constitution of South Africa (1996) is possibly one of the most supportive state-based instruments of transformation the world has ever seen and conveys strong assertions of social, economic and cultural rights (Ladbrook, 2009:30). The Constitution, containing the **Bill of Rights**, was drafted by parliament and was approved and became law subsequent to the elections Constitution of the Republic of South Africa (1996). On education, the Bill of Rights (sec. 29) provides Constitution of the Republic of South Africa (1996:14):

(a) Everyone has a right to a basic education, and

(b) to further education the state through reasonable measures, must make progressively available and accessible.

It continuous as follows:

- Everyone has the right to receive education in the official language or languages of their choice where that education is reasonably practicable. In order to ensure the effective access to and implementation of this right, the state must consider all reasonable educational alternatives, including single medium institutions;
- Everyone has the right to establish and to maintain, at their own expense,
 independent educational institutions that
 - (a) do not discriminate on the grounds of race
 - (b) are registered with the State, and
 - (c) maintain standards that are not inferior to standards at comparable public educational institutions Constitution of the Republic of South Africa (1996:14).

2.3.3 Education management

The continuing goal of South Africa is for a better life. The new government of 1994 had to ensure transformation through the creation of a new political order, economic growth, industrial transformation and national unity (Wolhuter, 2011:150-151).

Educational management and administrative structures were divided into three levels: central government, provincial government, and instructional levels (Steyn *et al.*, 2003:82). Education in South Africa is governed by two national departments, namely the DBE, which is responsible for primary and secondary schools, and the DHET, which is responsible for tertiary education and vocational training. Prior to 2009, these two departments were represented by a single DoE. According to Steyn (2008:69), the Minister of Education at national level is empowered by the National Education Policy (South Africa) Act (1996) to determine national norms and standards for education planning, provision, governance, monitoring and standards. A national DoE exists, who is responsible for translating education and training policies of government and the legislative framework in the school

system. According to the Public Servants Association of South Africa (PSA) (2018) South Africa's education curriculum is constantly developing, while the classroom environment facing teachers is changing just as rapidly. At the same time, teachers have to grapple with a legacy of apartheid training and instantly in the teacher training infrastructure during the post-apartheid era. These two trends – shifting curricula and problems in teacher education – mean that in-service training of teachers is still a troubled system. Departmental officials are responsible for in-service training and workshops with teachers to assist and monitor curriculum implementation. Constant changes to the curriculum and growing mistrust educators and their departments makes it difficult to address the effectiveness of in-service training, implementation without proper mechanisms to assess its effectiveness (PSA, 2018).

2.4 DIFFERENT SCHOOLS IN SOUTH AFRICA

According to the Federation of Governing Bodies of South African Schools (FEDSAS) (2017:3), South Africa has no state schools. All the schools in South Africa are either public or independent schools. The difference between a state school and a public school is that the former belongs to the state and the latter to the school community.

The DBE deals with public schools, private schools (also referred to by the Department as independent schools), ECD centres, and special-needs schools. Public and private schools are collectively known as ordinary schools and comprise roughly 97% of schools in South Africa. The DHET deals with FET colleges, adult basic education and training (ABET) centres, and higher education (HE) institutions (Ocampo, 2004).

The Constitution of South Africa (1996) defines a public school as an environment where teaching and learning occurs from Grade R to Grade 12 (FEDSAS, 2017:5). Public schools' juristic personality originates from legislation, more specifically, by the Constitution of South Africa (1996). Although public schools act as a juristic person, they are still limited to the provision of the Constitution of the Republic of South Africa (1996). Public schools have the right to an own identity, as long as it reflects and falls within the framework of its duty to be a school. This includes the right to an own name, location, colours, songs, traditions, and composition, such as unisex, single-medium, double-medium, or parallel-medium.

In 2019, Govender (2019c:6) said that the number of private (independent) schools in South Africa in 2018 were 1 865 and the number of learners attending the private schools were 589 348. South African private schools have been accused of being exclusionary and elitist by using entrance tests to cherry-pick only the most intelligent learners for enrolment to secure a good pass rate at the end of Grade 12. The private sector, however, justifies that the tests are used to determine whether a learner is ready for a particular grade or not. It is still the prerogative of parents and learners to have the opportunity to re-write the tests later in the year, as they may well have matured and mastered the appropriate skills needed. The common understanding in private schools is, if you filter at the admissions stage, you have much greater control over what your final academic results will look like at the end of Grade

12. Though many admission tests have been outlawed by the Constitution of South Africa (1996), many private schools still administer them, especially in English and Mathematics. Private (independent) schools no longer cater just for the rich, but for poorer people, too (Linde & Parker, 2019:20).

2.5 GOVERNING BODIES

At institutional level, school governing bodies (SGBs) comprise representatives of parents of students, teachers, non-teaching staff of the school, the school principal, representatives of students, and co-opted members from the local community. A public school is governed by its governing body to (FEDSAS, 2017:3):

- perform its statutory duty and act in the school's best interest;
- unlock the full potential of the school, educators and learners; and
- ultimately make a difference in South Africa.

The function of the SGB is the management and control of the school and recommendations on the appointment of teachers to the provincial offices. Efficient school governance is about striking the right balance between economic and social aims, and between individual and common objectives (FEDSAS, 2017:7). Efficient governing bodies must always act in an accountable, responsible, fair and transparent manner so as to ensure that a public school continues to be ethically and strategically accountable.

The following diagram illustrates the purpose of an efficient governing body:

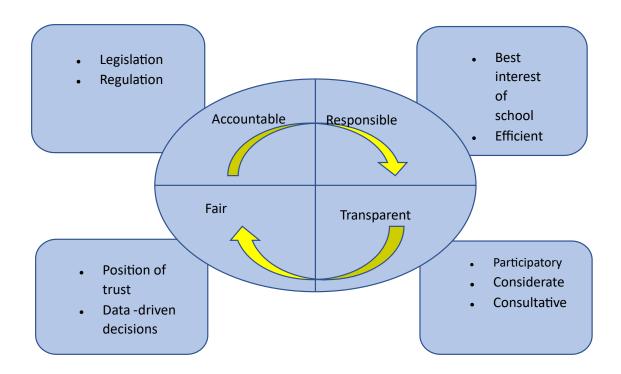


Figure 2.1: The purpose of school governing bodies in public schools (adapted from FEDSAS, 2017:8).

2.6 HIGHER AND BASIC EDUCATION

On 10 May 2010, the previous Ministry of Education was split to make provision for a Ministry of Higher Education and Training and a Ministry of Basic Education. The latter is now responsible for all school education, while the former oversees higher and post-school education and training, including the college sector (Anon, 2015). The nine provinces in South Africa also have their own education departments that are responsible for implementing the policies of the national department, as well as dealing with local issues. Each of the provinces has its own provincial Minister of Education and provincial DoE. Any aspects of education pertaining that province may be prescribed by provincial legislatures (Steyn, 2008:74). In 2010, the basic education system comprised 12 644 208 learners, 30 586 schools, and 439 394 teachers. In 2009, the higher education and training system comprised 837 779 students in HE institution, 420 475 students in state-controlled FET

institutions, and 297 900 in state-controlled ABET centres. According to the national census of 2016, among the South African population aged five years and older, shows an improvement of 35% attending an educational institution from 1996 to 2016 (Statistics South Africa, 2016).

2.6.1 Education reform

Education reform has been a priority in South Africa since the establishment of the Government of National Unity in 1994 and has played a key role in redressing the injustices of apartheid (OECD, 2008:3). Impressive progress has been made in education legislation, policy development, curriculum reform and the implementation of new ways of delivering education, but many challenges remain in many areas, such as student outcomes and labour market relevance. The outcomes-based curriculum launched in 1997 was a move towards changing the past system, but the experience of implementation prompted a review in 2000 followed later by a revised version, Curriculum 2005, the National Curriculum Statement (NCS) (Steyn et al., 2003:110). According to Msila (2007:149), the system has introduced new learning styles, implying change from passive, rote learning to creative learning and problem-solving through active participation in the learning process. The National Qualifications Framework (NQF) provided the structure for the new curriculum in South Africa. The NQF was intended to prevent learners from being trapped in any learning situation by facilitating movement between different areas and levels of education and training.

According to Msila (2007:150), two main reasons are cited as being crucial in the introduction of OBE. Firstly, the previous education system fell short by international standards in the field of Mathematics and Science, for example. Secondly, OBE aims to create a South Africa that is a prosperous, truly united and democratic country. These goals can be linked to the revival of a number of issues in society. The new curriculum was developed in South Africa to ensure that education reflected the contemporary needs of society.

The curriculum, as initially introduced, was not easily received by educators. The official curriculum for outcomes-based education (OBE) distinguishes between eight learning areas: Languages; Mathematics; Natural Sciences; Social Sciences; Technology; Economic

and Management Sciences; Life Skills; and Arts and Culture. For each learning area, learning outcomes are specified (Wolhuter *et al.*, 2014:154). According to Msila (2007:149), asserted that curricular changes, such as the adoption of OBE and the removal of certain subjects from the curriculum (such as, guidance and counselling, physical education, library resource education, and music) had a high impact and far-reaching consequences for education authorities, teachers, parents and learners.

The greatest strain was placed on teachers, as they were deemed to be the implementers of the new curriculum and were the direct interface with learners, the recipients of instruction. Other profound changes brought about where, for example, the introduction of and devolution of power to governing bodies (SGBs). Teachers were affected by the rationalisation and redeployment of teachers and the offering of voluntary severance packages to long-serving teachers. Teacher's training changed by the closures of teacher's training colleges and the amalgamation of some of these colleges with universities (§ 1.4.2). Schools had to adapt regarding changes in school language policy, the introduction of inclusive education, the abolition of corporal punishment, and the funding of schools (Dehaloo, 2011:62).

The above-mentioned changes, the tempo of their introduction and the manner in which they were ushered in had a significant impact on teachers, learners, parents, and various other role players in South African education. According to Ladbrook (2009:32), the revision of Curriculum 2005 resulted in a draft RNCS for Grades R–9 (schools). This draft RNCS was not a new curriculum but a streamlining and strengthening of Curriculum 2005. Educators more easily implemented it. The Review Committee of the RNCS recommended that strengthening the curriculum required streamlining its design features and simplifying its language through the production of an amended NCS.

2.6.2 The Revised National Curriculum Statement (RNCS)

The RNCS has since 2000 informed a system that seeks to introduce egalitarian pedagogy in South African schools (Msila, 2007:151). The goals of this system are to create a new South African identity that encompasses critical consciousness, to transform South African society, to promote democracy, and to magnify learner involvement in education. This system is based on the Constitution of the Republic of South Africa, (1996), which provides

the basis for curriculum transformation in South Africa. Education and the curriculum have a crucial role to play in realising the aims of developing the full potential of learners as citizens of a democratic South Africa (RSA, 2002a:1). The aims of the Constitution include the following:

- to heal the divisions of the past and establish a society based on democratic values, social justice and fundamental human rights;
- to improve the quality of life of all citizens and free the potential of each person;
- to lay the foundation for a democratic and open society in which government is based on the will of people and every citizen is equally protected by law.

The RNCS also clearly states that educators and learners are to assume new roles. The new dispensation regards teachers as key contributors to educational transformation in South Africa. The RNCS envisages teachers who are qualified, competent, dedicated and caring. Teachers are supposed to assume various roles and these include being mediators of learning, interpreters and designers of learning programmes and materials, leaders, administrators and managers, scholars, researchers and lifelong learners, community members, citizens and pastors, assessors and learning area or phase specialists (RSA, 2002b:3). All those roles are crucial for nurturing a new identity in learners. The promotion of values is important not only for the sake of personal development, but also to ensure that a national South African identity is built on values very different from those that underpinned apartheid education (RSA, 2002b:3).

Education is the key, because it empowers citizens to exercise their democratic rights and shape their destiny (RSA, 2001:13). Democratic education also enables people to participate in public life, think critically and act in a responsible manner. The values of the present South African education system are rooted in the values of the Constitution. These 10 fundamental values are: democracy; social justice; equality; non-racism and non-sexism; ubuntu (human dignity); an open society; accountability; rule of law; respect; and reconciliation. All these values are highlighted in the Manifesto drawn up by the Working Group on Values in Education (Ministry of Education, 2012:111). The new system strives to create an identity of South Africans.

2.6.3 New strategies

According to Msila (2007:152), the government has also tried to ensure that schools adopt a number of strategies to assist learners in embracing the new patriotism. Among these strategies also highlighted in the 2001 Manifesto, are the following:

The introduction of religion education into schools

Unlike during the days of the CNE, learners are now supposed to explore the diversity of religions that inspire society.

Making multilingualism happen

In the past, only English and Afrikaans were the dominant languages of formal learning. However, now there are policies that maintain that learners acquire knowledge better when they study in their mother tongue, especially in the formative years. Many teachers are beginning to use code-switching in their classrooms as one of the practical ways in a world dominated by the English language.

· Making schools safe and upholding the rule of law

In the face of the abolition of corporal punishment, this has become a challenge for teachers. Schools need to see themselves as part of the community. With the expanded powers of the parents and SGBs, the role of parents has ensured that schools do become accountable structures of authority in communities.

Nurturing the new patriotism

Schools must promote a shared sense of pride in commonly held values. Whilst the system of education acknowledges the multicultural nature of the South African society, there are commonly held values that forge a common South African identity. This new patriotism is forged through an allegiance to constitutional values.

It further recommended that the RNCS reduces the curriculum design features from eight to three: critical and developmental outcomes; learning outcomes; and assessment standards.

It had to align curriculum and assessment. In addition, it was recommended that implementation needed to be strengthened by improving teacher orientation and training, learning support and provincial support, and relaxation of timeframes for implementation. Some of the educators still experienced difficulty in understanding a competence-based curriculum, as they had taught a curriculum that was systemic and contained regulatory features, with discrete subjects and disciplines.

In the RNCS, there were eight learning areas in the NCS. A learning area was a field of knowledge, skills and values, which has unique features as well as connections with other fields of knowledge and learning areas (RSA, 2002c:4). The learning areas were:

- Grade R: Home Language (HL), Mathematics and Life Orientation;
- Grade 1–3: Languages (HL) and First Additional Language (FAL), Mathematics and Life
 Orientation;
- Grade 4–6/7: Languages (HL and FAL), Mathematics, Natural Sciences, Technology,
 Arts and Culture, Life Orientation, and Economics and Management Sciences.

According to the RSA (2011:5), promotion requirements for Grades R–3 are: HL – 50%; FAL – 40%; and Mathematics – 40%. In the case that the HL is not the learner's mother tongue, the learner may achieve 40% to qualify for promotion. All learners in Grade R should progress to Grade 1 as far as possible, provided that they are in the same permissible age cohort as the other learners. For Grades 1–8 learners who meet promotion requirements, "Ready to Progress" (RP) is written in the appropriate column against the name of the learner in the promotion schedules. A learner who does not meet the requirements for promotion can be progressed to the next grade in order to prevent the learner being retained in the

Foundation Phase for longer than four years, excluding Grade R (RSA, 2011:6). For Grades 1–8 learners who do not meet promotion requirements, "Not Ready" (NR) is written in the appropriate column against the name of the learner in the promotion schedules.

A learner may only be retained once in a phase in order to prevent the learner from being retained in a phase for longer than four years (RSA, 2017:2). This policy directive is meant to address learner dropouts attributed to frustration and loss of hope by learners who

experienced chronic patterns of underperformance in the GET or Further Education Training (FET) phases. If the learner has already been retained in a phase, the learner ordinarily qualifies to be "progressed".

2.6.4 Inclusive education in South Africa

The dramatic changes in South African society in the past years have affected both general and special education. According to Engelbrecht, Green, Naicker and Engelbrecht (2010:3), South African education moved away from special education towards a policy of inclusion. Inclusion is defined as a shared value that promotes a single system of education dedicated to ensuring that all learners are empowered to become caring, competent and contributing citizens in an inclusive, changing and diverse society (Engelbrecht *et al.*, 2010:6). In line with international trends, in South Africa, the new constitution emphasises respect for the rights of all, with particular emphasis on the recognition of diversity.

Inclusive education is a universal philosophy and practice that can be adopted and indigenised by local cultures and conditions. It has, therefore, a global agenda and has played a huge role in the educational reforms of many countries (Nel, Nel & Hugo, (2013:6). The global agenda for inclusive education evolves from the human rights culture worldwide and focusses on disability rights, children's rights and education. At the World Conference on Special Needs Education held in 1994, the Salamanca Statement and Framework for Action Needs Education was adopted. The **Salamanca Declaration**, which commits over 94 participating nations, declared that every child has the fundamental right to education (a learner-centred approach) and that all children are unique and therefore education must consider their needs and characteristics (Nel *et al.*, 2013:6). The fundamental principle of inclusive schools described in this document is that all children need to learn together and at the same time. Their individual differences and learning needs must be catered for through the provision of support that is specifically planned for them.

Inclusive teaching and learning explore two key curriculum processes, according to the RSA (2014:10), namely curriculum adaptation and curriculum differentiation. Adaptation is a strategy for ensuring effective curriculum delivery, and curriculum differentiation is a key strategy to include all learners in one classroom regardless of their barriers to learning or levels of ability.

According to the South African Teachers' Union (SAOU) (2018:3), curriculum differentiation is a key for responding to the needs of learners with diverse learning styles and needs. It involves processes of modifying, changing, adapting, extending and varying teaching methodologies, teaching strategies, assessment strategies and the content of the curriculum. It considers learners' levels of functioning, interests and backgrounds. Curriculum differentiation can be done at the level of content, teaching methodologies, assessment and learning environment.

Full-service schools admit and are willing to support all learners from their locality according to the principle of natural proportion, irrespective of whether the learners have low, moderate or high levels of support (RSA, 2010a:25). A full-service school must review its capacity to accommodate the needs of each individual learner who has additional support needs before considering permanent outplacement to a special/vocational school.

Education White Paper 6 (2006) is the policy on which inclusive education in South Africa is built. According to White Paper 6 (2006), inclusive education is defined as a learning environment that promotes the full personal, academic and professional development of all learners, irrespective of race, class, gender, disability, religion, culture, sexual preference, learning styles and language. According to White Paper 6 (2006), inclusive education and training were defined as:

- acknowledging that all children and youth can learn and that all children and youth need support;
- enabling education structures, systems and learning methodologies to meet the needs of all learners;
- acknowledging and respecting differences in learners, whether due to age, gender, ethnicity, language, class, disability, HIV, or other infectious diseases;
- broader than formal schooling and acknowledging that learning also occurs in the home and community, and within formal and informal settings and structures;
- changing attitudes, behaviour, teaching methods, curricula and environment to meet the needs of all learners;

- maximising the participation of all learners in the culture and the curriculum of educational institutions and uncovering and minimising barriers to learning;
- empowering learners by developing their individual strengths and enabling them to participate critically in the process of learning.

According to the RSA (2012:9), a learner who is not ready to perform at the expected level, and who has been retained in the first phase for four years or more, and who is likely to be retained again in the second phase for four years or more, should receive the necessary support in order to progress to the next grade. Every learner needs support, but some learners, for whatever reason, may require additional support for learning. Additional support needs can arise from any factor that causes a barrier to learning, whether such a factor relates to social, emotional, cognitive, linguistic, disability, or familial and care circumstances. Some additional support needs are long term, while others are short term. The effect they have varies from child to child (SAOU, 2018:3). Differentiation in assessment and accommodations are designed to equalise opportunities for all learners by addressing barriers learners may experience. The purpose of alternative and adaptive methods of assessment is to enable learners to give a true account of their knowledge and/or skills (RSA, 2010b:8).

The RSA promulgated the Policy on Screening, Identification, Assessment and Support (SIAS) in 2014 as a national policy to be implemented in all schools and districts as from 2015 (RSA, 2014:1). The purpose of the SIAS policy is to provide a policy guideline for the standardisation of procedures to identify, assess and provide programmes to the diverse needs of all learners in the ordinary classrooms to enhance their participation and inclusion in schools. The policy includes a protocol as well as a set of official forms to be used by teachers and school-based support teams (SBST) in the process of screening, identifying and assessing barriers experienced by learners for planning support provision according to programmes and monitoring by the district-based support team.

Inclusive education focusses on a systems approach, which means that systems in the society (e.g., classrooms, school, family, community, government) need to interact with each other to provide a supportive structure for the learner. It is important that teachers also familiarise themselves with Bronfenbrenner's ecological systems theory. This theory unable

teachers to understand complex influences, interactions and interrelationships between the learner and all the other systems (Donald *et al.*, 2014:80) learners encounter. This multidimensional model of human development is discussed.

Donald *et al.* (2014:26) explain that the RSA policy on inclusive education (RSA, 2001) highlights two major approaches to addressing barriers to learning:

- Prevention: the prevention approach in education focusses on transforming education institutes and curricula to facilitate access to appropriate education for all students. To prevent the occurrence of barriers to learning, it also focusses on elements of social transformation;
- Support: the supportive approach focusses on providing education support services to schools, staff, parents/caregivers and students. Support for learners with specific educational and developmental needs is required at individual level, but there are also many problems at other levels of the educational system and in the learning environment.

Two other policies and guidelines that support the thrust of the above-mentioned policy on inclusive education are the two documents that relate to the HIV and AIDS pandemic (RSA, 1999; Department of Health, 2000). These policies and guidelines aim to reduce the prevalence of HIV, improve the quality of life of people infected or affected by HIV and AIDS, and extend relevant school-based interventions, especially through the Life Orientation programme in schools.

The new curriculum's intension is still to include inclusive education for all learners with educational needs (LSEN). Education White Paper 6 on inclusive education (2006) described the governments intend to implement inclusive education at all levels in the system by 2020, facilitating the inclusion of vulnerable learners and reducing barriers to learning (OECD, 2008:40).

2.6.5 Assessment

According to Wolhuter *et al.* (2014:155-156), OBE implied a new system of assessment. A distinction is made between three types of outcomes: learning area outcomes; specific outcomes; and critical outcomes. Learning area outcomes specify the skills a learner should

obtain over a specific period of time in a specific learning area. Specific outcomes are the exact skills and information required in a particular context or situation. The critical outcomes are designed by the South African Qualifications Authority (SAQA) and should be applied to all learning areas.

Matar (2017:1) clearly explains that critical thinking never comes to persons who can be easily intimidated or dominated or restricted. The attribution of freedom must be instilled in students and have to generate a fearless atmosphere around them. Students ought to be encouraged to express their opinions, whether we like it or not, and to assure them that no penalty is waiting for them. Students must learn to support their arguments with facts and figures. Their progress will be measured against mastery of outcomes rather than the mastery of content. Teachers should assess on a continuous basis and should use a range of strategies, such as peer- and self-assessment, initiating projects, and assisting learners in compiling portfolios. The emphasis would move away from passing and failing, and the assessment of learners should then also change from the historical summative assessment to formative assessment. Informal and daily assessment is done through observation, discussions, learner-teacher conferences, informal classroom interaction, etc. Formal assessment provides teachers with evaluation on how well learners are progressing in a grade and in a particular subject.

2.6.6 The National Curriculum Statement

The NCS was the formal curriculum in South African schools since 2004. According to the RSA (2012:7), learning programme requirements for Grade R are as follows:

- Grade R: HL, Mathematics and Life Skills comprising Beginning Knowledge, Creative Arts, Physical Education, and Personal and Social Wellbeing.
- Grades 1–3: HL, FAL, Mathematics and Life Skills comprising Beginning Knowledge,
 Creative Arts, Physical Education, and Personal and Social wellbeing.
- Grades 4–6: HL, FAL, Mathematics, Life Skills and Social Sciences (one official or approved non-official language may be offered as an optional subject on least Second Additional Language level, not to be taken into account for promotion requirements).

As such, the NCS provides a framework for assessment in Grades R–12 which is based on the principles of OBE.

The assessment policy (National Protocol for Assessment Grades 1–12) amplified teachers' workload drastically. Norm-referenced tests were done away with and replaced with criterion-referenced tests. Whilst the former was based on work covered by the subject teacher and were assessed in the form of class tests and assignments, the latter involved an array of testing strategies to be employed until the desired outcome had been achieved. Criterion-referenced testing effectively meant that teachers worked on a continuous basis and accepted only the best marks of learners. OBE earned significant critique, because of the following factors (Motshekga, 2009:1):

- OBE was implemented over-hastily, and unprepared teachers were forced to adopt an unfamiliar system without any previous training;
- the envisaged in-service and pre-service teacher's training to build capacity in teachers did not materialise;
- learning materials and resources that were supposed to be produced by expert writers and publishers were exploited opportunistically by individuals with little understanding of OBE;
- important reviews and evaluations on the progress of OBE were not free of bias and communicated that the new system was efficient, whereas in fact, it was not.

2.6.7 Foundation for learning

An intentional four-year campaign – the Foundation of Learning Campaign – was launched from 2007 to 2011 by the RSA in order to improve the basic skills of learners in Grades 1–6 (OECD, 2008:172). All primary schools were expected to increase the average learner performance in Literacy/Language and Numeracy/Mathematics to no less than 50%, which implied an improvement of between 15–20% by 2011. The minimum expectations were that all teachers of Grades 1–3 actually teach reading and numeracy skills every day; that all teachers in Grades 1–6 would spend at least 30 minutes daily on additional reading for enjoyment and at least one hour on extended writing every week; and that all teachers in

Grades 1–6 would also teach numeracy (or mathematics) for at least 30 minutes every day, including 20 minutes of written exercises and 10 minutes of mental arithmetic exercises as appropriate to the grade level. Teachers were expected to assess learners' progress regularly and maintained individual learner performance reports of monthly tests. The national policy pertaining to the programme and promotion requirements of the NCS Grades R–1 (RSA, 2011:1) determines the minimum levels at which a learner must attain the content and assessment requirements for all subjects and also includes the programme and promotion requirements for Grades R–12 as stipulated in policy.

2.6.8 The importance of early childhood development and economic growth

Government priorities in South Africa focus on addressing equity and building economic growth (OECD, 2008:217). In both areas, education plays a significant role, and within those areas, early childhood education and adult and basic education could make major contributions. Dlamini (2015:7) announced the approval of the National Integrated Policy for ECD. The government of the Republic of South Africa has prioritised ECD within its National Development Plan for 2030. The National Integrated Early Childhood Development Policy is aimed at transforming ECD service delivery in South Africa to address critical gaps and to ensure the provision of a comprehensive, universally available and equitable ECD service. The long-term goal of the policy is to guarantee a full comprehensive age- and developmentally stage-appropriate quality in terms of the ECD programme that is available and accessible to all infants, young children, parents, educators, support staff and caregivers. To provide a comprehensive quality ECD programme, certain essential components need attention. The essential components of focus are:

- healthcare and nutrition programmes
- social protection programmes
- parent support programmes
- opportunities for learning
- national public ECD communications
- water, sanitation, refuse removal and energy sources

- · food security, and
- play facilities, sport and culture.

According to Perry (2008:7), internationally, humans have created an environment where children are growing up wanting more shiny things and starving for the fundamental core human relational aspects of touch, smile and a moment spent sitting with someone.

2.6.9 The National Curriculum Framework (NCF)

The department of Basic Education made the National Curriculum Framework (NCF) available since 2011. The NCF focusses on the child from birth to four years or to the time that the child enters Grade R. According to Motshekga (2015:3-7), that "...delays in cognitive and overall development before schooling can often have long lasting and costly consequences for children, families and society". The first step to underpin the NCF was the development of the National Early Learning Standards (NELDS) in 2009 to ensure that children from different backgrounds in different settings have access to quality ECD services to enhance learning and development. The NCF builds on NELDS and promotes a flexible and holistic approach with vision, principles, purpose and early learning content to support adults who work with and for children. South Africa has 11 official languages and the first years of schooling (Foundation Phase) are provided in all these home languages. There are three themes underpinning the NCF in a contextual, developmental and educationally appropriate way. The three themes are:

- young children as people;
- young children's learning and development; and
- young children's connections with adults.

According to Motshekga (2015:7-8) the NCF provides six early learning and development areas (ELDAs) which integrate the three themes and 12 principles. The three themes described are informed by 12 principles for working with all children and working with all adults, including families, practitioners, programme managers, and support and monitoring personnel. The focus of the principles is upon children's needs and interests and on working with children. The three child's voices they captured are:

- Theme 1: I am a competent person
- · Theme 2: My learning and development is important
- Theme 3: I need strong connection with adults.

The following 12 principles (NCF, 2015:7) are set into the themes.

Theme 1: I am a competent person

Principles

- 1. I am a competent person who actively creates my own identity and my own understanding of the world.
- 2. I am unique and have a unique life-story.
- 3. I flourish when attention is paid to equality of opportunities where I can participate to develop my own potential.
- 4. I am sensitive to individual and group differences and must be educated in ways that help me to celebrate differences.

Theme 2: My learning and development is important

Principles

- 5. I am curios, energetic and active and I learn by taking up opportunities to make meaning about the world around me.
- 6. Appropriate local and indigenous knowledge and skills are resources that can be used to promote socially, culturally and linguistically sensitive learning environments for me.
- 7. Play and hands-on (active) experiences enhance my learning and development.
- 8. A comprehensive ECD learning programme for quality and equity of opportunities pays attention to
- my developmental domains (social, emotional, cognitive, physical with a focus on health and nutrition),

- the content areas (languages and mathematics) and

- my strong links with my family and later, my links to schooling.

Theme 3: I need strong connections with adults

Principles

9. Parents and families in their different forms play a central role in my overall development.

10. I benefit from a close and loving relationship with an adult.

11. Adults have the responsibility for protection and promotion of my rights regardless of my

age, background, ethnicity, ability and gender.

12. We would like adults to promote children's wellbeing, positive identities, inclusivity, child

focussed activities and competence for living and coping with life.

According to the NCF (2015:8), the ELDAs organise children's development and learning to

help adults to organise the activities with babies, toddlers and young children. They are

wellbeing, identity and belonging, communication, exploring mathematics, creativity and

knowledge, and understanding of the world. Each of the ELDAs is closely related to the

desired results identified in NELDS.

NELDS promotes an integrated approach. This approach:

includes all the different skills, knowledge and abilities that children are expected and

encouraged to attain in the different domains of their development;

the integrated approach is appropriate as it relates directly to how children learn;

a good example will be when a specific experience or activity builds competencies in the

social and physical domains, as well as in the cognitive domains.

In NELDS, the same desired results apply to all children from birth to four (Grade R). Each

desired result has indicators and specific competencies. They are outlined according to the

different age ranges.

64

The desired results are aimed at:

- assisting and ensuring that children learn in an integrated way;
- enabling parents, practitioners and other caregivers to provide appropriate programmes and strategies to support children's learning activities;
- providing the basis for lifelong learning.

2.7 THE TEACHING CAREER AND TEACHER'S TRAINING IN SOUTH AFRICA

2.7.1 Education policy change and teacher context

When the new South African government took office in 1994, it inherited an education system with embedded inequality, much fragmentation and underinvestment (Jansen & Taylor, 2003). According to OECD (2008:293), the new regime signalled early on that the transformation of the education system was a high priority, viewing education as a key agency in building the new South Africa. In 1995, the government conducted a national audit on teaching that revealed many disparities and problems.

Another contemporary policy that caused upset in teacher training, according to OECD (2008:295), was the decision in the late nineties to close the 120 training colleges that had existed in the Bantustans and to locate teacher's training within the higher education sector in universities and Technikons. In 2007, the government published the Norms and Standards for Educators (NSE) (Nzimande, 2011:49-50). The policy aligns qualifications for teacher education with Higher Education Qualifications Framework and replaced the NSE in schooling 2000 in its entirely. The collective role of teachers in a school should be understood as everyday functions of the collective of all educators at a school. All classroom teachers will develop in the seven roles as appropriate to their practice. These roles are:

Specialist in a phase, subject discipline or practice

The educator will be well-grounded in the knowledge, skills, values, principles, methods and procedures relevant to the phase, subject, discipline or practice. The educator will know about different approaches to teaching and learning and how these may be used in ways

that are appropriate for learners and the context. The educator will have a well-developed understanding of the knowledge appropriate to the specialisation (Nzimande, 2011:49).

Learning mediator

The educator will mediate learning in a manner which is sensitive to the diverse needs of learners, including those with barriers to learning, construct learning environments that are appropriately contextualised and inspirational and communicate effectively, showing recognition of and respect for the differences in others. An educator will demonstrate sound knowledge of subject content and various principles, strategies and resources appropriate to teaching in the South African context (Nzimande, 2011:49).

Interpreter and designer of learning programmes and materials

The educator will understand and interpret provided learning programmes, design original learning programmes, identify the requirements for a specific context of learning, and select and prepare suitable textual and visual resources for learning. The educator will also select sequence and pace of the learner in a manner sensitive to the differing needs of both the subject and the learner (Nzimande, 2011:49).

Leader, administrator and manager

The educator will make decisions appropriate to the level, manage learning in the classroom, carry out classroom administrative duties efficiently and participate in the school decision making structures. These competencies will be performed in ways that are democratic, support learners and colleagues, and that demonstrate responsiveness to changing circumstances and need (Nzimande, 2011:49).

Scholar, researcher and lifelong learner

The educator will achieve ongoing personal, academic, occupational and professional growth, through pursuing reflective study and research in their field in broader professional and educational matters and in other related fields (Nzimande, 2011:49).

Assessor

The educator will understand that assessment is an essential feature of the teaching and learning process and know to integrate it into this process. The educator will understand the purposes, methods and effects of assessment and be able to provide helpful feedback to learners. The educator will design and manage both formative and summative assessments in ways that are appropriate to the level and purpose of the learning and meet the requirements of accrediting bodies. The educator will keep detailed and diagnostic records of assessment. He or she will also understand how to interpret and use assessment results to feed into processes for the improvement of learning programmes (Nzimande, 2011:50).

Community, citizenship and pastoral role

The educator will practise and promote a critical, committed and ethical attitude towards developing a sense of respect and responsibility towards others. The educator will uphold the Constitution and promote democratic values and practices in schools and society. Within the school, the educator will demonstrate an ability to develop a supportive and empowering environment for the learner and respond to the educational and other needs of learners and fellow educators. Furthermore, the educator will develop supportive relations with parents and other key persons and organisations, based on a critical understanding of community and environmental development issues. One critical dimension of this role is HIV/AIDS education (Nzimande, 2011:50).

2.7.2 Teacher qualifications and training

According to Jansen and Taylor (2003), the new South African government of 1994 inherited an education system with embedded inequality, much fragmentation and serious underinvestment. The new regime signalled early on that the transformation of the education system was a high priority, viewing education as a key agency in building the new South Africa.

The qualifications of teachers were linked to the new National Qualifications Framework (NQF) (OECD, 2008:296). The main pathways for initial teacher's training are either a four-year Bachelor of Education (B.Ed.) degree or a one-year post-graduate diploma, following

an approved first degree, known as the Higher Diploma in Education. The B.Ed. degree is on level 6–7, and the B.Ed. (Hons) at level 8. Teacher's training institutions were informed that all the competencies must be developed in all initial teacher's training qualifications (RSA, 2000).

Table 2.2 Teacher Education Qualifications (adapted from RSA DBE 2015:14).

NQF level	Degrees	Diplomas	Certificates
10	Doctorate degree		
	(Professional)		
9	Master of Education		
	degree		
	(Professional)		
8	Bachelor of Education	Postgraduate Diploma in Education	
	Honours degree	III Eddoduoii	
7	Bachelor of Education	Postgraduate	
	degree	Certificate in Education	
		Advanced Diploma	
6		Diploma in Grade R teaching	Advanced Certificate
5			

The qualifications for teacher education are indicated in table 2.2. Progression to higher levels implies that cognate learning is in place to enable successful engagement with the contents of the qualification programme at the higher level (RSA DBE 2015:14).

The education qualifications required for appointment in schools are as follows:

- Teacher (REQV 13): A recognised three-year qualification, which includes professional teacher training. Competencies and skills are basic knowledge of subject or phase.
- Teacher (REQV 14+): A recognised four-year qualification, which includes professional teacher training. Competencies and skills are basic knowledge of subject or phase.
- Senior Teacher (REQV13): A recognised three-year qualification, which includes professional teacher training. Experienced educator with good knowledge of subject or phase.
- Senior Teacher (REQV 14+): A recognised four-year qualification, which includes professional teacher training. Experienced educator with good knowledge of subject or phase.
- Master Teacher (REQV 13): A recognised three-year qualification, which includes professional teacher training. Experienced educator with good knowledge of subject or phase.
- Master Teacher (REQV 14+): A recognised four-year qualification, which includes professional teacher training. Experienced educator with good knowledge of subject or phase.

These documents state that teachers should be trained for the following seven roles:

- learning facilitator;
- · interpreter and designer of learner programmes and material;
- leader, administrator and manager;
- learner and lifelong researcher;
- community, citizenship and pastoral role;
- · assessor; and
- subject/phase specialist (Nzimande, 2011:54).

These roles should be understood as everyday functions of the collective of all educators at schools (Carl, 2009:198; Okeke *et al.*, 2016:6). They seldom must be carried out altogether, in all their detail, or all the time, by individual educators. However, individual teachers will carry out the roles appropriate to their specific position in the school. Nonetheless, teaching posts in South Africa are filled by numerous poorly equipped and underqualified teachers.

The Personnel Administrative Measures (PAM, 2016:51-56) of the DBE explained the educational qualifications statutory requirements and experience required for appointment in education as follows:

2.7.2.1 School-based educators

A school-based educator as general classroom teacher, according to PAM (2016:18), is
a general class with the responsibility to engage in class teaching, including the
academic, administrative, educational and disciplinary aspects and to organise extra and
co-curriculum activities as part of the school-based support team (SBST) so as to ensure
that the education of the learners is promoted in a proper manner. The different levels
are explained in Table 2.3 as follows:

Table 2.3: Personnel Administrative Measures (classroom teacher) (adapted from PAM, 2016:18)

PAM, 2016:18)			
Teacher (REQV 13)	A recognised three-year qualification, which includes professional teacher training	Registration with South African Council for Educators (SACE) as professional educator	Basic knowledge of subject/programme/phase as provided for in the professional qualification, e.g., Grade R diploma.
Teacher (REQV 14+)	A recognised four- year qualification, which includes professional teacher training	Registration with SACE as professional educator	Basic knowledge of subject/programme/phase as provided for in the professional qualifications, e.g., B.Ed. Foundation Phase.
Senior Teacher (REQV 13)	A recognised three-year qualification, which includes professional teacher training	Registration with SACE as professional educator	Experienced educator with good knowledge of subject/programme/phase as provided for in the professional qualification.
Senior Teacher (REQV 14+)	A recognised four- year qualification, which includes professional teacher training	Registration with SACE as professional educators	Experienced educator with good knowledge of subject/programme/phase as provided for in the professional qualification.

Master teacher

According to PAM (2016:24), a master teacher's responsibility is to engage in class teaching, including: the academic, administrative, educational and disciplinary aspects; to organise extra and co-curricular activities so as to ensure that the education of the learners is

promoted in a proper manner; act as mentor to less experienced teachers, students and interns (if and when applicable) to participate in and facilitate professional development activities; and to provide management support to the school management team (SMT) when and if required.

Table 2.4: Personnel Administrative Measures (master teacher) adapted from PAM (2016:24)

(2010.24)			
Master Teacher (REQV 13)	A recognised three-year qualification, which includes professional teacher training	Registration with SACE as professional educator	Experienced educator with good knowledge of subject/programme/phase as provided for in the professional qualification.
Master Teacher (REQV 14+)	A recognised four- year qualification, which includes professional teacher training	Registration with SACE as professional educator	Experienced educator with good knowledge of subject/programme/phase as provided for in the professional qualification.

School-based educator: manager

According to PAM (2016:26), the school-based educator (manager) is to engage in class teaching, be responsible for the effective functioning of the department, and to organise relevant extracurricular activities so as to ensure that the subject, learning area or phase and the education of the learners are promoted in a proper way.

Table 2.5: Personnel Administrative Measures (manager) (adapted from PAM, 2016:26)

Department Head	A recognised three- or four-year qualification, which includes professional teacher training	Registration with SACE as professional educator	Advanced knowledge of teaching as provided for in the professional qualification.
Deputy principal	A recognised three- or four-year qualification, which includes professional teacher training	Registration with SACE as professional educator	 Advanced knowledge of teaching as provided for in the professional qualification. Good management skills
			3. Leadership
Principal	A recognised three- or four-year qualification, which includes professional teacher training	Registration with SACE as professional educator	 Good knowledge of teaching as provided for in the professional qualification Good management skills Good leadership skills

According to Human (2016a), teachers must continuously upgrade their subject knowledge to be on top of their game. This will not only enable them to employ the latest and effective

classroom teaching techniques but will also impact positively on the quality and performance of the entire education system.

Unqualified or underqualified practising teachers can top up their experience with the National Professional Diploma in Education (NPDE). These education courses are validated by the Council on Higher Education (CHE). The CHE has conducted a full quality assurance review of a number of B.Ed. courses and has given feedback on desired improvements to the institutions, which is important to the institutions, policy makers, employers, and the profession.

This elaborate competency framework was new to South Africa, involving concepts and terminology with which most educators and teachers had no familiarity or experience. Any future policy on teacher education and the teaching career needs to examine the issues in a comprehensive way rather than focussing on specific issues whose resolution might appear straightforward (OECD, 2008:306).

2.8 NATIONAL AUDIT

In 1995, the new elected government conducted a national audit on teaching that revealed many disparities and problems. The new DoE immediately went about creating non-discriminatory school environments, delivering certain basic services to schools and, through legislation and persuasion, greatly increasing learner attendance. The "teacher rationalisation" had two elements to it:

- the equalisation of teacher salaries; and
- the equalisation of learner-teacher ratios among all schools.

The aim was to establish a general **learner-teacher ratio** of 35:1 in primary schools. The scheme led to a significant increase in the number of new teachers being employed and to improved salary and pension entitlements for many teachers.

2.8.1 Implications of democracy

Among the aspects brought by the new education policy is the idea of democracy in and outside the classroom. The classroom practice offered in OBE requires teachers to be

promoters of democracy (Msila, 2007:157). Many teachers have understood and probably internalised some forms of societal democracy espoused in the new South African constitution; they are slow in applying this in their classrooms. The teacher as an authoritarian and imposing figure is still important in their view. However, the trend towards the democratisation of society requires that the work of the new teachers should not only be qualitatively effective but essentially democratic and enabling by nature. According to Emeagwali (2005), teachers were not seen as part of democracy and, therefore, this is not as easy if one looks back at teachers' role in the past. Teachers stood in the middle of the ground contested, on the one hand, by the State, and, on the other hand, by pupils, parents and community. They are employees of the State and they are members of the community. Teachers often used to be criticised from all sides for inadequacies for which they were not to blame. These were the challenges that teachers faced in the years of apartheid. The new era of post-apartheid society has presented new challenges, amongst others, the way in which teachers are expected to deal with democracy. Teachers need to be consulted and trained so that implementation of curriculum in their classrooms can be hassle-free (Msila, 2007:157). Many teachers struggled with the new policy and led to the exit from the profession of many skilled and experienced practitioners who preferred to take the voluntary severance package offered rather than be involved in converting the policy into reality and what they saw as diminished working conditions (Jansen & Taylor, 2003).

In 1999, the DoE and the teacher unions signed an agreement on redeployment. School governing bodies had the right to employ extra teachers if they had the resources to pay for them, which, again, gave rise to inequalities between well-financed boards and those operating in disadvantaged circumstances (OECD, 2008:295) Two institutions were established by the new regime that are of particular importance to teachers. One is the Education Labour Relations Commission (ELRC, 2007), which is a statutory body. Teacher unions are members of this body and contribute financially thereto. Its key role is to engage in collective bargaining and conciliation and arbitration issues. It also has a dispute prevention dimension, particularly regarding promotion and dismissals. According to OECD (2008:298), the ELRC commissions research reports on issues affecting teachers' lives.

Two such recent reports relate to the health of teachers and to teachers' workload. The ELRC provides a multilateral forum where teacher issues can be discussed, problems resolved, and claims processed.

Another mayor agency in relation to teachers has been the South African Council of Educators (SACE), established in 2000. According to OECD (2008:298), SACE has three major responsibilities, namely:

- · professional development of teachers,
- registration of teachers, and
- regulation of teachers through the operation of an agreed code of ethics.

SACE is compulsory for all recognised teachers to be registered. Following its establishment, SACE extended registration to all existing teachers. Now, specific qualification requirements – such as a four-year B.Ed. degree – are needed for registration. At present, SACE is positioning itself to be the co-ordinator and endorser of continuing professional teacher development (CPTD) for teachers in the future. In 2002, SACE launched a three-year pilot project in compiling guidelines for *Professional Development Portfolios* (SACE, 2005). This was aimed at encouraging teachers to take responsibility for their own professional development and to engage in crucial reflection on their own practice.

The Integrated Quality Management System (IQMS) is a national policy aimed at increasing productivity among teachers (IQMS, 2014). IQMS comprises three programmes namely; Development Appraisal, Performance Measurement and Whole School Evaluation. This policy has been designed with the purpose of preparing an environment for teacher development, to monitor the overall effectiveness of the institution (school), to evaluate the performance of the teacher, to identify specific needs of the teacher for support and development, and to promote accountability.

Teachers' poor skills can only be addressed through Continuous Professional Teacher Development (CPTD), which is not always the focus of new teacher's training (Human, 2016b:14). It is essential to ensure that teachers remain up to date with developments in their area of expertise. According to OECD (2008:309), the DoE accepts that CPTD is an

essential dimension of teacher education if national policy is to be achieved. In the past, CPTD has often taken the form of acquiring increased academic qualification, sometimes detached from professional skills and current policy concerns, dissemination of information of new policies, short updating courses in various subjects and short courses on emerging issues.

2.9 BRONFENBRENNER'S ECOLOGICAL SYSTEM THEORY IN SOUTH AFRICA

Bronfenbrenner's ecological theory is discussed in chapter 1 (§ 1.3; § 1.7.1). This multidimensional model of human development looks at layers of interacting systems which result in the change, growth and development (physical, biological, psychological, social and cultural) of the learner (Nel *et al.*, 2013:11). There are continuous causal processes which can bring about changes. This means whatever happens in one system will affect or be affected by the other systems. Woolfolk (2007:73) states that proximal interactions occur face-to-face and involve a long-term relationship (e.g., between a learner and a teacher, and a mother and a child). Person factors as well as social contexts affect proximal interactions.

Bronfenbrenner has identified four interacting dimensions that are needed to understand how different levels of systems in the social context interact:

- person factors behaviour tendencies;
- process factors, such as patterns of interaction;
- contexts such as schools and families; and
- time, such as changes in the environment due to maturation which takes place over time (Nel et al., 2013:12).

Bronfenbrenner (Donald *et al.*, 2014:40) states that child development also takes place within four nested systems, namely the micro-, meso-, exo- and macrosystem. All four of these systems interact with the chronosystem.

• The microsystem is characterised by individuals and events that are the closest to a person's environment, for example, the child's parents, siblings and friends (§ 5.7).

- The mesosystem is a system of microsystems which continuously interact with each other, for example, family, school and peers (§ 5.7).
- The exosystem refers to environments where the learner is not directly involved, but still influences the people who have proximal relationships with a person in his or her microsystems, for example, the parent's work and the school environment (§ 5.7).
- The macrosystem refers to attitudes, beliefs, values and ideologies within the systems of a society and culture, which may impact or be influenced by other systems. Values and beliefs could include democracy, social justice and *ubuntu*, for example, government policies, historical events or economic situations (§ 5.7).
- Lastly, the chronosystem looks at the developmental time frames that take place in the
 interactions between these systems and the influence it has on the development of the
 child (Nel et al., 2013:12). Major life transitions such as changing location can be used
 as an example (§ 5.7).

According to Donald *et al.* (2006:37), the notion of balance is a central ecological concept. When the relationships and cycles within the whole system are in balance, the system can be sustained. When there is a major disturbance in one part of the system, however, the balance of the whole system may be threatened. A school, for instance, is a system with different parts, such as the staff, learners, curriculum, and the administration. The relationship between all the systems and the interdependence between all parts form the system as a whole and determines the success or the contrary thereof.

In addition, while systems interact and are interdependent, each level of system also functions in particular ways, as outlined in the schematic diagram of Bronfenbrenner's ecological systems theory below. Each system is subsequently discussed, reflecting on this chapter and practical examples from the current South African context is provided.

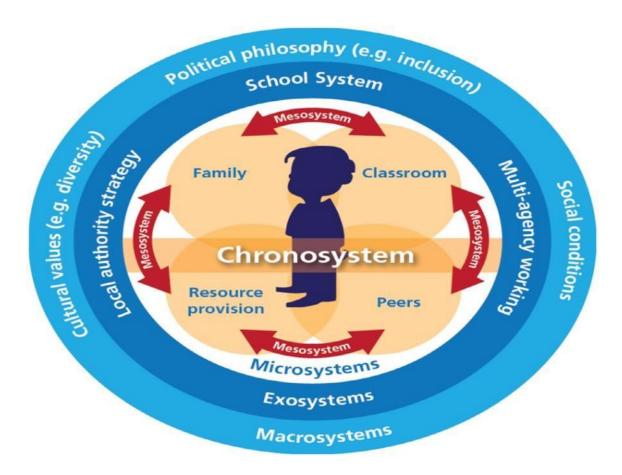


Figure 2.2: Schematic diagram of Bronfenbrenner's Ecological System Theory (adapted

http://whatmakespeopletick.blogspot.com/2010/07bronfenbrennersecological-systems-html)

Building a strong school–community relationship is a central challenge in promoting inclusion, health promotion and inclusive education in schools (microsystemic layer). According to Donald *et al.* (2006:131), communities strongly influence schools, and vice versa (exosystemic layer). Communities must be a safe place for families, learners and stakeholders (exosystemic layer). According to Dludla (2019:4), President Cyril Ramaphosa's new Cabinet must make an end to all violence against children a priority. It has an equally high social, emotional and economic influence on families experiencing poverty with child victims, earning less later in life than those not affected. During the Children's Protection Week in 2019, the Children's Institute made it clear that gender-based violence was tearing society apart. All forms of violence, including smacking or spanking, affect children of both genders and make children depressed, angry and anxious. In the

following part of this chapter more real-life situations in South Africa demonstrate the layers of Bronfenbrenner's Ecological System Theory

Mashaba (2018a:2) reported that the owner of a spaza shop in South Hills, Johannesburg, where a four-year-old boy was shot and killed during a robbery, told he heard a child crying, followed by a gunshot and complete silence. The robbers had shot the boy as they left the shop (exosystemic layer). Nkosi and Mashaba (2018:2) report that femicide and sexual crimes against women that continue to make shocking headlines have increased by an alarming rate over the past two years (mesosystemic layer). Statistics South Africa revealed in its report *Crime against Woman in South Africa* released on 20 June 2018, that the murder rate of woman raised by a shocking 117% between 2015 and 2016/2017. Sexual crimes against women also increased by a shocking double-digit percentage (exosystemic layer). According to Mashaba (2018b:2), Omari Monono who drowned in a pit toilet may have now been buried, but his distraught mother still wants answers. The three-year-old fell into a pit toilet at his aunt's home in Ditenteng Village in Moletjie outside Seshego, Limpopo. His body was retrieved from the toilet hours later and his mother is still traumatised by the way her son died (exosystemic layer).

Schools are affected by values, norms and practices of their local community, which, in turn, often reflect those of the wider community (macrosystemic layer). Zali (2019:5) revealed how curiosity is feeding a community when Mr Adam Ginster started a farm to provide organic food when he discovered that learners at a nearby school in Soweto were given mainly processed food. Some of the learners were living with HIV and diet was important for them to boost their immune (exosystemic layer). Mr Ginster spoke to the Department of Agriculture, which helped him with a crop-rotation plan to make sure what crops to grow, where and when during the year. The Department of Agriculture provides training to Mr Ginster's team who was part of identified people from the community to be responsible to run the crops (macrosystemic layer). Today, the farm feed 5 000 children from 12 schools and 80 elderly people at the old-age home, and some from the community centre in Soweto (macrosystemic layer). To start this foundation to feed children so they can have a better start in life illustrates different layers of Bronfenbrenner's ecological systems theory.

South Africa has gained political freedom in the context of its apartheid past (chronosystem layer). According to Retief (2018:3), Angie Motshekga, Minister of Basic education, stated that South Africa is still crippled by apartheid and that many people have lost faith; clearly, our struggle is not yet over. Over the past few years, the South African educational context has changed. According to Davidoff and Lazarus (2009:30), numerous new policies have been introduced to address the imbalances of the past and to address and transform impoverished notions of education (chronosystemic layer). These policies include school governance, curriculum, teacher education, professional development, inclusive education and support services. They are designed to create an enabling environment at South African schools for good teaching and learning. South Africa learners still experiences problems in terms of mother-tongue education. According to Krige (2018:1), there are only 1 644 primary schools and 566 secondary schools. Of the 25 000 public schools in South Africa, most of the schools' struggle to provide for learner's mother tongue education because of the eleven different languages in South Africa. Kruger (2018:10) reported that Mr Panyaza Lesufi, Gauteng MEC of the DoE, said that a learner's mother tongue should not be a barrier during school submission. Unfortunately, this statement is not in line with the Constitution of the Republic of South Africa (1996) and proves problems on the macrosystemic level.

In South African schools, many problems between learners and teachers are caused by conflicting values because of different cultural, family and peer group backgrounds and therefore language, and the cultural values associated with it, are some of the issues (Donald *et al.*, 2006:132). Racial issues often arise in the classroom, the school, the families and communities concerned and at the level of policymaking. The schools and the whole education system have a huge task in accommodating diversity because of social-economic class, culture, race, religion and language differences across South Africa.

Poverty remains part of South Africa's daily news. Collins (2017) claims that at least 30% of locally produced food is wasted. According to the Council for Scientific and Industrial Research Head of Waste Research, Susan Oelofse, meals with a greater variety of foods often results in more waste through food not being eaten, while people elsewhere starve to death. This problem was highlighted during the week of 10 December 2017 at the International Conference on Global Food Security in Cape Town (macrosystemic layer).

According to Matseke (2018:11), it is common knowledge that the public health system of South Africa is severely overburdened and under-resourced, resulting in many of those who depend on it being unable to access the care they need. The one important reality between the private sector and the public sector is that they are divided along socio-economic lines, with the public sector serving 84% of the population, which is mostly impoverished, while the public sector caters largely for the relatively well-off 16% of the population who can afford a medical aid. Louw-Carstens (2018:1) reported that the Limpopo Health Department is in a crisis, because only 50% of vacancy posts in the health system are filled. Most of the hospitals in Limpopo province have 47% and 50% vacancy posts. The Polokwane Provincial Hospital, the main hospital in Limpopo, experience a shortage of 80% in terms of staff establishment (macrosystemic layer).

We are living in times of changing family contexts. The norm of the nuclear family has changed. According to Davidoff *et al.* (2009:5), single-parent families, either by divorce or separation, or through mothers not having married their children's fathers, the HIV/AIDS pandemic, under-employment, insufficient income, lack of self-esteem, abuse of alcohol and other drugs affect the quality of family life profoundly. The impact of family and local community dynamics on the life of a school cannot be emphasised enough. Family and community involvement in schools and partnership among schools, families, community groups and individuals are especially important. Under-paid and under-qualified educators are also affecting the quality of education in South Africa (macrosystemic layer).

2.10 CONCLUSION

This chapter provides a literature review of the recent history of South African education system with its challenges and objectives (chronosystem). It is evident that education has a crucial role to play in society and to prepare learners for the 21st century. Schools in South Africa occupy an awkward position at the intersection between what people hope society will become and what they think it really is, between political ideal and economic realities. The National Policy of Education in South Africa is a system that strives towards achieving a number of goals enshrined in the Constitution. Nation-building, non-racism, inclusiveness, democracy and *ubuntu* are some of the values that the new curriculum is

trying to instil. Education in South Africa continues to be a vehicle for social and political transformation.

Bronfenbrenner's ecological explains the interconnectedness of different layers as illustrated with the examples of the above from schools and communities in South Africa in paragraph 2.9. The above factors deprive the system to achieve the dream of effective basic education, including 21st century skills as basic educational right to become a reality by means of a literature review, the next chapter (chapter 3) explains each level of exploring curriculum and instructional design in primary schools for learners 0–12 years in the Netherlands, their teacher's training, and the school system and government in the Netherlands.

CHAPTER 3: THE HISTORY AND CONTEXT OF EDUCATION IN THE NETHERLANDS

3.1 INTRODUCTION

In chapter 2 I explored the existing literature on the background and transformation of education in South Africa since 1994. I reviewed the challenges often faced by South African teachers, learners, and communities. In this chapter, I explore the existing literature on the history of education in the Netherlands school system and teacher training.

3.2 CONTEXTUAL BACKGROUND OF THE NETHERLANDS

3.2.1 History and education reform

The Netherlands is in North-western Europe, between the North Sea to the north and west, Germany on the east, and Belgium to the south. With a population of 16,8 million inhabitants, it is densely populated and highly urbanised, with 84% of the total population living in urban areas. *Netherlands* means low-lying country. The name Holland (from *Houtland*), or *Wooded Land*, was originally given to one of the medieval cores and is still used for two of its 12 provinces (Noord-Holland and Zuid-Holland). Amsterdam is the capital and The Hague the seat of government (Meijer, Wintle, Heslinga & Rowen, 2019). According to the Organisation for Economic Co-Operation and Development (OECD, 2014:18), as in other European countries, the birth rate is declining, but with 1.8 children per woman, it remained higher than the European Union (EU) average of 1.6 children per woman in 2011.

Migration is the main driver of population growth and potential educational expansion. Immigration to the Netherlands has continuously increased since 2005. In early 2012, 21% of Dutch residents were non-native, with the largest immigrant groups coming from Turkey, Indonesia, and Germany. Although indigenous Dutch are most likely a combination of Frisians, Saxons and Franks, immigrants from many other cultures have settled in the Netherlands for centuries. Twentieth-century immigrants from former Dutch colonies – mainly Indonesia, Molucca, and Suriname – make up a majority of ethnic minorities (Meijer et al., 2019).

In 1996, more than 16% of the Dutch population were non-indigenous. The largest minority population groups came from the Dutch Indies (more than 300 000), Surinam (282 000), Turkey (272 000), Morocco (225 000), the Antilles (94 000), and other Mediterranean countries (164,000) (Brinkel, 2019).

Freedom of religion is guaranteed by the Dutch Constitution, church and state are separate, and there is no state religion. The Dutch population in 1997 generally comprised Roman Catholics (32%), Protestants (22%), and the non-religious (39%). Almost 8% of the population belonged to other religious groups. Among those, 2.5% of the population were Muslim and 0.5% were Buddhist (Bosland, 2018). According to Boer (2018) and Bosland (2018), there are Catholic, Protestant, Jewish and Muslim elementary schools, high schools, and universities. In the Netherlands, a special/religious school can reject educational philosophy, but this is uncommon. In practice, there is slight difference between special schools and public schools, except in traditionally religious areas of the Dutch Bible Belt (Bosland, 2018; Visser, 2018).

Dutch is the language of both the country and instruction; but in the province of Friesland, Frisian is also an official language and taught in the schools. Due to its history of occupation, geographic location and tourism interests, many people in the Netherlands are fluent in a few languages. Three-quarters of the Dutch speak a second language and 44% speak two foreign languages. The most common foreign languages spoken regularly in the Netherlands are English, French or West Frisian (only in Friesland) and German (Visser, 2018) (§ 1.4.3).

According to the OECD (2014:18), the Netherlands is a wealthy country. Globalisation has had a major impact on the Dutch economy, given its important role as a European trade and transportation hub. After a long period of uninterrupted economic growth, the Dutch economy has weakened since the beginning of the global economic and financial crisis in 2008. There has been a significant increase in unemployment rates in recent years, from 3% in 2008 to 7% in December 2013, but the proportion of unemployed persons remains slightly below the OECD average of 8% and well below the EU average of 11%. The increase in unemployment has affected people differently depending on their age and educational attainment, with the youngest and least-educated cohort being hit the hardest.

The Netherlands has a long history of **educational reform**. In the 14th century, the brethren of the Common Life were founded to bring together laymen and religious men. The Brethren eventually set up schools that some of the most important humanist from Northern Europe attended. The most well-known was Desiderius Erasmus, a great scholar and liberal educator. Erasmus of Rotterdam was often called the "prince of the humanists" and was one of the most influential European philosophers and theologians of the early modern period (Brown, 2016; Tracy, 2019).

According to Bosland (2018), the national system of education was introduced in the Netherlands around the year 1800. The *Maatschappij tot nut van't Algemeen* (Society for the Common Good) took advantage of the revolutionary tide in the Batavian Republic to propose a number of educational reforms. The Education Law of 1806 encouraged the establishment of primary schools in all municipalities and instated provincial supervision. It also introduced a mandatory curriculum comprising Dutch language, reading, writing, and arithmetic. All newly established schools needed consent from the authorities or would be disbanded as freedom of education was not proclaimed until the Constitutional Reform of 1848. In addition to primary education, gymnasia, or Latin schools, and universities constituted higher education. Secondary education or vocational training was unregulated (OECD, 2012).

The situation changed in the second half of the 19th century in the wake of social and economic modernisation. The first piece of educational legislation in the Netherlands, the Elementary Education Act, was passed in 1801. Before the Kingdom of the Netherlands was founded in 1813, education was the responsibility of mainly private religious institutions and guilds supplied vocational training. In the Constitution of the New Kingdom, education was declared the responsibility of the state to ensure that citizens unable to afford expensive schools had an opportunity to receive a basic education free of charge. This was the beginning of Dutch public schools. Later, the Constitution of 1848 restored the right of private organisations to found schools, but without financial help from the state. During the 19th and early 20th centuries, elementary schools were divided into government-funded public schools and privately funded schools (Bernas, 2015; Besselink, 2014; Homan, 1966).

In 1857, a Lower Education law replaced the 1806 law supplementing the mandatory curriculum with geography, geometry, history, natural sciences and singing. Modern languages and mathematics remained optional. Drawing and physical education would be added in subsequent reforms. The introduction of the so-called *Kinderwetje* ('children's little law') by legislator Samuel Houten in 1874 forbade child labour under the age of 12. An amendment in 1900 led to compulsory education for children aged 6–12 years in 1901 (Boer, 2018).

A political struggle during decades, from about 1848, culminated in the equalisation of public financing for religious and public schools in 1917. This so-called school struggle (schoolstrijd) was important for the emancipation of the Roman Catholic part of the country, which is traditionally mainly Protestant (Bosland, 2018; Glenn, 2018). The unequal treatment of public education led to the "schools dispute" - a political battle to achieve complete equality under the law for both types of schools. Catholics and Protestants wanted their own schools but with equal state funding. The Liberals also wanted their freedom of education guaranteed by the Constitution to receive equal financial treatment. Dutch taxpayers were already contributing to the costs of funding state education. Most active church members felt they should not have pay for private "confessional" education at their own expense in addition to helping to pay for state "profane" schools. Ultimately, this led to the political emancipation struggle, often referred to as the "school funding controversy". This was finally resolved with the 1917 Constitution, in what is known as the "Pacification of 1917", establishing equal funding for state and private schools and up until today all schools have received equal funding from the state (Onderwater, 2018; Ten Napel, 2013; Visser, 2018).

Secondary education was introduced in 1863. This comprised the *Hogere burgerschool* ("higher commoner's school" [HBS]) and the polytechnic. Classical education was still given in higher education in gymnasiums and universities. According to Luijkx and De Heus (2018), the first act on compulsory education was implemented in 1900. This act made primary education of six grades compulsory to all children between six and 12 years of age. Adjustments to this act were repeatedly made, but in 1969, it was completely replaced. According to the new act, all children aged six to 16 were obliged to fully attend daytime classes (§ 1.4.3). In 1985, the lower limit was adjusted to the age of five years, and full-time education has since been compulsory for at least 12 complete school years. changed during

the 20th century. After 1917, the HBS diploma could also give access to a number of courses at universities, while lyceum, combining the HBS diploma and gymnasium, became an increasingly common type of school (De Jongh, 2018; OECD, 2012).

After 1917, the principle of financial equality was extended to secondary and higher education. There are now nearly twice as many private schools as public schools (Boer, 2018). According to Bosland (2018) and Van Dam (2018), by the 1960's, a range of school types existed:

- Kleuterschool kindergarten (ages 4–6).
- Lagere school primary education (ages 6–12), followed by either;
 - * Individueel technisch onderwijs (literally, "individual technical education") now vmbo praktijkonderwyijs (ages 12–16).
 - * Ambachtsschool (vocational training) comparable with *gemengde leerweg*, but there was more emphasis on thorough technical knowledge (ages 12–16) and other schools that were not applicable to this study.

3.3 GENERAL BACKGROUND TO EDUCATION IN THE NETHERLANDS

The Netherlands is a parliamentary democracy with a king as head of state and a prime minister as head of government. The parliament is bicameral, consisting of the Senate (*Eerste Kamer*) with 75 members and the House of Representatives (*Tweede Kamer*) with 150 members. The Netherlands is divided into 12 provinces. The responsibilities of government and the provinces are laid down in the Constitution (Bernas, 2015; Homan, 1966).

The Netherlands has one of the most devolved education systems, with schools enjoying a high degree of autonomy. According to Nusche, Braun, Halász and Santiago (2014:17) and Van Dam (2018), school autonomy is grounded in the principle of "freedom of education", which gives the right to any natural or legal person to set up a school and to organise teaching. This constitutional arrangement puts public and private schools on an equal footing, with all schools receiving public funding, provided they meet the requirements for schools in their sector (§ 1.4.3). According to Leeman (2008), "freedom of education"

implies that schools are free to determine the content and methods of teaching – the central government sets learning objectives and quality standards that apply to both public and private schools.

The different types of schools in the Netherlands are, according to Boer (2018):

Public (*openbare*) schools: all of them are state-run schools (non-denominational) and provide secular Dutch education, but they can also offer teaching around specific philosophic principles (Montessori, Steiner, etc.). Public schools are governed by the municipal council, or a public legal entity or foundation set up by the council and are subject to conditions of the Dutch school system.

Private special (*bijzondere*) schools in the Netherlands: About two-third of all learners attend special private schools or independent schools in the Netherlands. They are part of denominational schools (Catholic, Protestant, Islamic, Jewish, or Hindu). Private schools are governed by a board, which often consists of parents or the foundation that established them. Special education in the Netherlands is subsidised and essentially free, but all schools ask for a contribution for things such as school trips. Special schools may decide themselves to ask for a set amount per parent contribution, but it is rarely higher than EUR800 per year. Some special schools base the rate on the parents' household income.

International schools in the Netherlands: These schools provide education for the global students of any nationality. Dutch International Primary Schools (DIPS) and Dutch International Secondary Schools (DISS) provide international education at reasonable fees because of subsidies from the Dutch government. They are designed for non-Dutch families returning from, or preparing for, an overseas assignment. These schools offer the International Primary Curriculum (IPC).

Special needs schools in the Netherlands: Special private schools should not be confused with *special onderwijs*, which are special needs schools in the Netherlands that teach learners with more severe learning disabilities. The national "Appropriate Education" (*Passend Onderwijs*) policy was designed to enable and encourage as many learners as possible with minor learning difficulties to be educated in mainstream schools. Since 2014, all mainstream schools have resonated under the "All-inclusive Act", although participation

in mainstream schools in the Netherlands has been encouraged through other policies for several years.

iPad schools in the Netherlands: Since 2014, more than 20 so-called "Steve Jobs schools" have opened in the Netherlands, pioneered by Dutch entrepreneur Maurice de Hond. These government-funded schools provide learners with iPads and educational apps, which replace everything from books to blackboards. Teachers act as coaches to help learners direct their own learning.

According to Bernas (2015) and Boer (2018), the first three years of both senior general education (HAVO) and pre-university education (VWO) are called the *basisvorming* ("basic formation"). All learners follow the same subjects: languages, mathematics, history, arts, and sciences. The last two years of HAVO and the last three years of VWO are referred to as the second phase (*tweede fase*) or upper secondary education.

Boer (2018) and Van Dam (2018) claim that there is no legal necessity for schools to implement self-evaluation processes, but it is essential for the Netherlands' schools to compile an overall annual report and a four-year school plan based on the internal review of school quality. The Inspectorate regulates external school evaluations at least every four years, depending on identified risks in each school (De Jongh, 2018). The Inspection Reports and School Quality Cards, which provide information about the inspection, are published by the Inspectorate (De Jongh, 2018). School-level information and performance barometers are available through online information systems – for example, Windows for accountability, and Schools on the Map (Scholen op de kaart).

System evaluation in the Netherlands is an overall performance of the Dutch system monitored in several ways (Van Dam, 2018). The OECD (2014) reported that student learning outcomes are collected from international surveys, national monitoring sample surveys (*Peridodiek peilings Onderzoek* [PPON], and *Jaarlijkse Peilingsonderzoek van het Onderwijsniveau* [JPON]), Cohort Survey School Careers (*Cohort Onderzoek Onderwijsloopbanen* [COOL]), standardised test results reported by schools (the *Centraal Instituut voor Toetsontwikkeling* [Cito] school leavers test) and the results from the secondary school-leaving examinations (Bosland, 2018; Van Dam, 2018) (§ 1.4.3). The Ministry of Education, Science and Culture collected the information directly from schools.

According to Boer (2018) and De Jongh (2018), the Inspectorate of Education analyses the education system based on all the information collected from its inspection activities and thematic inspections on priority themes in samples of schools. System evaluation also makes use of BRON (*Basis register Onderwijs*) register data, based on learner (student) number.

Information on education system performance is published in several ways, including the Ministry's publications on *Key figures and Trends in the picture* and the Inspectorate's State of education report (OECD, 2014). Table 3.1 indicates the main instruments used for evaluation and assessment in the Dutch school system.

Table 3.1: The main instruments used for evaluation and assessment in the Dutch school system (adapted from the OECD, 2014)

Level of evaluation	Reference	Approaches or	Reporting
	standards	Instruments	
Learner	Act on Primary education and	School-based assessment	Summative reporting to
			reporting to learners and parents three times a year on a scale from 1– 10 LVS learners' reports and group surveys CITO school leavers test results and advice on the secondary track most suitable for each learner
			certificates at the

			end of secondary school, including pass/fail information and marks (1–10) for each subject
			School-level and national reporting of aggregated student assessment results
Teacher	 Competency requirements included in Education Professions Act (2006) Inspectorate's indicators for lesson observation 	 School-based teacher appraisal Voluntary teacher registration 	 Teacher competency files Teacher register School-level and national reporting on teaching quality
School	 School goals and strategic plans Inspectorate's Supervision Framework 	 School internal quality care Quality control by school boards 	School annual report, school plan and school prospectus
		Risk-based inspection	Inspection reports

			 School Quality Cards Windows for Accountability website National reporting on school quality
System	 Act on Primary Education and Act on Secondary Education Language and Numeracy Act Specific policy and programme objectives EU benchmarks for education (ET 2020) 	 National sample-based assessments (PPON, JPON) National cohort surveys (TIMMS, PIRLS, PISA, ICILS, ICCS, TALIS) Collection of indicators Inspectorate Thematic evaluations Programme evaluations 	 Key Figures report Trends in the Picture report State of Education report Ministry "Monitors" on specific themes

Teacher appraisal is part of the responsibility of the competent authority of each school. According to the OECD (2014) and Van Dam (2018), the 2006 Educational Professions Act requires school boards to establish human resource policies for their schools, keep teachers' profiles updated with regard to personal information and teachers' qualifications so as to ensure that teachers' competencies are maintained. Regular performance semi-structured interviews with teachers are compulsory by central regulations. Central

regulations also give guidance on how the performance of individual teachers should be evaluated. The employing authorities for teachers and school boards are free to develop their own criteria for teacher appraisal.

The Dutch education and training system comprise the following six main elements:

 Primary education, special education, general (secondary) education (consisting of two phases, senior secondary vocational education and adult continuing education, and higher education.

Table 3.2 provides information about the Dutch Framework of Qualifications. The European Qualifications Framework (EQF) consists of the learning outcome relevant to each level for learners in schools in the Netherlands (Visser, 2018). The Dutch Qualifications Framework (NLQF) comprises eight qualification levels and an entry level. The levels of the NLQF are linked to the levels of the EQF. Currently, 39 European countries are working on linking their qualifications framework to the EQF (De Jongh, 2018; Visser, 2018).

Table 3.2: A simplified diagram of the Dutch NLQF

EQF Level	NLQF Level	Dutch Qualification
8	8	Doctor
7	7	Master
6	6	Bachelor
5	5	Associate Degree
4	4+	VWO
4	4	MBO 4/HAVO
3	3	MBO 3
2	2	VMBO/MBO 2
1	1	VMBO/MBO

National Framework of Qualifications adapted from the National Coordination Point for the Dutch Qualifications Framework NLQF (www.nlqf.nl)

However, there is one important characteristic of the Dutch educational system that has stayed intact since the beginning of the 20th century: since 1917, public and private education have been treated equally by law. This so-called freedom of education (article 23 of the Dutch Constitution) refers to the right of all Dutch citizens to found schools or follow education based on certain religious, ideological, or educational persuasions. All schools (public and private) are equally funded through a lump sum allocated by the Dutch government (OECD, 2014:4). However, if they are to receive financial governmental support, both private and public schools have met the qualitative standards provided by the education authority of the Ministry of Education, Culture and Science. Whether those qualitative standards are met or not, is determined by the Dutch Inspection of Education. The aim of this inspection – which is part of the Dutch Ministry of Education, Culture and Science (OCW) (2007) – is to warrant the quality of all Dutch private and public schools.

In elementary and high schools, pupils are assessed annually by a team of teachers who determine whether they have advanced enough to move on to the next grade. According to Nusche et al. (2014:17) and Van Dam (2018), evaluation and assessment are key elements in the drive to achieve these goals, as reflected in recent laws on student assessment making it mandatory for primary schools to implement regular monitoring systems as well as a standardised end-of-primary test. Since forcing a pupil to retake the year has a profound impact on such a pupil's life with regard to social contacts and remaining in the educational system longer, this decision is not taken lightly and mechanisms, such as remedial teaching and other forms of guidance, are in place to avert retaking years. As a result, retaking a year is uncommon, but it happens more often in elementary schools than in high schools because there are fewer negative consequences at a younger age. Gifted children are sometimes granted the opportunity to skip an entire year, yet this happens rarely and usually happens in elementary schools (Van Dam, 2018).

According to Majewski (2018:2), the Netherlands has one of the top education systems in the world and was ranked eighth by Pearson's 2014 global report on education. There are a few reasons why the Dutch have an education system that enriches their youth, and other countries could learn from the Netherlands to improve their own systems. The Netherlands puts its youth first when it comes to education. Young people demonstrably succeed in mathematics and science while having a low unemployment rate. The learner/teacher ratio is 20-25:1 in the Netherlands. Quality education in the Netherlands consists of the following:

- Schools in the Netherlands give homework sparingly. Research has shown that play and
 exercise are vital to children's growth and school performance. Dutch students under the
 age of 10 receive very little, if any, extra schoolwork to take home, which gives them time
 for daily exercise.
- Education in the Netherlands is fairly affordable. It is free for primary and secondary schools; parents need to pay for annual tuition only after their child reaches 16 years of age, and low-income families qualify for grants and loans.
- There are different types of classes Dutch students can take for secondary school before college. Students can take HAVO (senior general secondary education) or VWO (preuniversity education) before they go to college. They also take preparatory secondary vocational education (VMBO) if they do not want to attend college right away. This system allows students to work with a programme according to their level of development.
- Education in the Netherlands involves learning a second language, while American students usually start learning a second language in middle school. Some primary schools in the Netherlands teach English as early as Group 1, which is the equivalent of American kindergarten. All Dutch students learn English, but some schools require students to learn an additional language. There are even bilingual schools for every education level, where some classes are taught in English and others are taught in Dutch.
- The Dutch school week differs from the American school week. A school day in primary school usually takes place from 08:30 to 15:00 on weekdays, but students go home for lunch instead of eating at the school cafeteria. On Wednesdays, schools dismiss students around noon to enhance the value of healthy family time (Bosland, 2018; Majewski, 2018:2).

In general, all schools in the Netherlands have a summer holiday, and several weeks of oneor two-week holidays during the year. Schools are closed during public holidays. Institutions are free to divide their year, but a year is most commonly organised into four academic terms. The summer holiday lasts six weeks in elementary school and starts and ends in different weeks for the northern, middle, and southern provinces so as to prevent families from going on vacation simultaneously (Bosland, 2018; Van Dam, 2018).

3.3.1 Learners and teachers

According to Visser (2018) and Van Dam (2018), education is divided across schools for different age groups, some of which are divided in streams for different educational levels. Education is oriented towards the needs and backgrounds of learners. Schools are furthermore divided into public, special (religious), and general-special (neutral) schools, although there are also a few private schools. The principle of freedom of education implies that schools are free to determine the content and methods of teaching, the central government sets quality standards that apply to both public and private schools. The figure below (Figure 3.1) illustrates the education division to meet the educational needs and backgrounds of learners.

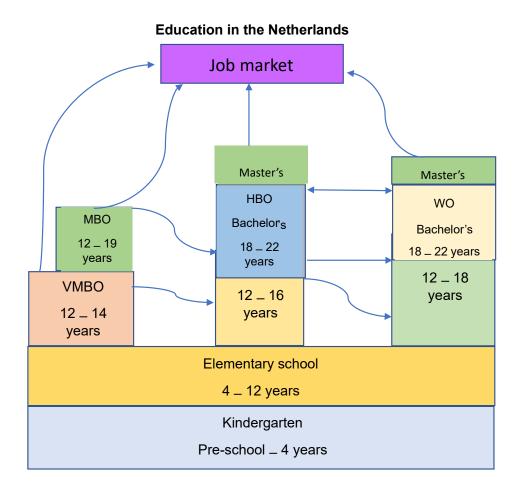


Figure 3.1: The division in the education of the Netherlands to meet learners' needs and backgrounds (adapted from OECD, 2014).

There is no national curriculum, but the Ministry of Education, Culture and Science (*Ministerie van Onderwijs, Cultuur en Wetenschappen,* OCW) (2007) monitors the quality of the education system. The Ministry of Education, Culture and Science (2012) sets national education policy standards, examinations and funding mechanisms. According to Boer (2018) and Van Dam (2018), it is the prerogative of the school to decide how learners will achieve the level required to meet the core goals (*kerndoelen*). Most schools make use of teaching methods for culture and the arts, or special methods for individual arts subjects. Schools can decide which teaching materials they purchase from publishers or to develop their own resources according to their needs so as to meet the core goals.

At the end of primary and lower secondary education, learners are expected to meet core learning objectives (Boer, 2018). According to De Jongh (2018) and Visser (2018), the education policy is shaped as follows:

- The education Inspectorate reviews and monitors the quality of educational institutions.
- Statistics Netherlands (Central Bureau of Statistics) collects and processes data on education and transition to the labour market.
- The Dutch Education Council is an independent advisory body of leading academics, administrators and other experts on education.
- Ministries responsible for health, welfare, sports, social affairs, employment economy, agriculture and innovation address specific education issues.
- Other stakeholders including unions representing teachers and school leaders, umbrella
 organisations of school boards, and the Education Co-operative (*Onderwijscoöperatie*),
 which includes the five leading teachers' organisations, give a guarantee to support the
 quality of the teaching profession.
- Research institutes and other institutes, such as the National General Institute for Curriculum Development (National Expertisecentrum Leerplanontwikkeling, SLO); the Central Institute for Test Development (Centraal Instituut voor Toetsontwikkeling, CITO); the Centre for tests and Examinations (College voor Toets en Exminering, CVTE); the Netherlands' School Leaders Academy (Nederlandse Schoolleiders Academie, NSA); the Foundation for Co-operation on Vocational Education, Training and the Labour Market (Samenwerking Beroepsonderwijs Bedrijsleven, SBB); the Research Centre for Education and the Labour Market (Researchcentrum voor Onderwijs en Arbeidsmarkt, ROA); and school support agencies (schoolbegeleidingsdienst).

The OECD (2014:4) stated that schools in the Netherlands are characterised by a high degree of autonomy. The OECD is an international organisation that works to build better policies for better lives. The main goal is to shape policies that foster prosperity, equality, opportunity and wellbeing for all. School autonomy is grounded in the principle of "freedom of education", which gives the right to any natural or legal person to set up a school and to organise teaching. According to Boer (2018) and Van Dam (2018), all schools in the Netherlands are governed by a legally recognised competent authority, or school board, which oversees the implementation of legislations in the school and employs teachers and other staff.

All teachers receive initial training, and most school leaders take additional professional training while they are at the job. Teachers' salaries are relatively high but lower than other highly trained employees in the Netherlands. There has been an increased focus on the use of evidence from assessment and evaluation. Results from school self-evaluations, monitoring reports from the Dutch Inspectorate of Education and student assessments can provide information to schools on areas for improving school quality and student learning (Visser, 2018).

The OECD (2014:4) determines that the Dutch education system combines a centralised framework and policies with decentralised administration and school management. The framework provides standards with broadly formulated attainment targets and assessment as compared to other OECD countries. School management in the Netherlands depends on the director/principal, with senior (lead) teachers or co-ordinators in the different groups. Senior teachers, co-ordinators or teachers assist each other on school related matters, lesson preparation and/or subject content. The Ministry of Education, Culture and Science (2012) has the political responsibility for the educational system and is bound by national legislation: The Higher Education and Research Act (Wet op *Hoger onderwijs en Wetenschappelijk onderzoek*, WHW) and the Student Grants Act 2000 (Wet studiefinanciering [WSF] 2000). The WSF was last amended in 2007, and an important result of this is that, since 01 September 2007, students have been able to take their student grants abroad under certain conditions in order to obtain a higher education degree there.

The Inspectorate of Education monitors school quality and compliance with central rules and regulations. According to Nusche *et al.* (2014:17) and Visser (2018), current policy priorities include promoting excellence among students and schools, raising teacher professionalism, and enhancing results-orientated work in schools (§ 1.4.3).

Early childhood education and care (ECEC) policies aim to foster equity and increase the participation of students from disadvantaged backgrounds. All four-year-olds were enrolled in early childhood education in 2012 (above, the OECD average of 70% for three-year-olds and 82% for four-year-olds). A large majority of students in early childhood education (70.1%) are in public institutions, slightly above the OECD average of 68.4%. Children are entitled to free ECEC from the age of four. Provisions provide for children below that age

include childcare for birth to four-year-olds and play groups, which are open to all two- to four-year-olds, particularly for children with language delay or those at risk of other developmental delays (OECD, 2014:6).

Compulsory education in the Netherlands starts at the age of five; although, in practice, most schools accept children from the age of four. From the age of 16, there is a partial compulsory education: a learner must attend some form of education for at least two days a week (Boer, 2018). Education is compulsory from five to 16 years of age, but students can voluntarily enter primary education at four years of age (OECD, 2014:18) (§ 1.4.3). The law requires 16-year-olds to attend part-time education on 01 August of any year for one or two days a week (Van Dam, 2018).

Since the start of compulsory education in the Netherlands, the educational system has changed in many aspects (Luijkx & De Heus, 2018). The Dutch education system consists of eight years of primary education, four, five, or six years of secondary education (depending on the type of school), and two to six years of higher education. Both public and private institutions exist at all levels of the education system, and the private institutions are in most cases based on religious or ideological principles (Van Dam, 2018).

Bosland (2018) and Van Dam (2018) affirm that municipalities in the Netherlands are responsible for certain areas of education policy in compulsory schools, including infrastructure. Municipal authorities monitor compliance with the Compulsory Education Act and collect information on students who drop out. They also aim to informally influence local school policies.

3.3.2 School governance

According to the Ministry of Education, Culture and Science (2012), learning environments in the Netherlands serve more than 1.6 million primary students and 960,000 secondary students. Students in the Netherlands receive one of the highest number of hours of compulsory instruction time in OECD countries: 940 hours annually in primary education compared to the OECD average is 791 hours for primary education. School leaders in the Netherlands works in autonomous schools, with school boards responsible for educational quality within a national framework. School leaders are appointed by and accountable to the

school board. Their role varies depending on educational level and the legal and supervisory responsibilities granted by the school board.

Most school leaders are responsible for financial matters and for ensuring that teaching and learning comply with the school's educational goals and standards (Van Dam, 2018). In a context of school autonomy and the governing role played by school boards, there are few nationally defined eligibilities requirements for school leaders. School boards appoint school leaders after a selection process and manage their training and development. Candidates can come from teaching staff or, in some cases, from outside the education profession. New school leaders are often trained through a combination of in-service education training, external training courses provided by the Dutch School Leaders Association, or through training by the School Leaders Academy (NSA). All school types are under the jurisdiction of a government body called *Inspectie van het Onderwijs* (Inspection of Education) who can demand a school to change its educational policy and quality if at risk of closure (De Jongh, 2018; Van Dam, 2018).

According to the Dutch Inspectorate of Education (2013), educational policy is coordinated by the OCW with municipal governments. The Inspectorate of Education monitors school quality and compliance with central rules and regulations. Current policy priorities include promoting excellence-oriented work in schools. Evaluation and assessment are key elements in the drive to achieve these goals, as reflected in recent laws on student assessment, making it mandatory for primary schools to implement regular student monitoring systems as well as a standardised end-of-primary test (OECD, 2014:17).

3.3.3 Financing of schools

Public, special (religious), and general-special (neutral) schools are government-financed, receiving equal financial support from the government if certain criteria are met (Boer, 2018). A central provision of the Dutch Constitution is that all schools are funded if they meet statutory regulations. These include that the school must have a minimum of 260 students, licensed teachers, and a school plan with attainment targets approved by the government appointed school inspector. Although schools are officially free of charge, all schools may ask for parental contributions. According to Van Dam (2018), learners up to the age of 16

attend school for free, with occasional supply fees. Learners from low-income families may apply for grants or loans between the ages of 16 and 27 years.

The Ministry of Education, Culture and Science (2012) is to a large extend responsible for the financing of the education system, defines the general education policy and specifies the admission requirements, structure and objectives of the education system on general lines. In addition, the Ministry of Health, Welfare and Sport and the Ministry of Economic Affairs are involved in the content of higher education. At all levels (primary, secondary and higher education), there is a general trend towards fewer rules and regulations so that institutions can take responsibility themselves for the implementation of government policy (Visser, 2018).

Private schools rely on their own funds, but they are highly uncommon in the Netherlands. The Dutch monarchs have traditionally attended special or public schools. Public schools are enrolled by local governments. Special schools are enrolled by a board and are typically based on a particular religion; those that assume equality between religions are known as general-special schools. These differences are present at all levels of education (Bosland, 2018).

3.4 EDUCATION PHASES IN THE NETHERLANDS

3.4.1 Pre-primary Education in the Netherlands

According to Luijkx and De Heus (2018:48), before the age of five years, when education becomes compulsory, there is no official pre-primary education in the Netherlands. The parents are responsible to take care of the children until the age of compulsory school (Boer, 2018). Children can also begin attending early education, day-care centres or playgroups up until the age of four years. However, in June 2000, the Minister of Education, Culture and Science, the Minister of Health, Welfare and Sports, and the Minister of Urban Policies and Integration stated that pre-primary schooling would be beneficial to those children between the ages of two and five years who run the risk of falling behind later in their educational career. Children who particularly need this extra educational time are often children of ethnic minorities and children of poorly educated parents. Educating them before officially entering primary school could improve such children's educational starting position. In 2003, a

programme that provided pre-primary education to such disadvantaged children was launched, and 25% of the children who were eligible for the programme were reached.

According to the Nederland's Jeugd Instituut (2007), small-scale programmes of this kind have been regularly introduced since 1988. These so-called step-projects (*stap-projecte*) have focussed on children of poorly educated parents and children of ethnic minorities. These step-projects give pragmatic steps to parents that will accelerate implementation and outcomes from a leadership forum from Amsterdam, Netherlands. With active involvement of the parents of such children, the children are encouraged to acquire all kinds of general developmental skills at home before entering the educational system. However, not all projects continue for longer periods of time.

All children are enrolled by the age of four years when children are invited for orientation. Some schools in the Netherlands can arrange early childhood education programmes for children aged two to six years whose first language is not Dutch. The 1994 Social Welfare Act, under the jurisdiction of the Ministry of Health, Welfare and Sport, covers childcare standards and facilities. The 1999–2002 welfare policy called *Towards Social Quality* coordinated childcare with local youth programmes and education policy. However, 98% of Dutch students begin attending school at the age of three years and 10 months, prior to the government allowing pre-school enrolment (Van Dam, 2018).

3.4.2 Primary Education in the Netherlands

Before 1985, there were separate schools for children aged four to six years (*kindergarten*) and children aged six to twelve years (lower education) (De Jongh, 2018; Luijkx & De Heus, 2018:48). After the introduction of the Act on Primary Education (*Wet op het Basisonderwijs*, WBO), these schools integrated with primary schools for children aged four to 12 years. Special education was arranged by an interim law on special- and secondary special education and was strictly separated from normal primary education. In 1998, the WBO was replaced by the WPO (*Wet op het Primaire Onderwijs*). This new act on primary education was aimed at equipping primary schools in a better way to deal with pupils with behavioural and learning disorders.

Children between the ages of four to 12 years attend primary (elementary) school (basisschool; which is literally "basic school") (Bosland, 2018). Compulsory education in the Netherlands, by law, applies to all nationalities from age five who are living in the Netherlands. According to De Jongh (2018), primary education is intended for pupils between four and 12 years of age and lasts eight consecutive years. Children are leerplichtig under a learning obligation or leerplicht of Netherlands education. The school has eight grades called groep 1 (group 1) through to groep 8 (group 8). School attendance is not compulsory before group 2 (at age five years), but almost all children commence school at age four (in group 1). Groups 1 and 2 used to be held in a separate institution akin to kindergarten (kleuterschool; literally, "toddler's school") until it was merged with primary (elementary) schools in 1985.

According to the OECD (2014:6), the OCW sets a general national curriculum framework. The framework outlines suggested time allocation and attainment targets (what students should know and be able to do) for subject areas and cross-curricular topics. Primary education in the Netherlands comprises general primary education, special education, and (advanced) special education for children with learning and behavioural difficulties and children with learning disabilities. The Dutch primary education policy is based on providing children with made-to-measure curricula (De Jongh, 2018; Van Dam, 2018). However, schools are free to teach the core subjects in any way they see fit, provided they meet the attainment targets. The Ministry consults with the Education Council and the Consultative Committee for Primary and Secondary Education – which serves as an independent advisory group to provide consultation on mayor education reforms –before establishing curriculum development.

De Jongh (2018) and Luijkx and De Heus (2018:49) state that primary schools consist of two parts: the first four grades are the so-called lower school (*onderbouw*); and the last four grades from the upper school (*bovenbouw*). Learners usually move up to a higher grade every year. So, most children finish primary school around the age of 12 years. From group 3 onwards, children learn how to read, write and do arithmetic. Most schools teach English in groups 7 and 8, but some start as early as group 1.

Schools in the Netherlands have a fair degree of autonomy in determining how students will be instructed (De Jongh, 2018). Administrators determine both class size and composition, and teachers can choose their own instructional materials and teaching philosophies. In primary school, though most schools organise learners into age grouping, some schools elect to group learners by achievement level or to combine two age groups in one classroom.

According to De Jongh (2018) and Nusche *et al.* (2014:35), the Netherlands stands out internationally for its well-developed evaluation and assessment approaches. Central mechanisms for student assessment, school evaluation and education system evaluation have been in place for decades, along with requirements for schools to assure their own quality. The Dutch evaluation and assessment system combine a high degree of school autonomy with a set of checks and balances that allow for intervention if schools are found to be at risk of underperformance.

Assessment takes place on a day-to-day basis: teachers do continuous assessment through homework, oral exams and classwork (Van Dam, 2018; Visser, 2018). The Ministry sets learning standards in language and mathematics, as well as objectives for primary and lower secondary education. There are external standardised tests for summative purposes at the end of primary school and started in 2014/2015. These assessments are diagnostic in nature so that teachers can guide students through the curriculum (Luijkx & De Heus, 2018:48). Students take a national examination at the end of primary school (age 12) that serves as the main determinant of the type of secondary school that they will pursue. In group 8, the vast majority of schools administer an aptitude test called the *Cito eindtoets Basisonderwijs* (Literally, "Cito final test primary education") – often abbreviated to *Citotoets* (Cito test), developed by the *Centraal Instituut voor Toetsontwikkeling* (Central Institute for test Development) – which is designed to recommend the type of secondary education best suited for pupils. Cito also develops national tests that are used to access both students and the education system itself (Van Dam, 2018) (§ 1.4.3).

According to the OECD (2014:74), building on identified strengths, the following give potential directions for further policy development in building a coherent framework for student assessment in the Netherlands:

- build consensus on key learning goals for the 21st century;
- consider developing learning progressions to complement curriculum goals;
- · develop an assessment strategy corresponding to agreed education goals;
- further development of the assessment infrastructure;
- strengthen teacher professionalism for effective development and use of assessment;
- support innovative assessment practices at the local level;
- balance the use of assessment for improvement and accountability;
- critically examine unintended consequences of assessment.

There is a clear understanding that shared decision-making and buy-in from schools are essential for successful evaluation and assessment policies (Nusche et al., 2014:42; Visser, 2018). For all key components of the evaluation and assessment system, the Dutch approach combines centralised and school-based elements. This combination appears to have contributed to the development of an advanced evaluation and assessment culture. The OECD (2013) claims that balancing school-based and central elements of evaluation allows education systems to combine a degree of national consistency along with local diversity. Consistency across schools is important to implement national agendas for improving education, but greater diversity of approaches offers more opportunities for innovation and adaptation to local needs.

Boer (2018) and Bosland (2018) state that students have two options to choose from: general secondary education (*algemeen* voortgezet onderwijs, HAVO *or* VWO); or preparatory secondary vocational education (*beroepsgericht voortgezet onderwijs*, VMBO). In recent years, this has gained authority, but the recommendation of the group 8 teacher along with the opinion of pupil and his/her parents remain the main factors in choosing the right form of secondary education (De Jongh, 2018; Visser, 2018). A considerable number of primary (elementary) schools are mostly based on a particular educational philosophy – for instance, the Montessori Method, the Pestalozzi Plan, the Dalton Plan, or Freinet. Most of these are public schools, but some special schools also base themselves on one of these educational philosophies (De Jongh, 2018).

3.4.3 Special Education in the Netherlands

Special education is intended for pupils who require more support and guidance due to a mental, sensory, or physical problem (De Jongh, 2018). The admission age varies from three years to six years, depending on the type of special education involved. Secondary special education is open to pupils after the age of 12 years. Almost half of these pupils move on to some form of vocational education. "Back to school" is an approach designed to bring about more integration of primary and special education in order to call out steady increase in the number of pupils attending special education.

Pre-vocational education (VMBO, typically ages 12 to 16 years) caters to vocationally orientated students and lasts for four years (Bosland, 2018; Nusche, *et al.* 2014:19). It is intended as a foundation course providing a basis for further vocational training (MBO), which is focussed on preparing students for the labour market. VMBO combines vocational training with theoretical education in languages, mathematics, history, arts, and sciences. Sixty percent (60%) of students nationally are enrolled in VMBO. Students who complete the theoretical VMBO programme may choose to transfer to HAVO (senior general secondary education) (De Jongh, 2018; Van Dam, 2018; Visser, 2018).

3.5 TEACHER'S TRAINING

Candidates must earn a diploma from one of the Netherlands' primary school teacher's training colleges to qualify to work as a primary school teacher (Boer, 2018). It takes four years to obtain a mainstream teaching qualification. Primary school teacher's training is provided at the higher vocational education programmes level at HEIs. Students with a diploma at the highest level from pre-university secondary education, senior general secondary education, or vocational secondary education are eligible to apply to these programmes (Visser, 2018). Qualified primary school teachers are allowed to teach all grades and all subjects in primary education, with the exception of physical education. The initial teacher's training includes an introduction to educate learners with special needs.

Students can enter primary school colleges with a senior general secondary school certificate (HAVO), pre-university education certificate (VWO), or vocational diploma (MBO). For disappointing results of first-year teacher's training students, a compulsory mathematics

and language test has recently been introduced (Boer, 2018). Failing the test means the students cannot continue with the next year of their programme. In order to motivate students with academic potential, initiatives have been taken to start a teacher's training course for primary school teachers at academic level.

The University of Utrecht offers a combined course of teacher's training for primary education and educational science for pre-university education (VWO) graduates (De Jongh, 2018). Supplementary training for teachers in special education is optional; the majority of special teachers undertake two-year part-time training. There are several specialist fields, including visual impairments, behavioural problems, intellectual disability, remedial teaching and peripatetic (migrant) teaching. Although not compulsory, a growing interest of mainstream teachers have a special education certificate (Boer, 2018).

According to Bosland (2018), there are two forms of teaching qualification for secondary education:

- Lower-secondary qualification, the so-called "grade two" qualification, qualifies teachers
 for the first three years of senior general secondary education (HAVO) and pre-university
 education (VWO) and all years of secondary vocational education (VMBO/MBO).
 Courses for this level are provided at HEIs.
- Full qualification, the so-called "grade one" qualification, qualifies teachers for all levels
 of secondary education.
- The "grade one" qualification courses are provided at higher education (HBO) institutes
 and universities. At university, courses are offered for university graduates with a
 master's degree. Courses are available for all subjects in the secondary curriculum.

For this study, I only concentrated on education for learners 0–12 years and their teachers' training, for which the general framework for teachers' competence is important.

According to Majewski (2018:2), the government of the Dutch (Netherlands) has the constitutional duty to provide high-quality education for everybody. As a result, the Dutch Parliament had to pass the Professions in Education Act in 2004. The essence of the Act

(abbreviated as the "BIO-Act") is that educational staff, such as teachers, assisting staff members, and school managers, must not only be qualified but also competent.

Sets of competencies and requirements for teachers are accepted by the government and have been operational since 2006. Schools are forced to appoint competent staff into their employment and subsequently enable them to keep up their competences at a high level and further professional development. According to De Jongh (2018), teacher's training colleges use these competences as a guideline to their educational programme. There are three versions of the competence requirements:

- · for teachers in primary education;
- · for teachers in secondary and vocational education; and
- for teachers in the last two classes or pre-university education (VWO).

The differences between the three versions are only little, because all teachers in the Netherlands are required to have the same basic competencies. The framework of competence requirements specifies, according to Visser (2018), four professional roles that teachers have, namely: • interpersonal role;

- pedagogical role;
- organisational role; and
- the role of an expert in subject matters and teaching methods.

Visser (2018) referred to these professional roles as the professional characteristics of a teacher as professional. The professional roles refer to the teacher's own personal development. The teacher fulfils these roles by:

- working with students,
- colleagues,
- · the school's working environment, and
- with themselves.

3.5.1 Teachers in Europe

Being a teacher today in Europe is different from 20 or 30 years ago. In the European Union (EU) members' states collaborates regarding the quality of teaching and learning and to improve support for the profession. It does so by facilitating the exchange of information and experience between policymakers. The EU plays a critical role in achieving high quality education for all learners and, therefore teachers need to continuously develop their competencies (The teaching professions, 2020). The knowledge, skills and attitudes of the EU's teachers and school leaders are of great importance. Their quality and professionalism have a direct effect on the learning outcomes of learners. Initial education and continuous professional development need to be of the highest quality, and access to professional support throughout their careers is essential (EU DoE, 2020).

Wu (2017:28) confirmed in an internationally study that the most rewarding aspect of teaching was intrinsic motivation. If teachers' beliefs are incongruent, they contribute to feelings of vulnerability and emotional disturbance. Wu explained the relationship between teachers' perspectives and external influences as follows: "Although settings, policy, and conditions may be imposed principally by external forces, they are not unaffected by teachers' goals and perspectives. Similarly, although teachers' goals, beliefs, and perspectives are fundamentally internally constructed, they are definitely affected by conditions and policies" (Wu, 2017:28).

Van Dam (2018) claims that teacher's appraisal can influence teachers' career progression in the Netherlands. Schools are responsible for evaluating their teachers' performance regularly. The Inspectorate evaluates teachers' compliance, using professional standards for primary and secondary teachers that were developed in co-operation with key stakeholders, including teachers and the Ministry.

Developed nations are generally categorised as countries that are more industrialised and have higher per capita income levels. Those countries are gradually changing their status from modern-industrial systems to post-modern societies. According to Ostinelli (2009:291), their cultural models were widely influenced by positivist views of reality to post-modern societies. The change of reference at the cultural and, therefore, school level, is slower than

in other domains. In this context, teacher education can play an important role, taking into account some important issues:

- The need for a deep understanding of and reflection on concepts such as knowledge and learning in a complex and changing world.
- An up-to-date vision of the professional role of the teacher in contemporary societies, considering the fundamental function played by the building of shared educational values in the school domain.
- The issue of the polarisation of the teaching profession: nowadays it combines aspects
 that are characteristic of the activity of a professional and traits that are typical of a
 functionary's job (curriculum decided from above; control over teaching by the principals
 and/or the inspectors).
- The ability of the European school system to face the challenges posed by the increasing presence of children without a basic mastery of the country of adoption's spoken and written language.
- The need for teachers of every grade to hold pedagogical, psychological and relational competences in order to interact effectively with their students at the individual and group level.
- The aptitude to operate in collaborative environments, where cooperation between colleagues and other stakeholders is a common feature.
- The possession of basic research competencies through updating (reading of articles, etc.) and participation in "on the spot" research in the school.
- The ability to use information and communication technologies in a technically adequate and culturally attentive manner.

3.5.2 Practical work experience

From the first year of teacher's training, students gain practice work experience through regular teaching practice in primary schools. Approximately one quarter of teacher's training is devoted to instructional practice. Halfway through teacher's training, students can choose to specialise in lower primary- or upper primary education (Visser, 2018).

The School of Education (teacher's training) provides bachelor's degree courses in primary as well as secondary, vocational and adult education (De Jongh, 2018). At the Rotterdam University of Applied Sciences, students were trained for teaching in primary schools, the junior years of higher general and pre-university secondary education and the entire curriculum of pre-vocational and vocational secondary education. The design of the various teacher's training courses is quite similar but differ in knowledge areas, training schools (internship), instructional methods, and educational theories. There is a difference between teaching toddlers and teaching adolescents; they require different qualities. All the students who complete one of the four-year courses are rewarded a bachelor's degree and are thereby qualified as teachers.

3.5.3 Professional development

Boer (2018) confirms that ongoing professional development for teachers is possible through a variety of courses and other voluntary professional development activities for both primary and secondary school teachers. Professional development is optional and not compulsory. Professional development courses are offered by teacher's training colleges, universities, or commercial institutes, as well as organisations offering educational advice and support. Teachers can also participate in subject-related workshops or conferences.

3.5.4 Improvement of the teaching profession and schools

According to the OECD (2013:11), the Netherlands has recently introduced a comprehensive strategy to improve the teaching profession and promote the excellence of education. The comprehensive strategy is called the *Teachers' Programme*. The focus areas of the programme are as follows:

 attracting high-performing students into teacher's training programmes, improving teacher pre-service training programmes, providing attractive and flexible development pathways, developing support for teachers at the start of their careers, developing schools as learning organisations by engaging teachers, school leaders and school boards, helping all teachers maintain and develop their skills and qualifications, and sustaining a strong professional organisation that represents teachers.

Netherlands has also made efforts to improve and strengthen the capacity of schools to improve through a three-year programme called *Schools have the Initiative*. The main aims of this programme are to leverage internal motivation to increase the effectiveness of the education provided through work in six areas, namely:

 results-orientated work, human resources management or learning organisation, promoting basic skills, dealing with differences between learners/students, giving attention to excellence or gifted learners/students, and enhancing science and technology skills.

Schools participate in this programme on a voluntary basis and the programme begins with schools defining their own goals and ambitions. Schools can conduct three sessions known as ambition conversations as well as three evaluation conversations to monitor achievements with their own expectations. The programme also encourages schools to apply for funding to provide for visits to independent experts and so-called critical friends to participate in such conversations (OECD, 2013:11).

3.6 TWENTY-FIRST-CENTURY SKILLS IN THE NETHERLANDS

Instructional design is a process for improving student achievement through the systematic design, development and evaluation of instruction. According to the OECD (2014:75), there is continuing interest in the Ministry of Education, Culture and Science to encourage schools to focus on 21st century skills. The new mission of schools is according to Darling Hammond (2012:2) to prepare learners to work at jobs that do not exist yet and start to create ideas and solutions for products and problems that have not yet been identified by using technologies that have not yet been invented.

Earley and Greany (2017:83) state that the essence of great (effective) schooling in the 21st- century is only possible by focussing on the nine pillars (published as *the 9 Pillars of Greatness*). The nine pillars are as follows:

 Pillar 1: A shared vision, values, culture and ethos, based on the clear expectations of all the members of the school community

The vision and mission must be optimistic and be based on a "growth mindset" philosophy and ethos. There must be no ceiling of expectations of the performance of any member of the school community and it must be expressed through ways that members of the school community relate to each other – the way they work together, through the organisation of the school's structures, physical environment and through the quality of learning for both learners and teachers. The culture and ethos are embedded in the basic beliefs that are shared by all members of the school community. There is a solid commitment to excellence, to remaining open to new ideas and thinking in news ways to embrace the challenges of the 21st century.

• Pillar 2: Inspirational leadership at all levels throughout the school

Great schools grow and deliver great leaders as well as great teachers. It is possible through coaching, mentoring, role modelling and providing an example of leadership opportunities. The belief is that all humans have potential for growth and development (learners and teachers) and that everyone has a different profile of leadership qualities. Inspirational leadership is visionary, inspiring and value-based, where leaders are able to share and communicate this effectively to the entire school community, being enthusiastic, good planners, organisers and paying attention to detail and getting results through being resilient and determined. Characteristics of good leadership are visible in a sense of moral purpose, optimistic personal behaviour, clear communication, role modelling, transparency and trust.

 Pillar 3: Exceptional teaching, learning, assessment and feedback to support the highest levels of attainment and achievement

The promotion of high-quality learning is the main aim of a great school to achieve their goals. School policy is about the practise of teaching and learning, underpinned by the highest of expectations in every area of the curriculum. The school leadership team will prioritise the selection of highly qualified teaching staff, with excellent subject knowledge and a passion for their curriculum. Good classroom management, organisational skills and

curriculum enrichment are part of the expectations of good (invitational) leadership teachers.

• Pillar 4: A relentless focus on engaging and involving students

Educational experience on all levels involves learners' leading, planning and management strategies. Members of the school community have a responsibility to support and motivate everyone, learners and teachers, through day-to-day opportunities in every classroom. This includes encouraging risk-taking, pushing oneself beyond the comfort zone, making mistakes, embracing them and learning from the outcomes. In student/learner-focussed schools, learners play a key part in the appointment of teachers, make a contribution to school publications and communication, and are represented on SGBs and their committees. Peer mediators and mentors are used to aid behaviour management where learners have gone wrong.

 Pillar 5: Personalised and highly effective continuous professional development within a learning community

Life-long learning is central to the notion of a great school. Ongoing professional development and learning committees embrace collaborative planning, teaching and assessment. Coaching and mentoring involve small groups of teachers working together to be enquiry-minded and to be geared toward innovation and research. Knowledge-creating institutions produce excellent educational outcomes for teachers and learners.

Pillar 6: A stimulating an inclusive environment and climate for learning

In great schools, learners are taught about healthy lifestyles, the building of successful relationships, learn to manage emotions and act as responsible citizens. Great schools have high expectations of the behaviour of learners and adults based on mutual respect, trust and kindness to each other. The whole school environment, the quality of day-to-day performance in the class and on the playground, the entrance of the school, lunch facilities, toilets, and a safe and secure environment enhance the climate of the school and community. Displays and exhibitions of learners' work in public – the use of photographs in the media of the community – are part of reinforcement of subjects and learning to celebrate achievement progress and raise aspirations for learners and teachers.

 Pillar 7: A rich and creative curriculum within and beyond the classroom, fully meeting the needs of individuals and groups of students

The curriculum of the school is carefully considered and based on the vision, values and mission of the institution, where all the subjects are interlinking meaningfully, logically and consistently. The focus of the curriculum is to enhance learners to understand the world in which they live and to encourage them to enter the real world with dignity and self-confidence. Learning and teaching will be personalised throughout the curriculum to include all learners with their own special needs to guarantee participation, progress and achievement.

 Pillar 8: High-quality partnerships with parents and the community, their schools and networks – locally, nationally and internationally

A great school is a system player and change agent to contribute and sustain knowledge and understanding of education and school systems – locally, nationally and internationally. To be part of the global world, the widening of learners' and teachers' horizons are important – for instance, by learning different languages and to be exposed to different cultures, or to have a range of international partnership for a variety of purposes, such as curriculum projects widening horizons. To build positive interactions with parents and the community has a positive impact on the local community and assists in promoting community solidarity.

• Pillar 9: Robust and rigorous self-evaluation, data analysis and collective review

Regular feedback of teaching and learning is a continuous reflection on quality assurance and self-evaluation within the school community. Internal and external critical self-evaluation enhances quality teaching and learning. The views of all stakeholders, parents, learners, teachers and community are part of the feedback on learning and teaching to demand benchmarking. Self-evaluation is part of everyday routine and develops and sustains critical reflection, enquiry and intellectual continuous improvement and ensuring consistently high standards.

The Dutch (Netherlands) curriculum needs to be considered when reflecting on the learning goals for 21st century skills. The Netherlands does not have or provide a specific curriculum in education with clear indications for teaching and learning, evaluation and assessment.

The main focus is on the national core objectives, which specify the knowledge and skills needed for learners to meet the outcomes at the end of primary and secondary education.

Literacy and numeracy skills to be achieved at the end of each educational stage are described in more detail. In the Netherlands, education learning goals are being set with references to current assessments – in particular, the Cito end-of-primary test and the national examinations at the end of secondary education (OECD, 2014). Although the education of the Netherlands has a high level on international assessment, attention to 21st century skills – such as, creativity, collaboration, and ICT literacy – are needed, according to various groups interviewed by the OECD (2014).

According to McMillan (2018:4), the following 21st century skills are essential for all learners internationally:

 deep understanding of fundamental concepts of important content areas and disciplines, cognitive skills such as problem-solving, decision-making, critical thinking, and metacognition, creativity and innovative thinking, effective communication skills, effective social skills, global understanding and perspectives, and dispositions, such as responsibility, flexibility, self-direction, determination, perseverance, risk taking and integrity.

From international and national platforms there are an endless series of high-profile calls to action for changes at all levels of education to meet the demands of an information-based, interconnected world.

3.7 CONCLUSION

Information from literature is interpreted within Bronfenbrenner's Ecological theory taking the contextual determinacies into account. This theory is a perspective of the interaction between the developing human and the environment (Nel, et al., 2013:12). The five ecological systems identified by Bronfenbrenner, namely microsystem, mesosystem, exosystem, macrosystem and chronosystem is described in (§ 1.3; § 1.7.1). The different layers of Bronfenbrenner's ecological system theory were discussed in chapter 1 (§ 1.7.1). Factors which play a positive role in the context of the teaching and learning system of the

Netherlands are the freedom of education which put public and private schools on equal footing, with all schools receiving public funding (exosystem). The schools are free to determine content and methods of teaching as long as they obtain the learning objectives and quality standard set by the central government (macrosystem). The Netherlands is a wealthy country and do not experience social-economic challenges (macrosystem). The Netherlands also embraces good family time to ensure social wellbeing of learners and family (micro- and mesosystem).

Chapter 2 discussed the relevant literature of education in South Africa. This chapter reported on the history of education in the Netherlands. In-depth research about the two countries were needed to get insights into exploring curriculum and instructional design in South African primary schools. According to McMillan (2018:37), learners of the 21st century need to be prepared with many different skills and attitudes. They should not only have subject-area knowledge but also a global understanding, cross-cultural skills and skills for the 21st century.

The research design, methods, data analysis, and ethical considerations of the empirical data collection in the Netherlands and South Africa are discussed in chapter 4.

CHAPTER 4: RESEARCH DESIGN AND METHODS.

4.1 INTRODUCTION

The first objective of this study is to explore and determine to get insights into exploring curriculum and instructional design in selected South African primary schools as well as selected Netherlands schools. In chapters 2 and 3, the researcher consulted existing literature on education systems in South African primary schools and the Netherlands, the system and school organisation and teacher's training. The methodological choices for the research are explained in this chapter against the background of the research questions and purpose of the study.

First, the perspectives and approaches to social research are discussed. The research design and methods that were applied to gather data as well as the methods of data analysis are discussed. The researcher explains the choice of interpretivism as a worldview for this research and the related advantages and potential limitations of the research. There is a focus on a concern with applications and solutions to problems. In cross-cultural and cross-national studies like this one, there are the obvious constraints associated with differences in language, culture, symbols and signs (Creswell, 2014:7; Mouton, 2012:155). Moreover, the researcher explains the sampling method, different schools, questionnaires, districts, semi-structured interviews, classroom field observation as context of interaction and field notes for data generation and documentation purposes.

The process of data analysis and interpretation is discussed, and the chapter is concluded with a discussion on ethical guidelines and the strategies to improve the trustworthiness of findings.

4.2 RESEARCH PARADIGM

According to Bryman (2016:637), a paradigm is "a cluster of beliefs and dictates which for scientists in a particular discipline influence what should be studied, how research should be done, and how results should be interpreted". A paradigm is perceived as a general orientation that the researcher has of the world and the nature of the research (Creswell, 2009:6; Creswell, 2014:5).

De Vos *et al.* (2012:40) define a paradigm as a model or pattern containing a set of legitimated assumptions and a design for collecting and interpreting data. The important point is that all scientific research is conducted within a specific paradigm, or way of viewing one's research material. According to Creswell (2009:8; Creswell, 2014:129), people search for insight into the world in which they work and live by using an epistemological paradigm. The aim of the researcher is to rely on research participants' perceptions of the phenomenon under study.

Glesne (2016:5) describes a paradigm as a framework of science that provides expectations about the nature of reality and truth, the kind of questions to discover and how to go about doing so. According to Mouton (2012:137), questions about human understanding of the world and the way this understanding is communicated, cross-examine the worldviews of how humans learn. The understanding of everyday life and lay knowledge, the world of science and the world of meta-science are based on the view that reality is constructed socially by individuals through describing, making sense of and negotiating the external world (Glesne, 2016:9). The process looking for insight knowledge on what reality is (ontology) starts by identifying a real-life problem and converting it into a research problem (epistemology) (Creswell, 2014:129). To elucidate and get in-depth understanding of the real-life problem, the researcher needs to conceptualise the research problem by making use of methodology to unlock the phenomenon (Creswell, 2014:139; Creswell & Plano Clark, 2011:43). Phenomenology focus attention on subjective lived experiences of individuals who have experienced a particular phenomenon. To understand phenomenology is to look for the essence of the research (Lichtman, 2011:77).

Worldview/paradigms arise based on discipline preference, students' advisor's tendency and past research experiences. The researcher highlighted the four worldviews/paradigms as follows: post positivism, constructivism, transformative and pragmatism. According to Creswell (2014:5-9) the post positivist worldview is sometimes called the scientific method and is more suitable for quantitative research than qualitative research. The constructivist or social constructivism worldview is often combined with interpretivism and is generally seen as an approach to qualitative research. The transformative worldview arises from individuals who felt that the postpositivist theory assessed structural laws and theories that did not fit in our society or issues of justice, discrimination, and despotism. The pragmatic

worldview arises out of actions, situations and consequences and is philosophical underpinning for mixed methods studies.

The philosophical orientation of research aims to provide a clear approach towards research and stipulates the regulations of the study while serving as guardrails for the researcher (Rajasekar, et al., 2013:8). As mentioned in chapter 1 (§ 1.7.1) and chapter 5 (§ 5.3). interpretivism is a philosophical orientation and argues that human beings interpret a situation and reacts to their own interpretation, truth becomes something that cannot be measured (§ 1.7.1). The researcher aims to gain a deeper knowledge and understanding of a specific phenomenon based on its context and interpretations of participants (Pham, 2018:3). Interpretivism therefore translates the worldview of different people. Creswell (2009:6), Creswell (2014:5) and Yin (2011:285) explain the term worldview as "a basic set of beliefs that guide action". All research can be interpreted or guided by a number of beliefs and feelings about the world and how to understand and study it (Denzin & Lincoln, 2011:13). Kelly et al., (2018:9-13) refers to Weaver and Olson that subjectivity and intersubjectivity is kept in mind with the epistemological stance of the Interpretivist paradigm. They further explain that the ontological stance shows lived experience, cultural influence and meaning but on the other hand also acknowledges the potential for numerous realities. Therefore, researchers who use Interpretivism as a paradigm are likely to gain a deeper understanding of the phenomenon, its complexity and in its unique context. It does not attempt to generalise the findings of understanding for the whole population (Kivunja & Kuyini, 2017:33). Interpretive paradigm mainly consists of observation and interpretation. To observe is to collect information about events and interpretation is to understand the information by drawing inferences or by judging the similarities and differences and how it matches with the information and some abstract patterns.

The understanding of the different worldviews guides the researcher to choose qualitative, quantitative, or mixed methods approach for the research. Some researchers refer to worldviews as paradigms, but Creswell (2009:6; 2014:5) prefer to use the term *worldview* (§ 1.7.1). In this study the researcher acted as an interpretivist to explore, understand and interpret curriculum and instructional design in selected South African primary schools.

Researchers distinguish between three lenses through which the nature of the social world is viewed, namely **ontology** (what is reality?), **epistemology** (how do you know something?) and **methodology** (how do you go about finding out?) (Creswell & Poth, 2018:19; Glesne, 2016:5; Kruger, 2015:170). According to Creswell and Poth (2018:20), ontology embraces the idea of multiple realities, while epistemological assumptions mean that researchers try to get as close as possible to the participants being studied. Qualitative researchers make the value of their research known through a study, better known as the axiological assumption. Kruger (2015:170) refers to a fourth lens, namely the **human nature**, which explains the relationship between human beings and their environment. The procedure of research (the methodology) proceeds from particular facts to a general conclusion.

Mertens (2018:13), Guba and Lincoln (1989, 2005) adapted the concept of paradigms by including four sets of philosophical assumptions that distinguish a person's worldview. The four sets of assumptions include:

- axiology: the nature of ethics and values;
- ontology: the nature of reality;
- epistemology: the nature of knowledge and the relationship between the evaluator and stakeholders;
- methodology: the nature of systematic inquiry.

The following table summarises the philosophical assumptions made by researchers when they undertake research:

Table 4.1: Table of philosophical assumptions with implications for practice (adapted from Creswell, 2009:66; Creswell & Poth, 2018:20)

Assumption	Questions	Characteristics	Implications for
			Practice
			(Examples)
Ontological	What is the nature of reality?	Reality is multiple as seen through many views.	The researcher reports different perspectives as themes develop in
			the findings.
Epistemological	What counts as knowledge? How are knowledge claims justified? What is the relationship between the researcher and that being researched?	Subjective evidence is obtained from participants; the researcher attempts to lessen the distance between him- or herself and that being researched.	The researcher relies on quotes as evidence from the participants as well as collaborates, spends time in fields with participants, and becomes an "insider".
Axiological	What is the role of values?	The researcher acknowledges that research is value laden and that biases are present in relation to their role in the study context.	The researcher openly discusses values that shape the narrative and includes his or her own interpretation in conjunction with those of participants.
Methodological	What is the process of research? What is the language of research?	The researcher uses inductive logic, studies the topic within its context and uses an emerging design. The researcher also includes theory deductively in quantitative theory in terms of testing and verification.	The researcher works with particulars (details) before generalisations, describes in detail the context of the study, and continually revises questions from experiences in the field.

An appropriate way to demonstrate the philosophical worldviews for understanding is to draw a framework for design to indicate the interrelationship of worldviews, strategies of inquiry, and research methods:

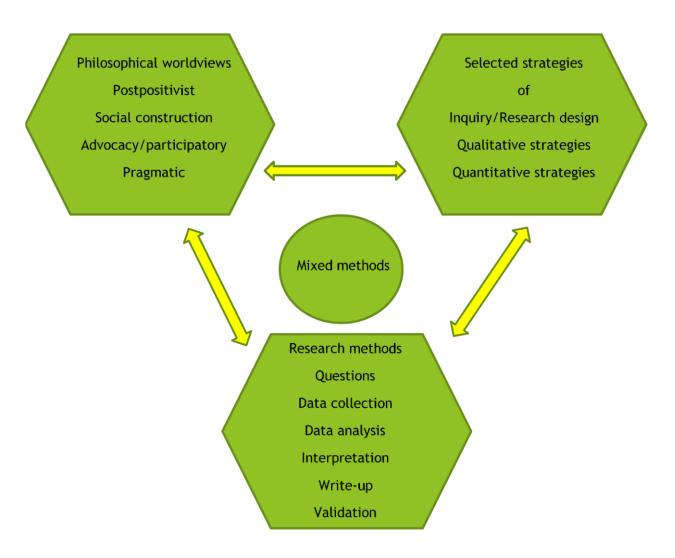


Figure 4.1: A framework for philosophical worldviews (adapted from Creswell, 2014:5).

In order to report on a logical way of research, the researcher in this study made use of the simple structure described by Mouton (2012:137), namely the three-worlds framework.

According to Creswell (2009:6) and Creswell (2014:132), worldviews make sense of the general direction about the world and the real-life problem to research.

As mentioned in (§ 1.7.1), real-life problems are usually constructed in research problems in the social and physical world (Mouton, 2012:137). Problems manifest in a variety of ways,

such as stress, unemployment, poverty, violence, misdemeanour (crime), drug and alcohol abuse, to name but a few (§ 1.4.1; § 2.2.2; § 2.9). The framework is constructed on the difference between the three "worlds" and can be explained as follows:

- World 1: The world of everyday life and lay knowledge
- World 2: The world of science and scientific research
- World 3: The world of meta-science (Mouton, 2012:137).

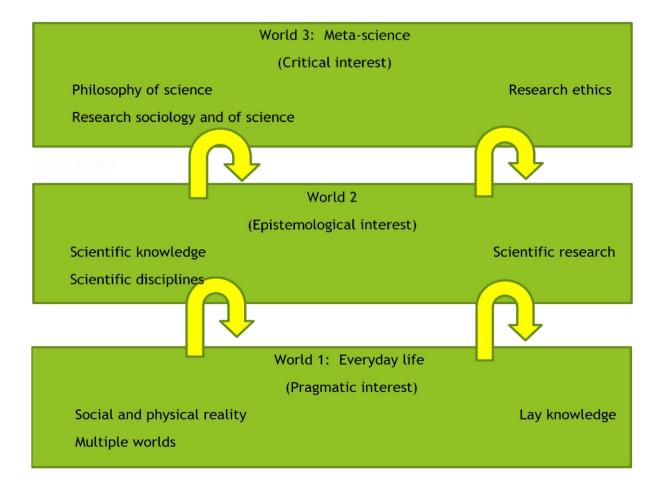


Figure 4.2: The three-worlds framework (adapted from Mouton, 2012:139)

World 1: Our everyday life is part of World 1

Lay knowledge is an essential part of knowledge to assist human life (Mouton, 2012:138). Researchers use real-life problems to do research. When a researcher refers to a research problem, he or she has already identified a real-life problem and converts it into a research

problem (Mouton, 2012:137). The phenomenon to explore and investigate in world 1 is the quality of education in South African primary schools and their teachers training to prepare learners for the 21st century. The education system of South Africa is currently a national crisis: this is reflected in the provincial pass rates, the results of PIRLS and the results of TIMMS (§ 1.1; § 1.3; § 2.1). A concerning percentage of primary school teachers in South Africa are underqualified. Sixty percent of teachers in KwaZulu-Natal are under qualified and the ongoing struggle with content knowledge needs to be addressed. Primary schools in deprived socio-economic circumstances have become unsafe for learners due to gangsterism, drug abuse, and sexual assault and rape (§ 2.1; § 2.2.2; § 2.9).

World 2: The world of science and scientific research

In social science, the researcher selects situations that exist or happen in World 1, especially those who cause these situations as objects of inquiry (Mouton, 2012:138). A study was needed to explore and investigate a developing country like South Africa in terms of their curriculum and instructional design in selected South African primary schools and their teacher's training with the aim to obtain and get insights to the education system in South Africa and how learners are prepared for the 21st century.

Bronfenbrenner's ecological theory as discussed in § 1.3; § 1.7.1; § 2.9, is used as interpretation theory.

World 3: The world of meta-science

Researchers as scientists constantly make research decisions about which theory to use, which indicators, or which research design to choose for specific research (Mouton, 2012:138). In this study, the researcher explored curriculum and instructional design in selected South African primary schools and the Netherlands as perceived by principals, teachers, departmental officials and lecturers. The role of the environment and the experiences of principals, teachers, departmental officials and lecturers were investigated, and these participants' voluntary participation in this study served to inform the researcher as an interpretivist to interpret their views and experiences on the curriculum and instructional design in selected South African primary schools and also teacher's training in South Africa and the Netherlands (§ 1.3; § 1.4.1; § 1.6; § 1.7.1; § 1.7.3; § 1.7.4).

4.3 RESEARCH DESIGN

Bryman (2016:40) describes a research design as a framework for the collection and analysis of data. The research design as framework consists of a flexible set of guidelines that connect theoretical paradigms to strategies of inquiries and to methods for collecting empirical data. The choice of research design includes the importance of:

- communicating the starting point between variables;
- observing similarities to larger groups of individuals;
- understanding performance and the meaning of performance in its specific social context;
- having a time-related appreciation of social phenomena and their interconnections.

According to McMillan and Schumacher (2010:22), a research design outlines the procedure of the study. The research design describes the procedure for conducting the study, from whom, and under what conditions data collection takes place. It also indicates the plan of action that will be used to answer the research questions. The focus of the research design is to draw the most valid and credible conclusions from the answers to the research questions. The quality and strengths of different research designs should be compared in order to choose an appropriate design to conduct the investigation and to determine how the data should be analysed (Creswell, 2014:206).

As explained in chapter 1 (§ 1.7.1), the research design outlines the structure of the research and holds all the pieces of the study together through guiding the researcher's decisions and data towards the aim of the study (Inaam, 2016:68) (§ 1.6). The philosophical orientation of this study was based on interpretivism. According to Hammersley (2012:22) this orientation focuses on acquiring different people's experiences; how the perceive and feel about life. Interpretivist researchers state that it is impossible to grasp a person's reason for their actions without understanding their interpretation of life (Hammersley, 2012:22). What distinguishes interpretivism is the fact that individual human interest becomes part of the research, as interpretivism assume that realities are built upon social constructions

through experiences, culture, and language (Dudovskiy, 2019:1). Within interpretivism data is gathered mainly through observation and interviews (Dudovskiy, 2019:1).

For the purpose of this study, the researcher used a qualitative research design as discussed in chapter 1 (§ 1.7.1) with phenomenology as the strategy of inquiry in order to understand and interpret the data that has been collected. Qualitative research design has numerous benefits whilst conducting an empirical research study. Chalhoub – Deville and Deville (2008:214) argues that qualitative research achieves deeper insights pertaining to the research topic being explored. Secondly, qualitative research approach holistically understands the human experiences in specific settings, which enables the researcher to understand different participants' opinions and experiences on events (Rahman, 2017:104). Lastly, Daniel (2016:93) stated that a qualitative research approach views human thoughts, and behaviour in a social context, which covers a wide range of phenomena in order to ensure an understanding and appreciation of the participants views, thoughts and experiences. Human behaviours consist of interaction with others, internal thought processing, reasoning, composition, and norms.

The research design depended primarily on semi-structured interviews, questionnaires and observation data (§ 1.7.3; § 1.7.4; § 1.7.5; § 5.4.2; § 5.4.3; § 5.4.4; § 5.4.5; § 5.5.2.; § 5.5.3; § 5.5.4; § 5.5.5). The data collected was analysed and interpreted by means of the interpretivism philosophical school of thought (§ 1.7.6). The underlying premise if interpretivism is that the whole picture needs to be observed in order to understand the particular phenomenon (Neill, 2006).

In this section, the selected research design for this study is explained. A research design is, according to Creswell (2009:5) and Creswell (2014:17), the plan or proposal to conduct research. It involves the intersection of philosophy, strategies of inquiry, and specific methods. Mouton (2012:56) also confirms that a research design is a plan or blueprint of how the researcher intends to direct the research. Researchers often confuse the concepts of "research design" and "research methodology".

A research design provides a framework for gathering and analysing data as demonstrated in Figure 4.3. According to Bryman (2016:40), the research design is the starting point for

a research outcome which involves the main concern of the research process. The main concern of this research is the phenomenon of the poor results of learners in South Africa as explained in chapter 1 (§ 1.1). These results are part of interrelated connections between variables, mainstreaming of larger groups of individuals, interpreted behaviour and the meaning of behaviour in a specific social context, and a time-related opinion of social situations as explained with Bronfenbrenner's ecological systems theory at the end of chapter 2 (§ 2.9).

The purpose of the qualitative research method was to gather and apprehend the realities people form through the way they see and do life, as two people may experience the same situation completely different (Cropley, 2019:9) both through interpretivism and phenomenology. For this study, questionnaires, semi-structured interviews, field observations and field notes were used (§ 5.4.2; § 5.4.3; § 5.4.4; § 5.5.2; § 5.5.3; § 5.5.4). Observations of classroom environments were also monitored on a rubric/scale from 1 to 4 (see Appendix G2) (§ 5.4.5; § 5.5.5).

Participant selection for this study, as well as the way in which data were generated and documented, are described. The researcher provides a detailed description of the research process and selected methodological strategies. Through qualitative-methods research, the researcher shows the result and explains how it is obtained (qualitative) (McMillan & Schumacher, 2010:28).

4.3.1 Research methods

There are various kinds of interpretivism methods nestled under this umbrella term, one of these is known as phenomenology (Creswell, 2014:12). As discussed in chapter 1.7.1 phenomenology is the way an individual perceives life and is based upon the perceptions of people instead of solely on theories (Moon, 2011:1). When conducting this phenomenological approach, the researcher gathered data through semi-structured interviews, documents and visiting places and people to experience the participant's reasoning from their point of view (Muhammed, 2016:8) (§ 1.7.3; § 1.7.5). Curriculum and instructional design in primary schools is something that affects different people in different ways. The narratives of the participants feed the further investigation and exploration of

curriculum and instructional design in selected South African primary schools and therefore the phenomenological approach fitted best with the aim of this study.

According to Bryman (2016:40), a research method is a way of gathering, analysing and interpreting data. Data determine the foundation of a study (Yin, 2011:129). Data-gathering techniques are instruments, such as a test, a questionnaire, an interview, or gathering information by means of a checklist, or visiting a research site while observing the behaviour of individuals (Creswell, 2009:15; Creswell, 2014:209; Yin, 2011:131). Questionnaires, semi-structured interviews, field observation sheet, field observation schedule and field notes were used to gather data in this qualitative-methods research (§ 1.7.5) and are available as appendixes B, C, D, E, F and G.

4.3.1.1 Qualitative research

Humans are unique and base their reality on personal experiences and observations, therefore "reality" becomes something that is personal instead of universal; realities are built upon a person's understanding and interpretation of situations which they use to make sense of life (Cropley, 2019:5). As mentioned in chapter 1 (§ 1.7.2) qualitative data is gathered by and through narratives such as questionnaires, semi-structured interviews, observation schedules and field notes to explain how and why a phenomenon is interpreted in a specific context by a specific individual (Haradhan, 2018:3) (§ 1.7.5). Qualitative research contributes to areas which are growing disciplines, by expanding or discovering new knowledge, it identifies the meaning an individual associate with a specific phenomenon (Jaikumar, 2018:3) (§ 1.7.1).

According to Creswell (2009:173) and Creswell (2014:202), qualitative research methods indicate a different procedure to scholarly inquiry than quantitative research methods. Although the procedures are the same, qualitative research depends on written work and resemblance data, have individual steps in data perusal, and draw on various strategies of inquiry. The strategies of inquiry have an impact on the methods used during research.

Qualitative research methods have two main aims in common: first, the focus on a fact or situation that is observed to exist or happen, especially one whose cause or explanation is in a question; and secondly, those causes, or explanations, are studied in all their intricacies

(Leedy & Ormrod, 2010:135). The main goal of qualitative research is to disclose the nature of several aspects.

The researcher chose to make use of qualitative-methods research because qualitative methods research emphasises the fact that participants in qualitative research experience the research situation as individuals and, therefore, are suitable to make valuable contributions, reflecting their experiences and particular views of life situations. Qualitative research aims to get subjective meaning of an issue or problem under study (Flick, 2015:11) (§ 1.7.2).

The length and expressive nature of the research report forms part of the characteristic of qualitative research (De Vos *et al.*, 2012:425; Yin, 2011:6). These characteristics can be outlined as follows:

- qualitative data provide more detail than quantitative data as words, pictures and quotes are used instead of numbers;
- qualitative research tends to report on factual evidence in a way, so the reader gets a sense of the personalised world of the participants, thus to transfer the reader directly into the world of the study;
- techniques of data collection and data analysis are well explained during qualitative research in a detailed way;
- the investigative nature of qualitative research leads to the development of new concepts or theories by interpreting the data;
- the written account of connected events provided by the qualitative researcher extends the length of the report as it is subjective, confidential and friendly.

The following characteristics of participatory qualitative research were of importance in this study (Creswell, 2009:175; Creswell, 2014:204 - 219):

 Natural settings: The data were collected in selected natural settings in the field at the site where participants were influenced and involved in specific problems. Actual semistructured interviews took place with the participants in these natural settings (§ 1.7.5).

- Research as key instrument: The researcher collected data through field observation of selected natural settings, examining documents, field notes, informal conversation semi-structured interviews, standardised semi-structured interviews, key informant semi-structured interviews and in-depth semi-structured interviews. The researcher engages several events, objects, or people of a similar or related kind coming one after another in the data collection process (§ 1.7.4).
- Multiple sources of data: Different forms of data are collected, and data do not stem from only one source (§ 1.7.3; § 1.7.5).
- Inductive data analysis: Qualitative researchers scaffold their inductive data analysis
 from patterns, categories and themes by grouping the data into more abstract units of
 information (§ 1.7.6).
- Participants' meaning: The researcher's point of departure is always the meaning participants give to the problem or issue and not the researcher's personal meaning or expression in the literature (§ 1.7.4).
- Emergent design: The research process for qualitative researchers is a process of coming into being or becoming prominent and not forceful in a specific direction. A rearrangement can take place after the researcher gains access to the field and starts collecting data (§ 1.7.5).
- Theoretical lens: Theories are formulated to explain, predict and understand phenomena in many cases, to challenge and extend existing knowledge within the limits of critical assumptions. The interpretivist worldview used in this research with the theory of Bronfenbrenner to view and understand the social, political or historical context of the issue under study and focuses on data collection, analysis and composing text to come to a solution and final conclusion in chapter 6. In chapter 1 (§ 1.7.1) the researcher mentioned Bronfenbrenner's ecological system, and in chapter 2 (§ 2.1; § 2.9), the researcher discussed and applied the theory of Bronfenbrenner's ecological system in the South African context. The interaction between these systems influences the physical, biological, psychological, social and cultural development of children. This directs how data are collected and analysed and provides action or change. The

theoretical lens becomes an overall orientation for the study, which shapes the type of research questions (§ 1.7.1).

- Interpretive: Qualitative research is a form of analytical inquiry of what the researcher sees, hears and understands. The backbone of researchers' own history, frame of experience, context and prior knowledge cannot be unconnected from their understanding of the research problem (§ 1.3).
- Holistic account: Qualitative researchers develop a compound impression of the problem under study.

A qualitative study is an inductive process of building from the data to expansive themes to an abstract principle or theory (Gray, 2018:19). According to Creswell (2009:63) and Creswell (2014:69), the following figure illustrates the logic of an inductive approach:

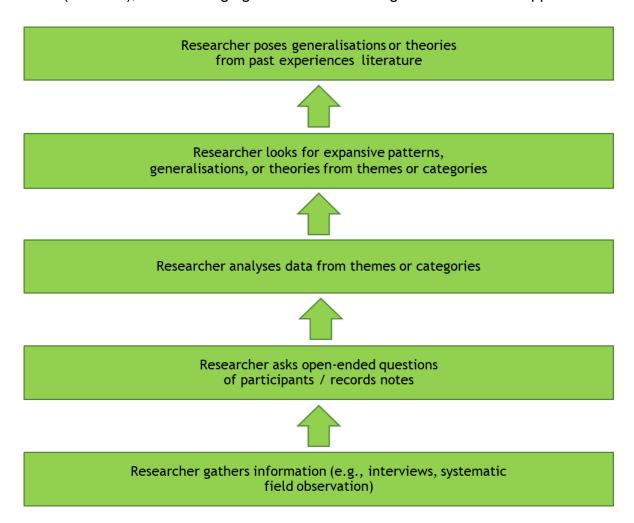


Figure 4.3: The inductive logic of research in a qualitative study (adapted from Creswell, 2009:63; Creswell, 2014:69; Gray, 2018:19)

The researcher in this study depended on qualitative research to gather data to focus on and explore nationally (South Africa) and internationally (Netherlands) curriculum and instructional design in primary schools and their teacher's training. The researcher did semi-structured interviews (Appendix D) to departmental officials and lecturers and questionnaires (Appendix F) to information-rich primary school teachers (participants) of learners 0–12 years. The participants comprised selected primary school teachers from the Netherlands and South Africa (Gauteng and the Eastern Cape). The researcher made field notes during the semi-structured interviews and filled in data on questionnaires (§ 1.7.4; § 1.7.5). This study required an in-depth understanding of exploring curriculum and instructional design in selected South African schools and their teachers in South Africa and the Netherlands (§ 1.7.2).

Teddlie and Tashakkori (2009:99) state that the research question(s) of a study should be of primary importance, more important than either the method or the theoretical paradigm (lens) that underlies the method (§ 1.5). Qualitative-methods procedures are those in which the researcher uses a theoretical lens as an overarching perspective within a design that contains qualitative data (§ 1.7.1). The theoretical lens provides a framework for topics of interest, methods for collecting data, and outcomes anticipated by the study (Creswell, 2009:15; Creswell, 2014:71).

4.3.2 Population and sampling

It is important to take note of the difference between the term "population" and "sampling" (§ 1.7.4).

4.3.2.1 Population

According to Flick (2015:100), "population is the mass of individuals, cases, events to which the statements of the study will refer, and which has to be delimited unambiguously beforehand with regards to the research question and the operationalization". The population of a study refers to the entire group of people who the researcher wants to gain in-depth knowledge from.

The population targeted for the purpose of this study comprised all participants who could provide exploring insight into curriculum and instructional design in selected South African primary schools and their teachers in schools in South Africa and the Netherlands (§ 1.7.4).

The sample group from the population for this study included selected pre-primary, primary school teachers, departmental officials and lecturers in teacher education in South Africa and the Netherlands (§ 1.7.4; § 5.2) will be discussed in § 4.3.2.2.

4.3.2.2 Sampling and sample

The term "sample" refers to a specific group of individuals who will be used to gather data McCombes, (2020:1). Sampling is done for the simple reason that it would be impossible and expensive to gather data from every single person in a specific population. As mentioned in chapter 1 (§ 1.7.4) sampling has to do with identifying and narrowing down the target audience of the study. Sampling therefore refers to the selecting of individuals and sites to conduct the study who can purposefully inform one to understand the research problem and core phenomenon of the study (Creswell & Poth, 2018:158).

According to Bhattacherjee (2012:1) sampling can be done in three steps. The first step requires the researcher to identify their population, this could be individuals, companies, groups or even countries. The second step requires the researcher to draw a list of the accessible members of the population and finally the third step requires the researcher to choose a sample from the population to represent their population and gather data from (Bhattacherjee, 2012:1). The final step of choosing a sample from the population could either be done through probable sampling where the researcher choses participants at random or non-probable sampling where the participants are nominated according to criteria (McCombes, 2020:1). By using the purposeful sampling technique, the population was narrowed down to only a few selected representatives as participants (§ 1.7.4) to this multi case study design. According to Gustafsson (2017:10) a multiple case study design is a valuable qualitative research tool in studying the links between the personal, social, behavioural, psychological, organizational, cultural and environmental factors.

The sample group for this study therefore consisted of selected primary school teachers, departmental officials and lecturers in teacher's training from the Netherlands. The multiple

case sampling was done by selecting teachers from selected pre-primary and primary school phases (0–4 years [pre-primary], 5–9 years [Foundation Phase] and 9–12 years [Intermediate Phase]) in South Africa (§ 1.4.2; § 2.2.1). They were purposefully selected from schools and different quantiles in a good performing province (Gauteng) and underperforming province (Eastern Cape) in South Africa and a cosmopolitan staff composition (§ 1.7.4). The reason for the selected diverse staff composition was a fair representation of the population of each country (South Africa and the Netherlands) and also gender representation. Another prerequisite was that teachers must have been teaching for 20 years in South Africa to be information rich regarding the recent South African education system and teacher's training (§ 1.7.4).

Empirical research was done to explore and gain first-hand experience of curriculum and instructional design (for learners 0–12 years) of selected South African primary schools and selected Netherland schools. The researcher utilised semi-structured interviews to give interviewees a voice on the relativism of the primary school system and management thereof and their training to become primary school teachers as well as in-service training (§ 1.7.3).

Table 4.2: Selected primary schools and selected primary school participants in South Africa and the Netherlands

Selected primary schools in South Africa (Eastern Cape and Gauteng) and the Netherlands. Pre-primary (0–4 years), Foundation Phase (5–9 years) and Intermediate Phase (9–12 years).	Number of selected primary school teacher participants in South Africa	Number of selected primary school teacher participants in the Netherlands
5 Eastern Cape primary schools	10	-
5 Gauteng primary schools	10	-
5 Netherlands primary schools	-	5
Lecturers in South Africa	10	-

Lecturers in the Netherlands	-	5
Departmental Officials in South Africa	5	-
Departmental Officials in the Netherlands	-	-

Five selected primary school teachers (n=5) from five (n=5) selected primary schools from the Netherlands and 20 (n=20) selected primary school teachers from 10 selected primary schools in South Africa (10 selected primary school teachers from Gauteng, and 10 selected primary school teachers from the Eastern Cape) participated in this study. The Netherlands is a smaller country than South Africa and therefore there was a difference in the selected number of primary school teachers and selected primary schools in the Netherlands than South Africa. All selected primary school teacher participants were requested to complete the questionnaire (Appendix F) in their language of choice, which, upon completion, was collected by the researcher (§ 1.7.4).

Five (n=5) lecturers from the Netherlands where teachers were being trained to teach learners 0–12 years were selected, and the lecturers were invited to participate by means of semi-structured interviews comprising of open-ended questions on the research topic (Appendix D). The Netherlands do not have departmental officials (§ 1.7.4).

Five (n=5) selected departmental officials from South Africa were interviewed by means of semi-structured interviews comprising of open-ended questions (Appendix D) (§ 1.7.4).

The data are provided in chapter 5.

4.3.3 Instrumentation and data collection

Data collection was a particularly important step in the research process, through which the researcher could answer the research questions and come up with conclusions. Yin (2011:130) refers to data collection "as a collection of organized information, usually the result of experience, observation and/or experiments. This may consist of numbers, words, or images, particularly as measurements or observations of a set of variables." The researcher made use of a wide range of techniques and adopted a specific approach for

answering the research questions (McMillan & Schumacher, 2010:130) (§ 1.7.5). Validity and reliability are the two basic principles of measurement for all methods (Creswell, 2014:221) (§ 1.8.1; § 1.8.2). Validity refers to the reflection of real meaning of the concept under discussion. Synonyms for validity are truthfulness, accuracy, authenticity, genuineness and soundness of the instrument a researcher uses to answer the research question (De Vos *et al.*, 2012:172).

The collection of data are several events of corresponding in which things are happening or being done to answer emerging research questions. Multiple activities are involved by collecting data, such as locating the site or individuals, gaining access and developing rapport, sampling purposefully, collecting data, recording information, minimising field issues and storing the data securely. Ethical consideration is placed as intersection of the data collection across the phases (Creswell, 2014:227; Creswell & Poth, 2018:148) (§ 1.9).

According to Mouton, data are collected in the following stages:

- identifying and selecting the data sources;
- using measuring instruments: validity and reliability assessment;
- · developing new instruments: design, construction and piloting;
- collecting or gathering data;
- fieldwork/data documentation;
- · date capturing and data editing;
- data analysis and interpretation (synthesis) (Mouton, 2012:99).

Bryman (2016:10) maintains that data collection is the key point of any research project and therefore the issue that arises in all research is that of quality. Research quality relates to all phases of research. According to Mouton (2012:100), some form of measuring instrument must be used to collect data. Existing instruments can be used, or data can be collected by means of the researcher's own instruments. The collection of data takes place through a variety of data collection methods as indicated by Mouton (2012:105). As a point of departure, the table below indicates the classification of data collection methods (§ 1.7.5).

Table 4.3: A classification of data-collection methods (adapted from Mouton, 2012:105)

Data-collection method	Specific types of data collection
Field observation	Experimental (controlled) recordings
	Field observations
	Participant observation
Interviewing	Questionnaires
	Telephone interviews
	Interviewing
	Free attitude interviewing methods
Testing	Psychological or psychometric testing
Selecting and analysing texts	Textual analysis (content analysis, conversation analysis, semiotic analysis and ethnomethodology) Historical or narrative analyses

The researcher utilised semi-structured interviews to give selected interviewees a voice on their knowledge and experience of the primary school system and management thereof and also their training to become primary school teachers as well as in-service training (§ 1.7.5).

The search for answers to all the research questions (§ 1.5) in this qualitative-methods study the researcher relied primarily on the analysis of qualitative data collected through questionnaires with selected teachers (Appendix F) and semi-structured interviews with selected departmental officials and selected lecturers (Appendix D). The qualitative data collected through a field observation schedule (Appendix G1) and a field observation sheet (Appendix G2) were constantly used as descriptive data and as a way to seek clear understanding of the research questions (§ 1.7.4; § 5.4.2; § 5.4.3; § 5.4.4; § 5.4.5; § 5.5.2; § 5.5.3; § 5.5.4; § 5.5.5).

4.3.3.1 The process of data collection

Multiple methods of data collection were used to strengthen the outcomes of this qualitative method study. First, the researcher followed the following steps to gather data from the different primary schools, departmental officials and lecturers.

- Step 1: The researcher went to different selected primary school districts in South Africa (Gauteng and the Eastern Cape) and the Netherlands to get permission from the principal to give questionnaires to these primary school teachers in different phases (0–12 years) to complete the questions (§ 1.7.4; § 5.4.3; § 5.5.3).
- Step 2: The researcher made arrangements to collect the questionnaires from the teachers from different selected primary schools after they had completed them.
- Step 3: Field observation took place in the selected natural field settings (primary schools, classrooms and infra-structure) (§ 1.7.5; § 5.4.4; § 5.4.5; § 5.5.4; § 5.5.5).
- Step 4: The researcher made arrangements with selected lecturers (Netherlands) and selected departmental officers (South Africa) for semi-structured interviews during the visit to them (§ 1.7.3; § 5.4.2; § 5.5.2). Documentary sources from the selected lecturers and selected departmental officials were collected by the researcher. Document analysis (e.g., teacher's training and national curricula), conversation analysis and historical or narrative analysis (from semi-structured interviews) were part of the data collection to select which data were relevant to the research topic and eventually the analysis of the documents (§ 1.7.5).

Data was collected through field observation of these primary schools and classes and were recorded as field notes, questionnaires from selected teachers and semi-structured interviews with above mentioned lecturers and departmental officials (§ 1.7.4; § 1.7.5; § 5.4.2; § 5.5.2). According to Flick (2015:133), most surveys are constructed on questionnaires. Questionnaires can be completed in written form or face-to-face questioning (Nieuwenhuis, 2019:97). The researcher formulated the questions and sequence of questions and possible answers. The questioning and the data collection procedures were planned and executed similarly for all selected participants (Flick, 2015:134). Semi-structured interviews with selected lecturers and selected departmental officials were

prepared to cover the core problem of the research questions in the form of a dialogue between the researcher and the selected interviewees (§ 1.7.4; § 5.4.2; § 5.5.2). The researcher made use of field observation while observing the infrastructure, classrooms, teachers' lesson preparation/planning, and assessment, learning and teaching resources (LTS), timetables, programmes of selected primary schools. The management of these primary schools, districts and departmental officials were observed and interviewed in their respected workplaces. Field observations were conducted openly, and the principals and teachers at the selected primary schools gave their permission before hand for the observation. The field observation schedule (attached as Appendix G1) was taken as field notes by the researcher during field observation visits. The field observation sheet attached as Appendix G2 is part of the processing of field notes (§ 1.7.5; § 5.4.4; § 5.4.5; § 5.5.4; § 5.5.5). The sequencing of data collection as described, occurs in three phases as indicated in the figure below.

4.3.3.2 Phases of data collection for this research

First phase	Second phase	Third phase
Field observation of five (n=5) selected primary schools in the Netherlands.	Field observation of five (n=5) selected primary schools in the Eastern Cape.	 Field observation of five (n=5) selected primary schools in Gauteng.
 Questionnaires with five (n=5) selected teachers in the Netherlands. 	 Questionnaires with 10 (n=10) selected teachers of the Eastern Cape. 	 Questionnaires with 10 (n=10) selected teachers in Gauteng.
 Semi-structured interviews with five (n=5) selected lecturers in the Netherlands. Field notes. 	 Semi-structured interviews with five (n=5) selected lecturers/department al officials. Field notes. 	 Semi-structured interviews with five (n=5) selected lecturers/department al officials. Field notes.
Tield Hotes.		

Figure 4. 4: Phases of data collection

4.3.3.3 Questionnaires

The researcher made use of questionnaires (Appendix F) to collect data from information rich participants on the relativism of the primary school system, curriculum management and teacher's training as well as in-service education in the Netherlands and in two provinces in South Africa, Eastern Cape and Gauteng (§ 1.7.4; § 5.4.3; § 5.5.3). In the Netherlands and South Africa, the researcher made use of purposeful sampling of selected primary schools in the South of Netherland, Gouda (§ 1.7.4). In South Africa, the researcher selected two districts from two provinces, the Eastern Cape (underperforming) and Gauteng (well performing), to visit selected primary schools from different quintiles for data collection. The main reason for purposeful sampling was to explore, interpret to gain better understanding and insights in curriculum and instructional design in selected primary schools of the two countries, the Netherlands and South Africa (§ 1.4.2; § 1.4.3; § 5.2).

Questionnaires were personally delivered and collected by the researcher to five (n=5) selected teachers from the Netherlands and 20 (n=20) selected teachers from South Africa. Ten (n=10) selected primary school teachers from the Eastern Cape and 10 (n=10) selected primary school teachers from Gauteng participated (§ 1.7.4; § 5.4.3; § 5.5.3). The researcher made use of a field observation schedule (Appendix G1) during primary school visits to gather data by means of informal field observation, which formed part of the field notes (§ 1.7.4; § 5.4.4; § 5.5.4). The data collected from these teachers in different primary school phases were representative of learners 0–12 years to explore, interpret and to gain first-hand experience of the curriculum and instructional design of selected primary schools in South Africa and the Netherlands. The making of field notes on the field observation schedule (Appendix G1) was part of the starting process of making sense of data and data analysis while still in the field (§ 1.7.5; § 5.4.4; § 5.5.4) and to ensure the researcher's accuracy (§ 1.8; § 5.3). The observation schedule (Appendix G1) will be discussed.

The questionnaire for teachers (Appendix F) comprised 15 questions (see Appendix F). These participants (teachers) were allowed to share their experiences and knowledge in their language of choice by. The questionnaire determined the capability to teach in the specific grade (question 1), teacher's training (question 2), importance of assessment (question 3), the way assessment was being executed in the country (question 4), policy regarding second and third additional language (question 5), teaching and learning material

(question 6), resources (question 7), use of technology (question 8), inclusiveness (question 9), homework policy (question 10), parent involvement (question 11), extramural activities (question 12), method of intervention (question 13), curriculum (question 14), and preparation of learners to meet the demands of the 21st century (question 15) (§ 5.4.3; § 5.5.3).

4.3.3.4 Interviews

Qualitative data were also collected from five (n=5) selected lecturers from the Netherlands – where teachers are trained to teach learners 0–12 years – by means of semi-structured interviews (Appendix D) (§ 1.7.4; § 1.7.5; § 5.4.2). These semi-structured interviews were used to collect information from lecturers from De Driestar Educatief in Gouda and 12 (n=12) departmental officials from South Africa. Seven (n=7) selected departmental officials from the Eastern Cape in South Africa and five (n=5) selected departmental officials from Gauteng were interviewed (§ 1.7.4; § 5.5.2). The primary school system in the Netherlands does not have departmental officials like the primary school system in South Africa. Departmental officials from Gauteng and the Eastern Cape were therefore interviewed by means of semi-structured face-to-face interviews (§ 1.7.5; § 5.5.2). The semi-structured interviews will be discussed in chapter 5.

The data collection instrument used by the researcher for the semi-structured interviews with the selected departmental officials and the selected lecturers was an interview sheet comprised of 10 questions (see Appendix D). Semi-structured interviews were held in a formal manner with pre-planned and listed questions to guide the interviewer on the content of the interview. The interview determined the responsibility for curriculum design and instruction in the schools in the country (question 1), teacher's training (question 2), any major changes in the country over the last two decades (question 3), in-service education to adapt to changes (question 4), method of intervention in primary schools (question 5), requirements of promotion (question 6), requirements to become a principal (question 7), school management (question 8), improving and preparing learners to meet the demands of the 21st century (question 9), and improving teacher's training (question 10) (§ 5.4.2; § 5.5.2).

Data were gathered by means of a variety of data collection methods and data were classified according to various categories. Data sources were classified as follows: field observation, self-reporting, archival/documentary sources, and physical sources. Field observation took place in selected natural field settings (primary schools), while reporting took place through selected face-to-face interviewing and questionnaires (§ 1.7.5). Using this classification, the following data collection methods were used in this research according to the following categories of Mouton (2012:104):

- Field observation of selected natural field settings (primary schools, classrooms and playgrounds);
- during interviewing, the researcher made use of questionnaires with selected participants (teachers) of both countries and semi-structured interviews with selected lecturers of the Netherlands and selected departmental officials in South Africa as the Netherlands does not have departmental officials like in South Africa.

The duration of the questionnaires and semi-structured interviews was approximately between 30 and 40 minutes. The researcher conversed with and responded to each participant uniquely and in a flexible manner, according to participants' background, culture and the way they articulated themselves. The participants were voluntary to complete the questionnaires in their language of choice. The semi-structured interviews were noted verbatim by the researcher (Creswell, 2014:228; Yin, 2011:158).

4.3.3.5 Field notes and research journal

Semi-structured interviews and questionnaires were accompanied by field notes in a research journal (Creswell, 2014:209; Yin, 2011:109). According to McMillan and Schumacher (2010:348), field notes are created to record and remember the behaviours, activities, events and features of participants and social settings that had been observed. Data were recorded as field notes, or field observations, while the researcher was in the field (natural setting) visiting selected primary schools. The field notes are filled with abbreviations and difficult for others to read without editing. The researcher recorded detailed descriptive notes that was neither vague nor judgemental. Field notes were especially made to explain the nature of the selected workplace (schools, districts and

universities) in order to collect, select and analyse data in and of the real world (World 1) (Yin, 2011:109). The researcher kept field notes as a form of quality control. By keeping a record of all the main discussions and field observations, the researcher constructed a historical record of the whole process to which she could later return and enabled her to recall sites and situations (Mouton,2012:107; Yin, 2011:122) (§ 1.7.4; § 5.4.4; § 5.4.5; § 5.5.4; § 5.5.5).

The researcher used a research journal and a field observation schedule (see Appendix G1) to collect data in selected primary schools in South Africa and the Netherlands by means of informal field observation during visits to sample primary schools (§ 5.4.4; § 5.5.4). Schedule G1, the field observation schedule, comprised five aspects of classroom practice, namely:

- the learning and teaching environment;
- population in classes;
- lesson plans and preparation of lessons;
- · the timetable;
- informal and formal assessment.

The researcher made use of a field observation sheet (Appendix G2) (§ 1.7.5; § 5.4.5; § 5.5.5) as part of qualitative data collection strategy accompanied by a rubric/scale with a rating code of 1 to 4 and a description of competency of each rating code as indicated in Table 4.4:

Table 4.4: Rubric/Scale for field observation sheet (Appendix G2)

Rating Code	Percentages	Description of Competence
4	70% – 100%	Outstanding Achievement
3	50% – 69%	Satisfactory Achievement
2	35% – 49%	Partial Achievement
1	1% – 34%	Not Achieved

I used this field observation sheet (Appendix G2) to observe the environment of selected schools and classrooms in the Netherlands and South Africa (Eastern Cape and Gauteng) to get an in-dept understanding regarding the selected natural settings (primary schools) in the field at the site and circumstances where teachers of the Netherlands and South Africa (Eastern Cape and Gauteng) were influenced by and involved in specific problems on a daily base (§ 1.7.5). The well-being of teachers and learners in both countries were clear through thorough observation during the introduction conversation when the researcher met with the teachers to explain the primary aim (Appendix E) of this study before the teachers completed the questionnaire (Appendix F) in their language of choice (§ 5.4.3; § 5.5.3). The researcher made written field notes of the introduction conversation in her reflective journal and also through the process to ensure accuracy and consistency (§ 1.7.5; § 5.4.5; § 5.5.5).

According to recommendations made by Leedy and Ormrod (2010:253) and De Vos *et al.* (2012:249), the researcher made use of the following five steps to collect data of the field observation sheet (Appendix G2) (§ 5.4.5; § 5.5.5). Quantitative data is used for triangulation during this research to establish validity of findings and to guarantee clarity/confidence in the evaluation of the results in this research (Maree, 2016:121) (§ 1.8.1; § 1.9; § 5.1).

- Step 1: The data were summarised and interpreted by using a field observation sheet (Appendix G2) provided with a rubric/scale with a rating code 1 to 4 and descriptions of competency of each rating code, indicating competence (§ 5.4.5; § 5.5.5);
- Step 2: The researcher made use of the technique to convert the data to numerical form by using the field observation sheet rubric/scale with descriptions of competency (Appendix G2);
- Step 3: After the data was collected, the researcher prepared the data for data entry by
 editing collected data and coding the data by reorganising the raw data into a format of
 numerical codes or numbers with descriptions of competency;
- Step 4: The collected data of the field observation sheet were coded in terms of the rating code, percentages and description of competence (§ 5.4.5; § 5.5.5).

The researcher observed the infrastructure of selected primary schools, classrooms, selected primary school teachers' lesson plans/preparation and assessment, learning and

teaching resources (LTS), timetables, programmes of these primary schools, the management of primary schools, wellbeing of primary school teachers, learners and school communities, parent involvement and the general impression of these primary schools (§ 1.7.5; § 5.4.5; § 5.5.5). This data was recorded and reported as quantitative research contributing to the qualitative methods used in the research process. The field observation sheet (Appendix G2) was processed as field notes during school visits and will be discussed in chapter 5.

4.4 DATA ANALYSIS

Data analysis is a most important process in research as that is what the researcher uses to base all findings on. Qualitative data analysis requires analysing the data using qualitative- methods and procedures. According to Mouton (2012:108) and Creswell and Plano Clark (2011:204), the aim of data analysis is to perceive the intended meaning of one's data through an inspection of the relationships between concepts, constructs or variables, and to realise whether there are patterns or trends that can be identified or isolated, or construct themes in the data (§ 1.7.6). As discussed in chapter 1 (§ 1.7.5), qualitative data gathers its answers from texts. These "texts" include notes on observations, transcribed semi-structured interviews, historical documents, reflecting journals etc. to make sense out of the text (Creswell, 2014:215) (§ 1.7.5).

According to Leedy and Ormrod (2010:153) and Creswell and Plano Clark (2011:205), the researcher follows the following steps:

- Step 1: The researcher put together a large body of information through a variety of data collection methods. The large body of information, through synthetically reasoning, be divided and categorised to boil down to a small set of abstract, fundamental themes.
- Step 2: By using the data coil (spiral), the researcher amalgamated the data several times (Leedy & Ormrod, 2010:153).
- Step 3: I categorised the data and break down large bodies of text to smaller parts and create a computer database (Appendix H). Examined the data several times to get a comprehensive sense thereof while writing down preliminary explanations, identify

categories or groups (themes), and amalgamate the data into categories or groups (themes).

- Step 4: At this stage, the researcher acquired a comprehensive sense of the patterns and definitions in the data.
- Step 5: The researcher encapsulated the data into proportions that describe connections between the categories or groups (themes). The researcher involved packaging the data into organisational programmes (schemes), such as tables, diagrams, or pecking orders (hierarchies).

De Vos *et al.* (2012:403) emphasise that researchers must discover their own processes and analyse and report on the analytical process. Data analysis involves a twofold process, namely: data analysis in the field during data collection; and data collection away from the field following a period of data collection. In this research, after transcribing the qualitative data, all the data gathered through various sources were analysed.

According to Mouton (2012:108), the aim of data analysis "is to understand the various constitutive elements of one's data through an inspection of the relationships between concepts, constructs or variables, and to see whether there are any patterns or trends that can be identified or isolated, or to establish themes in the data" (§ 1.7.6; § 5.6).

According to Bryman (2016:382) coding of data is the starting point of most forms of qualitative data analysis. Coding of data must be done as soon as possible to sharpen the researcher's understanding of data. The researcher has to read many times through the data and make marginal notes about significant remarks or observations. Connections between the codes will become clear by reviewing the codes in relation to the transcripts. The researcher has to consider more general theoretical ideas to outline the connections between the concepts and categories the researcher is developing. Coding must be kept in perspective because coding is part of analysis (Creswell, 2014:217).

4.5 ETHICAL CONSIDERATIONS

Gray (2018:70) and McMillan and Schumacher (2010:142) voice that most research deals with human beings and therefore it is necessary to understand the ethical and legal

responsibilities of conducting research. It is ultimately the responsibility of each researcher to weigh considerations and to make the best possible professional judgement. Mouton (2012:239) views ethical issues as the concerns and conflicts that arise over the proper way research is conducted. Research ethics involves the careful consideration of certain requirements in order to respect the participants and environment involved (De Vos *et al.*, 2012:114). In order to follow the right ethical procedures, participants in this research were asked to give informed consent, asked for voluntary participating and were assured of anonymity and confidentiality and no harmful situations (Creswell, 2014:104; Maree, 2019:48; Yin, 2011:39) (§ 1.9) (see Appendix D; Appendix E).

4.5.1 Informed consent

According to De Vos *et al.* (2012:117) and Gray (2018:76), informed consent entails the communication of all information as accurately as possible about the research to participants so that they can make an informed decision as to whether they want to be participants. The participants in this study (teachers, district officials and lecturers) were able to give written consent (see Appendix D; Appendix E). The researcher provided all the details about the purpose, procedures, risks and the benefits of the research to the participants prior to the questionnaires and the semi-structured interviews. Participants were not deceived, or no information was withheld to mislead them or to try to ensure participation (Maree, 2019:48; Yin, 2011:44) (§ 1.9).

The researcher obtained ethical clearance from UNISA (Ethical Clearance Number: 2019/02/13/61958999/29MC) (see Appendix A 1), the DoE (see Appendix B), to conduct research in schools in the Netherlands and South Africa. The researcher contacted the principals of the designated schools and formally requested permission to involve teachers in the research (see Appendix C). Permission was obtained from all relevant role players (§ 1.9).

4.5.2 Voluntary participation

According to De Vos *et al.* (2012:116) the participation in this study was strictly voluntary and participants could withdraw at any time and stage of the questionnaires or interviews (§

1.9). Voluntary participation was clearly explained to all the participants in advance and written in the consent form (see Appendix D; Appendix E).

4.5.3 Anonymity and confidentiality

Violation of privacy, the right to self-determination and confidentiality can be viewed as being synonymous (De Vos *et al.*, 2012:119; Gray, 2018:79). The researcher must respect the participants' right to privacy, and anonymity must be ensured by omitting all identifiable details (Creswell, 2014:108; Leedy & Ormrod, 2010:102; McMillan & Schumacher, 2010:339).

The participants in this study were assured that all information provided would be strictly confidential. The participants were requested to not include their names, addresses or names of their schools, district offices or universities so as to avoid any traceable details of the participants or institutions.

As such, the researcher kept all data safe, while presenting the findings anonymously in this thesis to protect the participants' identities. The researcher gave each participant a unique, arbitrary, strictly confidential code as suggested by Leedy and Ormrod (2010:102) and Maree (2019: 48) (§ 1.9).

4.5.4 Right not to harm

According to Creswell (2014:107); Leedy & Ormrod (2010:101) and Yin, (2011:46) participants should be ensured that no harm would be done to them in terms of thinking, feeling or experiences and that no harmful physical or psychological conditions during participation would take place ((§ 1.9).

4.6 TRUSTWORTHINESS

Trustworthiness in qualitative research supports the argument that the inquiry's findings are "worth paying attention to" (Creswell, 2014:217). According to Maree (2019:143) trustworthiness refers to the mutual meanings of interpretations and concepts between participants.

4.6.1 Credibility

Criteria for judging the quality of research are described by Ary, Jacobson and Sorensen (2009:499) and Potgieter (2013:19). Credibility is equated with internal validity, transferability with external validity, dependability with reliability, and conformability with objectivity (Creswell, 2014:221; Maree, 2019:143). Leedy and Ormrod (2010:97), McMillan and Schumacher (2010:136) and Potgieter (2013:19) refer to **internal validity** as the degree to which findings correctly map the phenomenon in question. This can be distinguished in three different forms:

Content or substantive validity: content validity applies to procedures, principally instruments, questionnaires or observation charts or tests are valid with respect to the content, provided they are suitable for investigating the intended aspects of the phenomenon under study (Leedy & Ormrod, 2010:28; Potgieter, 2013:20);

Concept validity: concept validity pertains to the quality of conceptualization of applicable concepts, particularly where the object under study needs clarification in theoretical terms. this can be accomplished during the semi-structured interviews, ensuring that both the interviewer and interviewee use concepts consistently (in the sense that both have a clear understanding of what they mean) (Potgieter, 2013:20);

Logical validity: logical validity refers to the research results as well as the research framework. the logic of the research framework must provide arguments that are substantiating in order to defend the research conclusion (Potgieter, 2013:20) (§ 1.8.1).

4.6.2 Dependability

According to Gorard and Taylor (2011:43) and Potgieter (2013:20), dependability is viewed as they fit between what is recorded as data and what has actually occurred in the setting under study, rather than literal consistency in results of observations made by different researchers across different observations. It refers to the stability over time, the consistency through repetition and extending which findings can be replicated or reproduced by another inquirer (Leedy & Ormrod, 2010:28; Maree, 2019:143) (§ 1.8.2).

4.6.3 Objectivity and conformability

Potgieter (2013:20) describes objectivity both as a procedure and a characteristic. To be objective means one is unbiased and open-minded rather than subjective. As a procedure, objectivity refers to data collection and analysis procedures from which only one meaning or interpretation can be derived. Objectivity means that the influence of the researcher's judgement is minimised (Poggenpoel & Myburg, 2004:421) (§ 1.8.3).

4.6.4 Transferability

Transferability refers to the extent to which the researcher's findings of the study can be applied to other situations (Nieuwenhuis, 2019:92). This implies that the results of this study can be used in other studies to gain better understanding of important issues regarding quality curriculum and instructional design in primary schools.

4.7 DATA TRIANGULATION

4.7.1 Data triangulation

Data triangulation involves the use of different sources of data/information and see what correlation and /or discrepancies with literature come forth (Gray, 2018:198; Guion, 2017:1). A key strategy is to categorise each group or type of participants that are evaluated. The researcher should then also ensure that he or she includes a comparable number of people from each stakeholder group in the evaluation study to be representative of the population (Creswell, 2014:221) (§ 1.9). In this research data triangulation took place as data were collected by means of interviews, questionnaires to selected teachers, principals, lecturers and departmental officials in South Africa and the Netherlands and observations of selected schools for learners 0-12 years. This led to and ensures data saturation.

4.7.2 Investigator triangulation

According to Guion (2017:2), investigator triangulation involves using several different evaluators/investigators in an evaluation project. While this is an effective method of establishing validity, it may not always be practical to assemble different evaluators/investigators given time constraints and individual schedules (§ 1.9). In this

research investigators triangulation took place as the researcher was accompanied by her supervisor during all the interviews, completion of questionnaires by participants and observation at selected schools in the Netherlands and South Africa.

4.7.3 Theory triangulation

According to Guion (2017:2), theory triangulation involves the use of multiple professional perspectives to interpret a single set of data/information. One popular approach is to bring together different theories to interpret the information. However, individuals from different disciplines or positions bring different perspectives. Therefore, if each evaluator from different disciplines interprets the information similarly, then validity is established (§ 1.9).

As an Interpretivist researcher the researcher applied the theories of Pestalozzi (§ 1.3) and Bronfenbrenner (§1.3; § 2.1; § 2.9) throughout the research.

4.7.4 Methodological triangulation

Guion (2017:2) describes methodical triangulation as the use of multiple qualitative and/or quantitative methods to study the programme. If the conclusion from each of the methods is the same, then validity is established. This is true for this research. As being qualitative research data were mainly collected by means of qualitative methods, but the quantification of observation by the researcher (Appendix G2) lead to methodological triangulation.

4.7.5 Environmental triangulation

According to Guion (2017:3) and Patton (2008:136), this type of triangulation involves the use of different locations, settings and other key factors related to the environment in which the study took place, such as time of the day, day of the week, or season of the year. The key is identifying which environmental factor, if any, may influence the information you receive during the study. The environmental factor is changed to see if the findings are alike. If the findings are alike under varying environmental conditions, then validity has been established (§ 1.9). In South Africa environmental factors in Gauteng and Eastern Cape are different, but the data the same (§ 5.5.1). This research was done in both countries, South Africa and the Netherlands, during autumn.

4.8 THE RESEARCHER'S ROLE

As suggested by Creswell (2014:226) and Yin (2011:123), the researcher was continuously involved with the participants by means of the questionnaires, Semi-structured interviews and field observations (§ 1.7.4; § 1.7.5). To interpret research data involves ethical and personal background, values, history and socio-economic status, which may influence the researcher's interpretation shaped during a study (§ 1.4.1; § 1.4.2; § 1.4.3). The main focus as researcher was to understand and learn about the research questions through the meanings the participants held about the questions and interviews and not the meanings that the researcher brought to the research. Moreover, ethical considerations are part of the responsibility of the researcher.

The researcher played a dominant role in the design of the questionnaires, semi-structured interviews, field observations and field notes as well as the data collection through various techniques. The researcher further managed the collection of the data and making of field notes (Creswell, 2014:209) (§ 1.7.4; § 1.7.5).

In this qualitative-methods study, one of the main roles as researcher was to give meaning to the data in a trustworthy and honest manner, securing credibility and validity and to strive to maintain objectivity and integrity during the whole research process (Creswell, 2014:109; Mertens, 2018:3; Mouton, 2012:240 & Maree, 2019:143). All data – soft copy data and hard copy data – will be stored for three to five years, according to UNISA's research policy.

4.9 CONCLUSION

In this chapter, the paradigm/worldview, methodology and methods used in social research were discussed. The qualitative-methods research design that was applied in this study was also outlined. The research questions, data collection and methods of data analysis and ethical measures used by the researcher were further explained.

The research elements as discussed in chapter 1 serves to guide the researcher on her way through the research process. In this chapter the focus was on my steps from identifying the problem to formulating questions and aims as well as summarizing the latest and most current research on the phenomena being studied (§ 1.7.1). It also explained methodology, data gathering, analysis of data and the research process followed in this study (§ 1.7.2; §

1.7.5; § 1.7.6). The aim was to explore and collect relevant data that would enable the researcher to understand and interpret how teachers implement curriculum and instructional design in selected primary schools in South Africa and the Netherlands as well as their teacher's training to empower learners for the 21st century.

In chapter 5, the data analysis and findings and presentation of data are reported and discussed. The implications of the empirical findings and interpretation of literature are presented and discussed in chapter 6.

CHAPTER 5: PRESENTATION AND DISCUSSION OF DATA

5.1 INTRODUCTION

Chapter 4 explained the research design, the methodological choices for data collection, and content analysis as well as the strategies used to ensure trustworthiness. The phases of data collection for this research are described in chapter 4 (§ 4.3.3.2).

Chapter 5 provides a detailed account of the data analysis and findings that came from the questionnaires, interviews and observations of selected participants from the Netherlands and South Africa to answer the following research questions that lead the researcher to undertake the research and to reach the answers she initially asked:

- How do teachers implement curriculum and instructional design in selected South African primary schools?
- What are the different teacher education programmes in the mentioned countries?
- How should the teachers be skilled and trained in order to meet curriculum and instructional demands for the different selected primary school phases?
- What suggestions can be proposed to enable teachers and learners in South Africa to meet the demands of the 21st century?

5.2 POPULATION AND SAMPLING

The researcher described the population and sampling for this study in South Africa and the Netherlands in chapter 1 and 4 (§ 1.7.4; § 4.3.2; § 4.3.2.1; § 4.3.2.2). For this study purposefully sampling was drawn in South Africa and the Netherlands to include the rural and urban areas representing the total context of South Africa (§ 1.4.2; § 1,4.3; § 2.2.1; § 2.2.2, § 2.9; § 3.2.1). The researcher made use of selected lecturers from teacher's training colleges in the Netherlands and selected departmental officials in South Africa (Eastern Cape and Gauteng) to be interviewed (Appendix D). The semi-structured interviews consisted of ten questions to interview the selected lecturers (Netherlands) and selected departmental officials (South Africa) to determine deeper understanding of the curriculum

and instructional design and teacher's training (Appendix D) (§ 1.7.3; § 1.7.4; § 1.7.5; § 4.3.2.2; § 4.3.3.4). The researcher also purposefully selected pre-primary and primary school teachers from the different phases of selected primary schools from different quintiles in South Africa (Eastern Cape and Gauteng) and the Netherlands to complete this questionnaire consisted of 15 questions (Appendix F) (§ 1.7.4; § 4.3.2.2; § 4.3.3; § 4.3.3.3). The respondents from both countries had to comply with the following criteria:

- Respondents had to be information-rich participants from various racial groups, males and females (§ 1.7.4)
- Respondents had to be from a cosmopolitan staff composition (§ 1.7.4)
- Respondents had to form part of the different groups in the Netherlands, phases and quintiles in selected South African primary school (0- 4 years, 5 – 9 years, and 10 – 12 years) (§ 2.2.1; § 3.4.2)
- All participants had to have been part of the Netherlands and South African primary school system for the last two decades (§ 1.7.4).

5.3 THE RESEARCH REPORT

According to De Vos *et al.* (2012:278) and Mouton (2012:45), a research report is a way in which a concluded study is communicated to other people. Specific data or clear information should be the main aim of the data analysis, interpretation of data and presenting of information to understand the research questions (Creswell, 2014:219; Patel, 2020:1) (§ 1.5). This study adopted an interpretive paradigm to understand and analyse data on the curriculum and instructional design in selected South African primary schools and the Netherlands (Nieuwenhuis, 2019:120) (§ 1.3).

Interpretivism as a worldview (interest) emerge from actions, a set of circumstances (situations) and results (consequences) that take place in everyday life (World 1) and exist in social, historical or political situations (Creswell, 2009:11; Creswell, 2014:5; Mouton, 2012:138) (§ 1.7.1; § 4.2; § 4.3; § 4.3.1). The focus of the study was on the Netherlands and South Arica to investigate education in a historical context to enhance education as science with a focus on the demands of the 21st century. (§ 1.2; § 1.3; § 3.6; § 6.1; § 6.4).

The researcher made use of empirical research by means of exploring the research questions and interpreted the results of the data analysis to gain a clear understanding of the research problem (Creswell, 2009:11; Creswell, 2014:20; Dean, 2018:3). The research questions gave in-depth knowledge of the realities/perceptions of a phenomenon and will thus be suitable for the research of this study. Through the qualitative methods the research gathered data through narratives such as semi-structured interviews, questionnaires, field notes and the researcher's reflective journal (§ 4.3.3.3; § 4.3.3.4; § 4.3.3.5) (Cropley, 2019:5). Field notes were written down in the researcher's reflective journal after each visit to a selected school to maintain the researcher's memory and accuracy (§ 1.7.4; § 1.7.5; § 4.3.3; § 4.3.3.5; § 4.4; § 4.7) (Kabir, 2016:202).

During the process of data analysis, the researcher made use of multiple methods of data analysis to gain a clear understanding of the findings of the research project in an ingenious and scientifically based manner (Creswell, 2014:215; De Vos *et al.*, 2012:288). The qualitative researcher became the instrument used to gather data and to break down its meaning, by analysing reoccurring themes, patterns and interpretations (§ 1.7.6; § 4.4) (Miles, *et al.*, 2019:344). The researcher made use of research questions to collect data which will be analysed through the method of reduction, identification of themes and determining categories (§ 1.5; § 1.7.6; § 4.4). The data analysis process as on-going findings adjust the types of data needed for collection as well as how data should be collected (Miles, *et al.*, 2019:352). The purpose of an intelligible report is to minimise implications and maximise understanding (De Vos, *et al.*, 2012:402).

The researcher made use of inductive reasoning to provide clear understanding of the research questions (§ 4.3.1.1). According to Teddlie and Tashakhori (2009:93), Mouton (2012:117) and Gray (2018:9), inductive reasoning is a method of reasoning in which the premises are viewed as supplying some evidence for the truth of the conclusion, starting with observation, then generalisation to the paradigm and conclusion (Creswell, 2014:33; Maree, 2019:42). Through inductive analysis, themes emerged from the data during a systematic process of coding, categorising and interpreting data to provide a clear understanding of the research questions (McMillan & Schumacher, 2010:365; Venter, 2011). In this data analysis section, the researcher used data in a narrative form such as a questionnaire, semi-structured interviews, observation schedule, observation sheet, and a

reflective journal to get better understanding of the phenomenon (§ 1.7.5; § 4.3; § 4.3.1.1; § 4.3.3; § 4.3.3.1; § 4.3.3.3; § 4.3.3.4; § 4.3.3.5).

Some researchers prefer to call this section the "understanding of data" (Miles, *et al.*, 2019:352). Colour coding were used to categorise the raw data (Appendix H) into themes and sub-themes and will be presented in § 5.6.

To analyse data, the researcher made use of a data reduction strategy, by getting rid of unnecessary details in summarizing the essence of the data to have smaller quantities of data (Patel, 2020:1). According to Creswell (2014:217) coding is the process of organizing the data by bracketing chunks and writing a word, phrase or sentence representing categories. Systems such as coding, written words were used to represent the exploring interpretation and themes of data in colours (§ 5.6) and a suggested visual framework (§ 6.4) to show insights in the curriculum and instructional design in selected South African primary schools. Different participants have different perspectives, it is therefore not so easy to identify re-occurring themes, sub-themes and patterns from data and Miles *et al.*, (2019:352) advice researchers to be open to multiple possibilities and change patterns of thinking to find the link between the data (Miles, *et al.*, 2019:352). The researcher identified themes and subthemes during data analysis through an inspection of the relationships between concepts, variables, patterns or trends which were identified (Creswell, 2014:217) (§ 4.4).

In this chapter, the researcher reports the process and the results of the study. The themes and sub-themes that were identified during thematic analysis of the raw data are colour coded (§ 5.6) and will be discussed. The researcher includes verbatim responses throughout to support the findings, which ensures trustworthiness of the findings (§ 4.5.1).

In the next part of this chapter the background of the Netherlands (§ 1.4.3; § 3.2) and all data interpretation are discussed.

5.4 THE NETHERLANDS - CONTEXTUAL BACKGROUND

The researcher used Interpretivism as a worldview about the teacher, teacher strategies and the learners (§ 1.7.1; § 4.1; § 4.2). The researcher used Bronfenbrenner's ecological

system's theory for the purpose of this study. Bronfenbrenner's ecological system's theory is an ecological framework for human development. The researcher discussed Bronfenbrenner's ecological system's theory in chapter 1 (§ 1.3) and chapter 2 (§ 2.9) and gets more insights from the contextual background of the Netherlands and South Africa by interpreting the data in this chapter into the theory.



Figure 5.1: Detailed map of the Netherlands (adapted from ontheworldmap.com: 2019)

The current population of the Netherlands is 17 136 286, and the number of primary schools are 7 287. The educational enrolment for primary schools is 1 230 987, and the number of teachers in the primary schools is 84 900 (Van Dam, 2018 & De Jongh, 2018). The Netherlands population is equivalent to 0.22% of the total world population (2019). The Netherlands is among the top countries for equity in education, which means anyone can open a primary school based on their personal beliefs, provided they meet Dutch education standards. The head office of the DoE is located in Den Haag (Van Dam, 2018) (§ 1.4.3; § 3.2.1; § 3.3; § 3.3.1).

International education is available in the Netherlands. Currently, a pilot programme for bilingual (Dutch/English) education is followed in 18 Dutch primary schools. Dutch is still the home language, but some of the subjects, such as history, biology or music, are taught in English (§ 3.2.1). Since 2013, there were 965 primary schools in the Netherlands that

offer English classes and a further 100 that offer German, French, and Spanish. Since 2015, Dutch primary schools have been teaching 15% of courses in English, German, or French. Primary school learners do have the opportunity to learn a second language, such as English, and also learn other subjects such as biology or history in a second language (OECD, 2012; Van Dam, 2018; Visser, 2018) (§ 1.4.3; § 3.2.1).

The Dutch education and training system comprise the following six main elements, as described by Boer (2018) and Bosland (2018):

- Primary education
- Special education
- Secondary (general) education
- Senior secondary vocational education and adult continuing education
- Vocational courses and training for adults
- Higher education (§ 3.3).

Education in the Netherlands is compulsory by law and applies to learners of all nationalities from five years to 18 years who are living in the Netherlands (§ 1.4.3). According to OECD (2014:4) and Bosland (2018), children attend day-care centres or playgroups up until the age of four years (§ 3.4.1). The parents pay primary school fees for children naught to four years in preschool but can claim the primary school fees from income tax as child support. (§ 1.4.3).

Compulsory education starts in primary school (*basis school*) the day after their fourth birthday until they are 16, full time, plus one- or two-years part time until a diploma is attained (until 18 years) (§ 1.4.3). The law requires 16-year-olds, on 1 August of any year, to attend part-time education one or two days a week (Bosland, 2018; Boer, 2018; Visser, 2018) (§ 3.3.1). Primary school hours are required by law to provide 940 hours per year and classes of learning and teaching are held from Monday to Friday (OECD, 2012; Visser, 2018). Primary schools in the Netherlands do not have quintile primary schools; they are all on the same level (§ 3.3). Learners up to the age of 16 years attend primary school for free,

besides occupational supply fees, and learners between the age of 16 years and 18 years pay annual tuition fees. Learners from low-income families can apply for grants or loans between the age of 16 and 18 years while in the Dutch education system (§ 3.3.3).

5.4.1 Data-analysis: The Netherlands

This subsection gives a detailed account of the data analysis and findings from the data collected in the Netherlands.

This study was a qualitative multi case method research design from an interpretivist paradigm (§ 4.1; § 4.3.1.1). The interpretation of the semi-structured interviews (Appendix D) from five selected lecturers (n=5) from the Netherlands, five selected departmental officials (n=5) from Gauteng and seven selected departmental officials (n=7) from the Eastern Cape are presented as qualitative descriptions of competency. The Netherlands does not have departmental officials like South Africa (§ 1.7.4).

This section reports on the data from the selected teachers from the Netherlands on questions related when exploring the curriculum and instructional design of selected primary schools in the Netherlands and provide a summary of the themes that were identified from data collected from selected lecturers in the Netherlands.

During this research, anonymity was ensured to all the participants, and therefore the privacy of these primary schools and the participants are protected (§ 4.5.5). Codes are used to report the research findings. The diversity of participants purposefully sampled for this study is described in (§ 4.3.2.2). The raw data was transcribed by the researcher. The themes and sub-themes were colour coded and divided into categories from raw data (Appendix H), indicated in the transcriptions and presented in table 5.3 (§ 5.6). Codes are labels which are used to identify and recognise themes and sub-themes within the data to apply in this study (De Vos, *et al.*, 2012: 428).

The format for citing data and abbreviations used to indicate specific data sources are as follows:

• Semi-structured interviews (Appendix D)

Abbreviations used to ensure anonymity of participants are the following:

N 1 to N 5: Selected lecturers/participants from the Netherlands.

NT 1 to NT 5: Selected primary school teachers from the Netherlands.

SA 1.1 to SA 1.13: Selected primary school teachers from the Eastern Cape.

SA 2.1 to SA 2.10: Selected primary school teachers from Gauteng.

CSA 1.1 to CSA 1.7: Selected departmental officials/participants from the Eastern Cape.

CSA 2.1 to CSA 2.5: Selected departmental officials/participants from Gauteng.

This section reports on the data analysed from questionnaires and interviews of participants and field observations from **the Netherlands**. Raw data is available as Appendix H. In the discussion cross referencing indicates integration of literature and data.

5.4.2 Data from interviews in the Netherlands (Appendix D)

The following data were obtained from questionnaires. The colours indicate the themes that were derived and is summarised at the end of the chapter.

5.4.2.1 Curriculum design and instruction in the selected primary schools.

Respondent N 1 to N 4: "No formal curriculum prescribed by the department (government). Responsible for own curriculum in primary schools and free to choose own content but must meet the standards of the Dutch education system standards."

Discussion:

The respondents agree on the fact that the Netherlands does not have any formal curriculum prescribed by the government (§ 3.3.1). The Ministry of Education, Culture and Science sets quality Dutch education standards, attainment of targets and social objectives that apply to all types of schools (§ 1.4.3). The national core goals have to be achieved but the schools decide how learners will achieve the level required to meet the core goals (*kerndoelen*) per group. Primary schools in the Netherlands are responsible for their own teaching methods and teaching materials. They are free to choose their own content according to general levels set by government, and further interpretation is left to the primary school itself. The schools in the Netherlands are characterised by a high degree of autonomy (§ 3.3.1).

5.4.2.2 Primary school teacher's training.

Respondents N 1 and N 2: "Teachers are trained at universities and/or Teacher's Training Colleges. Qualifications of teachers in the Netherlands is a bachelor's degree [sic] or 4-year teacher's diploma."

Respondents N 3, N 4 and N 5: "University follows the curriculum. In the 1st and 2nd year, general curriculum, and in 3rd and 4th year, specialise in subjects. You can teach every grade."

Discussion:

The respondents agree that teacher's training in the Netherlands can be at a university or at a teacher's college (§ 3.5). The qualifications of primary school teachers in the Netherlands are a bachelor's degrees or a four-year teacher diploma. The first and second years comprise general curriculum knowledge, and in the third and fourth years, the focus is on conceptual thinking from their own theory and the specialisation in phases. However, after qualifying as primary school teacher, one could teach any group in the primary school. The University of Utrecht offers a combined course of teacher's training for primary education (§ 3.5). At Rotterdam University of Applied Sciences teachers are trained for teaching in primary schools. All students who complete the four-year courses are rewarded a bachelor's degree and are qualified teachers (§ 3.5.2).

5.4.2.3 Major changes during the last two decades (1997–2017).

Respondents N 1, N 4 and N 5: "To include English in the primary schools and the 21stcentury skills and ICT (tablets) are part of the curriculum."

Respondents N 2 and N 3: "Inclusive education: inclusiveness in the mainstream primary schools. Teachers are not trained as inclusive education teachers; must be more learner centred".

Discussion:

The respondents agree that the major changes in the Netherlands system are to include English in primary schools from an early age sometimes even starting from group 1 (4 years)

(§ 1.4.3; § 3.3) and to achieve complete equality for public and private schools under the law with equal state funding through a lump sum allocated by the Dutch government (§ 3.3; § 3.3.3). Eighteen Dutch schools are currently following a pilot programme for bilingual Dutch/English education (§ 1.4.3).

5.4.2.4 In-service education to adapt to changes.

Respondents N 1, N 2 and N 3: "All depends on the teacher's interest. Some are interest in management, and some are interest in teaching and learning. Skilled by own interest through ongoing developmental programmes."

Respondent N 5: "If you need help, you can ask a colleague to help you. No subject advisors, only inspectors to check, they don't help."

Discussion:

The respondents agree that it is the responsibility of the primary school, teachers and colleagues to feel free to be part of in-service (ongoing developmental) programmes to enhance learning and teaching in the Netherlands (§ 3.5.3). Some teachers are trained to be subject leaders, and some are trained to be part of the primary school management, or as lead teachers. Teachers are free to be involved in an in-service comprehensive strategy through the *Teacher's Programme* to maintain and develop their skills and qualifications (§ 3.5.4). The Netherlands has also a three-year programme called the *schools have the Initiative* programme to increase effectiveness on education in six areas namely; results orientated work, human resource management, promoting basic skills, dealing with differences between learners, gifted learners, and enhancing science and technology skills (§ 3.5.4).

5.4.2.5 Monitoring system.

Respondent N 1: "Lead teachers and head of departments [HODs] help to assist teachers with their work [curriculum in the primary school]."

Respondent N 2: "No formal system in primary schools. Only in-service monitoring and own initiative to do reflective skills."

Respondents N 3, N 4 and N 5: "No one does. No time for that. Inspection once in five years. The principals have to look in the classes. Cito is national decided"

Discussion:

The respondents agree that the Netherlands does not have a monitoring system in place to assist teachers in the execution of the curriculum and instructional design. It is the task of primary schools' principal, lead teachers and head of departments (HODs) – to reflect on the quality of teaching and learning. Inspection of primary schools takes place once every five years. The Inspectorate of Education monitors school performance compliance with central rules and regulations (§ 3.3.1). The Cito test, which was nationally decided, takes place in February and June of each year and informal tests take place weekly to determine quality and progress in teaching and learning (§ 1.4.3; § 3.3.1; § 3.4.2). Various research institutes and the education Inspectorate reviews and monitors the quality of educational institutions in the Netherlands (§ 3.3.1).

5.4.2.6 Requirements of promotion.

Respondents N 1 and N 4 : "No extra requirements for promotion you need experience and skills.

Respondent N 5: "If you want to have another function, you have to do a new study e.g., management, special needs or gymnastics."

Discussion:

No extra requirements for promotion are needed to get a promotion in the Netherlands, but teachers need skills and experience to be promoted (§ 3.5). Teachers could teach in primary schools with a bachelor's degree or a four-year teacher's diploma. If a teacher wants another function, he/she has to do a new study, for example, management, special needs, gymnastics, or teach in VBO (12 years+); a specialised subject is needed. It is hard for teachers to get promotion in the Netherlands because there are not many promotion opportunities.

5.4.2.7 Requirements for a teacher to become a principal.

Respondents N 1 and N 3: "Master's in Education or at least a bachelor's degree."

Respondent N 2: "Must have good leadership skills to become a principal at a young age."

Discussion:

The respondents agree that, in the Netherlands, a teacher can become a principal at a young age with a bachelor's or master's degree and good management and leadership skills. Professional development is optional and not compulsory (§ 3.5.3). School leaders in the Netherlands work in autonomous schools, with school boards which appoint school leaders after a selection process. Candidates can be appointed from teaching staff or from outside the education profession. Newly appointed school leaders (principals) are often trained through in-service education training, external training courses provided by the Dutch School Leaders Association, or through training by the School Leaders Academy (NSA) (§ 3.3.2).

Courses are also offered at universities, teacher's training colleges or commercial institutes (§ 3.5.3).

5.4.2.8 Management of primary schools.

Respondents N 1 and N 3: "Master's in Education or at least a bachelor's degree."

Respondent N 2: "Must have good leadership skills to become a principal at a young age."

Discussion:

The respondents agree that the management of primary schools in the Netherlands depend on the director or principal, with co-ordinators (lead teachers) in the different groups. This could differ from primary school to primary school according to expectations of the management team. The structure of management is the same in all primary schools.

Teachers assists each other on school related issues, lesson planning or subject content. The Netherlands does not have departmental officials to assist teachers therefore the teachers are designated to the principal, co-ordinators or colleagues (§ 3.3.1).

5.4.2.9 Prepare learners 0 – 12 years to meet the demands of the 21st century.

Respondents N 1 to N 5: "21st century skills are already part of and included in curriculum of primary schools and teacher's training. Not necessary for extra improvement or preparations to be done."

Discussion:

The respondents agree that the demands of the 21st century are already part of the Netherlands curriculum, and no adjustments are necessary (§ 3.6). Since 2014 iPad schools were established in the Netherlands. These government-funded schools provide learners with iPads and educational apps, which replace everything from books to blackboards. In the iPad schools' teachers become coaches to assist learners direct their own learning and connecting education with job market (§ 3.3).

5.4.2.10 Enhance teacher's training to meet the demands of the 21st century.

Respondents N 1 to N 5: "The demands of the 21st century is [*sic*] already included in the teacher's training. Holistic view of development."

Discussion:

The respondents agree that teacher's training in the Netherlands does not have to be improved to meet the demands of the 21st century; it is already part of the curriculum in primary schools and teacher's training (§ 3.6; § 3.5.4). According to some participants not only cognitive skills must be promoted in teacher's training, but also constructive learning and a holistic view of development. The Netherlands is a highly developed country with a sophisticated teacher's training sector consisting of both university and college education institutes (§ 1.4.3; § 3.5). The teacher's training colleges use the four professional roles of teachers as framework of competence requirements for their teacher's training programmes: • interpersonal role;

- · pedagogical role;
- · organisational role; and
- the role of an expert in subject matter and teaching methods (§ 1.4.3).

The above-mentioned competency requirements are fulfilled in working with learners, colleagues, the school's working environment and with the teachers themselves.

The Netherlands initial teacher's training allow teachers to teach all groups and all subjects in primary education. The initial teacher's training includes an introduction to educate learners with special needs (§ 3.5).

5.4.3 Questionnaire: Selected primary school teachers in the Netherlands (Appendix F)

Five (n=5) teachers from the Netherlands were selected to answer a questionnaire with 15 questions (Appendix F) (§ 4.3.3.3). The researcher selected information-rich participants (§ 4.3.2.2). All participants have been part of the primary school system in the Netherlands over the last two decades (§ 1.7.4). The participants are a fair representation of the population in the Netherlands (§ 4.3.2.2). (Colour coded raw data: Appendix H).

5.4.3.1 Equipped to teach in the phase.

Respondents NT 1 to N 5: "Yes, I feel equipped to teach but specially the learning experience is what me feel equipped to work with these children. Although you always need to learn more about certain barriers for the children with specific needs. Very good teacher's training at Teachers' College.".

Discussion:

All the teachers that participated in the research felt equipped to teach in the phase they were teaching due to very good teacher's training, but some indicated that they needed to learn more about certain learning barriers for learners with special needs. Most of the teachers felt equipped due to enough experience in teaching in the specific group. Teachers in the Netherlands are trained through sophisticated teacher's training courses (§ 1.4.3). They are trained to teach all curriculum subjects, but they are also phase specialists. Current teacher's training requires more knowledge of educating learners with special educational needs (§ 1.4.3; § 3.4.3;). The Dutch Inspectorate of Education prioritises excellent orientated learning and teaching in the Netherlands' schools (§ 3.3.2).

5.4.3.2 Trained for this specific phase.

Respondents NT 1 to N 5: "Yes, I am. But I'm never too old to learn. I am trained for this specific group (phase)."

Discussion:

Data collected from the questionnaires showed that all teachers in the Netherlands are well trained for the phase (group) they are teaching in (§ 1.4.3). The teachers of the Netherlands are also trained to teach all curriculum subjects as well as a specialist subject in the primary school (§ 3.5).

5.4.3.3 Assessment as an important part of the school day.

Respondents NT 1 to N 5: "Yes, assessment is important because it shows us (teachers and parents) how the children progress, competencies and what education and (extra) explanation is needed. If you don't do assessment, you forget things, with assessment you get your intuition on paper with marks."

Discussion:

All the respondents agree that assessment is an important part of the daily primary school day, because it shows the progress of the learners to the teachers as well as the parents. The marks must be written down to strengthen effective development and to make use of assessment to develop learners and enhance learning (§ 3.4.2).

5.4.3.4 Execution of assessment.

Respondents NT 1 and NT 4: "Assessment is used in every primary school in our country. Teachers keep up the marks during the year and 2–4 times a year, the children get a primary school report to show the parents how they are achieving."

Respondents NT 2, NT 3 and NT 5: "2x per jaar worden the kinderen getoets d m v een landelijke toets. Cito test."

Discussion:

The respondents agree that assessment takes place on a day-to-day basis in the Netherlands (§ 3.4.2). Teachers do continuous assessment through homework, oral exams and classwork. The Ministry of Education sets learning standards in language and mathematics, as well as objectives for all schools which guide the teachers in their daytoday assessment (§ 3.4.2). Assessment and evaluation are key elements to determine prescribed learning standards and objectives in the primary schools (§ 3.3). Teachers of the Netherlands assess on an annually base to determine whether the learners have advanced enough to move on to the next grade (§ 3.3). Formal assessment is the Cito exam, which is an independent assessment of final Dutch primary school learners twice annually (§ 1.4.3; § 3.4.2). The primary schools in the Netherlands start with the Cito test at ages 7–8 years. The Cito test is a general test for all primary schools. Before the end exams takes place, group 8 (12-year-olds) teachers assess which level of secondary school education fits best for each learner (§ 1.4.3). Assessment is used in every primary school, and the teachers keep up the marks during the year to inform the learners' parents about learners' progress (§ 1.4.3). It is important for learners to meet the expected core learning objectives at the end of primary and/or lower secondary education (§ 3.3).

5.4.3.5 Policy regarding second- and third-language learners.

Respondent NT 1 to NT 5: "They have to learn Dutch because that is the most spoken language in the country. At most primary schools, English is the second language that children learn. Sometimes from the age of four years most primary schools offer English from the age of 9–11 years."

Discussion:

The respondents agree that the primary schools in the Netherlands teach Dutch as first language because this language is the spoken language and English is the second language (§ 3.2.1). Some primary schools start with English between the ages of four and nine years. Currently, a pilot programme for bilingual (Dutch/English) education is followed in 18 Dutch primary schools (§ 1.4.3) Second- and third- languages in the Netherlands are English, French or West Frisian (only in Friesland) and German) (§ 3.2.1).

5.4.3.6 Teaching and learning material.

Respondents NT 1 to NT 5: "Yes, it is. There are methods for the most subjects and there is extra material as well. For example, there's extra materials for smart kids, and also for children who need extra help."

Discussion:

All the respondents agree that all primary schools in the Netherlands are equipped with the necessary learning and teaching materials for most subjects and there is extra material for smart kids and also for children who need extra assistance (§ 3.3.1). The ministry of education, Culture and Science sets national education funding mechanism in place for the schools in the Netherlands (§ 3.3.3). Schools can decide which teaching materials they purchase from publishers or which teaching and learning materials they need to develop their own resources according to their needs to meet the core goals (§ 3.3.1). Although schools are officially free of charge, schools may ask for parental contributions for special educational activities or events (§ 1.4.3). Municipalities also do have a responsibility for certain areas of education including infrastructure (§ 3.3.1).

5.4.3.7 Resources available and accessible.

Respondents NT 1 to NT 5: "Yes, if it's necessary, there are a lot of possibilities. All necessary things are available in all the primary schools."

Discussion:

All the respondents agree that resources are available and accessible in the Netherlands (§ 3.3.1). The Dutch government equally give funding to all schools through a lump sum to assure quality learning and teaching resources. The school management decide what to buy according to their needs, purchase from publishers or develop their own resources as needed (§ 3.3).

5.4.3.8 Use of technology.

Respondents NT 1 to NT 5: "It is a very important subject at our primary school, it's more in the higher groups than in the lower groups. As teachers and children, we use computers and digital smartboards every day."

Discussion:

All the respondents agree that primary schools in the Netherlands have access to technology and make use of technology on a daily base. The teachers and learners have laptops or computers to work on. All classes are equipped with smartboards (interactive boards) and tablets to encourage schools to focus on the 21st century skills. (§ 3.6). iPad schools have opened since 2014. These government-funded schools provide learners with iPads and educational apps, which replace books and blackboards (§ 3.3).

5.4.3.9 Inclusiveness in primary schools.

Respondent NT 1: "Yes and no. There are a lot of possibilities, and we try to see to the needs of each child. But some problems are too difficult in our classes and those problems take a lot of energy from teachers and the children."

Respondent NT 2: "Ja, tot op zekere hoogte. Een paar jaar geleden is passend onderwijs geintroduceerd met als doel kinderen met extra zorgbehoefte op gebied van leren en/of gedrag binnen het reguliere onderwijs te houden. Veel scholen lopen hierby wel kegen grienzen aan: es is niet altijd genoeg ruimte om deze kinderen goed op te vangen en vaal niet genoeg ondersteuning voor deze kinderen en de leerkrachten."

Respondents NT 3 to NT 5: "Yes, if the child needs more support in anything, they get assessed and get an amount of money and then they can buy extra support for them like physiotherapy, speech therapy or a one-on-one person [sic] next to the child in the primary school. You call it rugzakje/backpack."

Discussion:

All the respondents agree that the system provides for learners with inclusive needs. Initial teacher's training includes an introduction to teach learners with inclusive needs (§ 1.4.3). Current government policy requires more knowledge of educating learners with special needs within teacher's training. Supplementary education for teachers in special education is optional and is a two-year part-time course which focusses on both theory and practice (§ 3.5). A growing number of primary school teachers in the Netherlands have a special education certificate (§ 1.4.3). Learners with special education needs attend primary schools

for special education, and if learners experience barriers to learning, the government makes provision for them to get an amount of money to pay for extra support (rugzakje / backpack). Special education is intended for learners who require more support and guidance due to their specific educational needs. The admission age varies from three years to six years, depending on the type of special education needed (§ 3.4.3).

5.4.3.10 Homework policy.

Respondents NT 1 to NT 5: "No formal homework policy the primary schools decide to give homework or not".

Discussion:

All the respondents agree that primary schools in the Netherlands do not have formal homework policies and it depends on the primary school's policy and teacher's choice to give homework or not. Schools in the Netherlands give homework sparingly (§ 3.3). Play and exercise are more vital to learner's growth. Although there is no formal homework policy, the learners get minimal homework from the age of seven years, but from the ages of 11–12 years, homework increases frequently because homework forms part of learner's day-to-day assessment (§ 3.4.2).

5.4.3.11 Parents/guardian involvement.

Respondents NT 1 to NT 5: "Parents are mostly involved in the active learning and teaching at primary school. However, we expect them to help their children with their homework if necessary. Twice a year there is an evening for parents where they can learn and talk about their children and their progress at primary school (10 minutes for each child). Parents are involved in their children's progress".

Discussion:

All the respondents agree that the parents/guardians are involved in learners' progress and wellbeing in the primary school (§ 3.4.1). Frequently discussing of progress with parents during parent's evenings takes place to inform the parents about learner's progress in primary schools in the Netherlands (§ 3.4.2). The so-called *step-projects* focussed on learners of poorly educated parents and learners of ethnic minorities, involve and encourage parents to

acquire all kinds of general developmental skills (§ 3.4.1). The *step-project* is a pro-active way of dealing with developmental backlogs to enhance quality learning and teaching in primary schools. Some schools in the Netherlands involve parents in early childhood education programmes for children/learners aged two to six years whose first language is not Dutch (§ 3.4.1).

5.4.3.12 Extramural activities.

Respondents NT 1 and NT 3: "Sometimes there are extra lessons in some of these subjects. Once a week a group has movement education/gym for one hour. There is a local organisation that offers extra possibilities for such lessons. We can enrol."

Respondent NT 2: "Naast de wekelijkse gym lessen bieldt de primary school geen extra activiteiten op dit gebied maar via een plaatselijke organisatie worden deze activiteiten wel aangeboden."

Discussion:

All the respondents agree that main extramural activities in primary schools in the Netherlands are Sports and Movement (physical training and swimming), Creative Expression (music and art) is part of the Primary Dutch education attainment targets in six curriculum areas (main elements) for the education system of the Netherlands (§ 3.3).

5.4.3.13 Structures needed to optimise the curriculum and instructional design.

Respondents NT 1, NT 3 and NT 5: "It's important to see each child's needs and possibilities. Safety is a main condition for teaching children. A clear structure is necessary. Knowledge about barriers and how to deal with it. There are a lot of extra support available, like earphones for kids who are easily distracted or personal desk for kids with autism."

Respondent NT 2: "We hebben een leerstofjaarklassen system. Belangrijk is een goede overdracht v d kinderen tussen de leerkrachten v d verschillende groepen. Daarnaast kijken leerkrachten bij elkaar in de klas, wordt geevalueerd of ons onderwijs nog aansluit wat in het voortgezet onderwijs en in de maatschappy verwacht wordt."

Respondent NT 4: "Be aware of the well-being of the learners."

Discussion:

The respondents agree that structures in terms of extra support, safety, learners' wellbeing and learners' progress are part of optimising curriculum and instructional design in the Netherlands. Education is orientated towards the needs and background of learners therefore the principle of *freedom of education* implies that schools are free to determine the content and methods of teaching which includes methods of intervention (§ 3.3; § 3.3.1).

5.4.3.14 Current curriculum appropriate for the phase.

Respondents NT 1 to NT 5: "Yes, we have a lot of equipment and methods and all we need. There is a lot of support by internal guidance. There is money from the government to provide in our needs. Appropriate and very good. No need to change."

Discussion:

The respondents agree that the teachers of the Netherlands are positive about their current curriculum (primary school system) because the teachers have all they need and a lot of equipment methods to use to achieve the outcomes of the primary school's curriculum (§ 3.4.2). The Ministry of Education, Culture and Science sets national education policy standards and examination, but the schools can decide how learners will achieve the level required to meet the core goals (§ 3.3.1). Therefore, it is convenient for the school to be oriented towards the needs and backgrounds of their learners (§ 3.3.1). The teachers receive enough money from the government to address all their needs at primary school and do not need any change in the curriculum (§ 3.3).

5.4.3.15 Current system prepares learners (0–12 years) to meet the demands of the 21st century.

Respondents NT 1 to NT 5: "We doen ons best om de leerlingen toe te rusten op het gebied van leerstof, vaardigheden en een houding ten opzichte van social media, computers etc."

Respondent NT 3: "Yes, we have a lot in store and walking already forward to other countries in the world."

Discussion:

The respondents agree that teachers in primary schools in the Netherlands are positive about the primary school system to prepare learners (0–12 years) to meet the demands of the 21st century, by focussing on the nine pillars for effective schooling (§ 3.6). The Ministry of Education, Culture and Science shows a continuing interest on the nine pillars as a process for improving learner achievement through the systematic design, development and evaluation of instruction (§ 3.6).

5.4.4 Field observations in the Netherlands (Appendix G1)

The following field observation schedule was used by the researcher in primary schools in the Netherlands to collect data during primary school visits. The field observation schedule (Appendix G1) was qualitative by nature. The following data were collected through this informal observation and written down in the researcher's reflective journal after visiting each and every school to maintain the researcher's accuracy (§ 1.7.5; § 4.3.3.5). The observation data (Appendix H) was quantified by the researcher on Appendix G2. The themes and subthemes in Appendix G1 were colour coded as indicated below.

5.4.4.1 Learning and teaching environment (classroom, primary school safety and ventilation)

The primary school environment in the Netherlands is safe, clean and appropriate for quality learning and teaching. The majority of classrooms and recreational amenities are indoors due to weather conditions and have appropriate ventilation. Disciplinary problems are minimal due to more or less the same background of the learners. The Netherlands has one of the most devolved education systems, with schools enjoying a high degree of autonomy which is grounded in the *principle of freedom* to maintain safe, clean and appropriate classrooms for quality learning and teaching (§ 3.3; § 3.6).

5.4.4.2 Population in class (learner/teacher ratio)

The ratio in classes is seldom more than 20–25:1. Learners with special educational needs [LSEN] go to special primary schools from the age of four years. Administrators (principals) at those schools determine class size and composition (§ 3.3).

5.4.4.3 Lesson plans/lesson preparation

Preparation of lesson plans take place every Wednesday afternoon when learners are not at the primary school. Each teacher does his/her own lesson preparation with the assistance of the grade- or departmental head for the specific grade or phase. On Wednesdays, school dismiss learners around noon to enhance the value of healthy family time (§ 3.3).

5.4.4.4 Timetable /Formal primary school hours

Every class in primary schools in the Netherlands has a timetable in accordance with the prescribed regulations of the primary school. Formal primary school hours per day are from 8:30-12:30. Lunch breaks are from 12:30-13:15. Afternoon primary school hours are from 13:15-15:15. Schools in the Netherlands have a fair degree of autonomy in determining how students will be instructed (§ 3.3; § 3.3.1).

5.4.4.5 Informal and formal assessment

Assessment in primary schools in the Netherlands takes place on a day-to-day basis via informal assessment and the CITO exams to determine if a learner is ready for the following level or phase of education (§ 1.4.3; § 3.4.2). The CITO tests are provided to schools from their Education Department situated in The Hague, Netherlands. Learners take the national examination (CITO tests) at the end of primary school (age 12) that serves as the main determinant of the type of secondary school that they will pursue (§ 1.4.3; § 3.4.2)

5.4.5 Field observation sheet in the Netherlands (Appendix G2)

The field observation sheet (Appendix G2) is a quantitative (%) interpretation by the researcher of the field observations made during primary school visits in the Netherlands and serves as methodological triangulation of data (§ 4.3.3; § 4.3.3.5).

The criteria, rating code, percentage and description of competence, according to Appendix G2, were provided in § 4.3.3.5 (Table 4.4).

Table 5.1: Criteria indicating the quantitative data interpretation (the Netherlands) as described in Table 4.4

Criteria	Primary schools in the Netherlands (n=5)	Percentage and description of competence
Infrastructure of primary school (safe environment, ventilation, etc.)	4	70%–100% Outstanding achievement
2. Classroom (physical, tables, chairs, resources, etc.)	4	70%–100% Outstanding achievement
Timetable, lesson plans and teacher's preparation	4	70%–100% Outstanding achievement
Assessment (SBA formal and informal, intervention plans)	4	70%–100% Outstanding achievement
5.1 Learning and teaching support (LTS) and; 5.2 inclusive education	3	70%–100% Satisfactory achievement
J.Z molusive education	2	50%-69% Partial achievement
6. Technology	4	70%–100% Outstanding achievement
7. Management of primary schools	4	70%–100% Outstanding achievement
8. Wellbeing of teachers, learners and parents, stakeholders	4	70%–100% Outstanding achievement

Parent involvement and feedback	4	70%–100% Outstanding achievement
10. General impression of primary schools	4	70%–100% Outstanding achievement

Discussion:

According to the rating scale/rubric, 70% to 100% were allocated to the infrastructure, classrooms, timetables, lesson plans, assessment, technology, management of primary schools, wellbeing of teachers, learners and parents, parent involvement and the general impression of the primary schools as outstanding and excellent (§ 1.4.3; § 3.3; § 3.3.1; § 3.4.1; § 3.4.2; § 3.4.3; § 3.6). Learning and teaching support (LTS) are satisfactory (50% - 69%) and inclusive education is partially achieved (50% - 69%). It is the prerogative of schools in the Netherlands to decide how learners will achieve the level required to meet the core goals compulsory for all schools in the Netherlands provided by the education authority of the Ministry of Education as seen in the literature research chapter 3.3. Schools can decide which teaching materials they purchase from publishers or to develop their own resources according to their needs to meet the core goals. Education is oriented towards the needs and backgrounds of the learners (§ 3.3.1). Special education is open for LSEN from the age of three; it depends on the type of special education involved (§ 3.4.3). Further vocational education focusses on preparing learners for the labour market (§ 3.3.1; § 3.4.3).

5.5 SOUTH AFRICA - CONTEXTUAL BACKGROUND

According to the Constitution of the Republic of South Africa (1996), schooling is compulsory by law and applies to learners of all nationalities, from the age of 6 (grade 1) to the age of 15 years, or the completion of grade 9 (§ 1.2). Education in South Africa is governed by two national departments, namely the DBE (DBE) for primary and secondary primary schools, and the DHET, which is responsible for tertiary education and vocational education (§ 1.4.2; § 2.3.3). Prior to 2009, in South Africa (2018), these two departments were represented by a single Department of Education (§ 1,4,2; § 2.3.3).



Figure 5.2: Detailed map of South Africa (adapted from ontheworldmap.com:2019)

Each of the nine provinces in South Africa have their own education departments that are responsible for implementing, monitoring and support the policies of the national department as well as dealing with their own local issues (§ 1.4.2) (Bredenkamp, 2019; Stolk, 2019). According to Visser (2019), the learner and teacher ratio should be 35:1 but in fact some of the schools struggled with overcrowded classrooms (§ 2.2.1; § 2.8). The ratio of learners is more or less the same in the different provinces. In Gauteng there are about 800 learners per primary school and 28 teachers per primary school, whereas in the Eastern Cape, there are 350 learners per primary school and 12 teachers per primary school. This is important relevant information for this study to explore and determine quality implementation of the curriculum and instructional design. The number of learners attending schools are 23 796 primary schools with 12 490 132 learners in public primary schools and 1 966 independent primary schools with 402 141 learners.

Primary schools in South Africa receive a grant (Norms and Standards) from the government for their operational costs (§ 2.3.2.1). The size of the primary school grant per child depends on the quintile of the primary school. Quintiles determine the socio-economic environment of the primary school. Quintile 1 to 3 primary schools have learners from poor families, and quintile 4 to 5 primary schools have learners from richer families. Quintile 1 to 3 primary schools may apply to be classified as a "no-fee" primary school (§ 1.7.4). Operational costs are part of the maintenance of the primary school grounds, administrative costs, books and educational material and extramural activities. Primary school fees, fundraising projects and

donations form part of supplementary income for primary school grant. There is no limit to the fees set to parents by a primary school. Primary schools in South Africa usually require learners to wear primary school uniforms, which can be expensive, and parents are obliged to buy (Bredenkamp, 2019). According to the DBE (2006:6), primary schools in South Africa consist of the Foundation Phase (Grades R–3), Intermediate Phase (Grades 4–6), and Senior Phase (Grade 7) (Visser, 2019) (§ 2.2.1).

5.5.1 Data analysis: South Africa

This subsection gives a detailed account of the data analysis and findings in South Africa. The research done in South Africa took place in two provinces and in two districts of each province. Gauteng is divided into 15 districts, but the research was done in two (2) districts, Tshwane South and Tshwane North. Research was also done in the Eastern Cape, which is divided into 12 districts. The research for this study has been done in Port Elizabeth/Uitenhage district and in Sarah Baartman district. All the districts consist of urban and rural areas to ensure environmental triangulation (§ 4.6.5).

The quintiles of the selected primary schools in both provinces were between quintile 2 (no-fee primary schools) and 5 (higher socio-economic area schools) (§ 1.7.4). The years of experience of the principals of these primary schools vary between 20 and 39 years. The social-economic climate of the primary schools differs from each other. Some of the selected primary schools are high-performing schools and others are underperforming primary schools (§ 2.2.1). Drug abuse, alcohol abuse, disciplinary challenges, violence, crime, gangsterism, single parenthood and bullying at some of the primary schools and in some of the communities are the main problems experienced (§ 2.1; § 2.2.2; § 2.9). Most of these primary schools are value-driven and their values and norms are visible in the primary school buildings and classrooms (§ 2.3.2.1). All the primary schools rely on the paper budget, Norms and Standards of the DoE, but they also have to hold fundraising events to raise money for appropriate learning and teaching and staff establishment in these schools (Visser, 2019) (§ 2.3.2.1).

Some of these selected schools are guided through efficient leadership, fair decision-making and strategic planning of the primary SGBs (§ 2.5). The SGBs' purpose in primary schools is to improve the quality of teaching and learning, improve the general functioning of the

primary school and ensure the primary schools' financial stability and sustainability (§ 2.5). All these primary schools have school management teams (SMTs) to manage the daily programme at the school and to maintain law and order in terms of teachers, learners and parents (§ 2.7.2.1). The school-based support team (SBST) assists the teachers and learners with inclusive education when learners experience learning problems or learning gaps in mainstream education (§ 2.7.2.1). Furthermore, some of these schools have a feeding scheme to provide learners with food during primary school hours. According to Devereux (2018), the feeding scheme is officially called the National School Nutrition Programme. The aim of the feeding scheme is to foster better-quality education by:

- enhancing the active learning of children;
- providing an incentive to ensure that learners attend school; and
- addressing certain micronutrients deficiencies on a regular basis.

The feeding scheme was introduced in 2002 and involve the Departments of Health, Social Development, Land Affairs, and Agriculture.

This section reports on the data from teachers in South Africa on questions related to the curriculum and instructional design of selected South African primary schools and provide a summary of the themes that were identified from data collected from departmental officials in South Africa.

The format for citing data and abbreviations used to indicate specific data sources are as follows:

• Semi-structured interviews in **South Africa** (Appendix D)

The following abbreviations were used to ensure anomymity of participants.

SA 1.1 to SA 1.13: Selected primary school teachers from the Eastern Cape

SA 2.1 to SA 2.10: Selected primary school teachers from Gauteng

CSA 1.1 to CSA 1.7: Selected departmental officials/participants from the Eastern Cape

CSA 2.1 to CSA 2.5: Selected departmental officials/participants from Gauteng

This section reports on the data analysed from interviews and questionnaires of selected participants and field observations from **South Africa** (Eastern Cape and Gauteng). Raw data is available as Appendix H. In the discussion cross referencing indicates integration of literature and data.

5.5.2 Data from interviews in South Africa (Appendix D)

The following data were obtained from questionnaires. The colours indicate the themes that were derived and is summarised at the end of the chapter.

5.5.2.1 Curriculum design and instruction in selected primary schools.

Respondents CSA 1.1 to CSA 2.3: "Education is made up of the Department of Education (DBE) – primary and secondary primary schools and Higher Education and Training (DHET). DBE is for schooling curriculum. The curriculum is developed internally at DBE Curriculum. They use various stakeholders, representatives, and groups of curriculum experts. There after goes through a public comment process where all parties give input. The Minister then approves. UMALUSI plays the role of Quality Council. Curriculum has to be quality assured."

Discussion:

All the departmental officials agree that South Africa has a formal curriculum prescribed by the Department of Education. The nine provinces in South Africa are responsible for the implementation of curriculum (§ 1.4.2; § 2.6). Curriculum content is formally prescribed and compulsory in all departmental primary schools. DBE is for schooling curriculum. The DBE develops the curriculum internally (§ 2.3.2.1; § 2.6). They use various stakeholders, representatives, and groups of curriculum experts. Thereafter, the curriculum goes through a public comment process where all parties give input (§ 2.3.1). The Minister then approves. UMALUSI plays the role of quality council. The curriculum must be quality assured (§ 1.4.2).

5.5.2.2 Primary school teacher's training.

Respondent CSA 1.1 "Curriculum development through holiday courses, teachers support through monitoring and support, circuit support and lead teachers."

Respondent CSA 1.2: "Pre-primary: hardly any training (mostly) except crash courses. Colleges/Universities lack skills, integrity, hardly no knowledge of learners.

Correspondence certificate or diploma or 10 weeks training after Grade 12."

Respondent CSA 1.3 to CSA 1.6: "Educators are given separate training programmes at universities e.g., to develop teaching material, to understand the implementation of the Curriculum and Assessment Policy Statements or teacher professional development, which include resources, administrative and instructional support."

Respondent CSA 1.7 to CSA 2.5 "Attend workshops and support sessions when they are in the field. These support sessions and workshops are conducted by subject advisors in the different phases. Unions (SAOU) have training on subjects, e.g.,

Mathematics, Languages etc. NECT does training workshops."

Discussion:

The majority of departmental officials agree that teacher's training in South Africa takes place at universities and the minimum qualification currently is a B.Ed. (Bachelor of Education) degree (§ 2.7.2; § 2.8.1). Curriculum advisors and unions train teachers on content in the different phases in primary schools (§ 2.3.3). Entry-level teachers battle in the primary school system because they are ill-equipped when it comes to applying and integrating the curriculum into practice. Pre-primary teachers reportedly get hardly any education (mostly), except for crash courses due to the closure of teacher's training colleges and amalgamation of universities (§ 2.6.1).

5.5.2.3 Major changes during the last two decades (1997–2017).

Respondents CSA: 1.1 to CSA 2.5: "Yes, Curriculum 2005, Revised curriculum, Foundation for Learning. Settled with CAPS. There was more focus on equality and social justice. Inclusive education, early childhood development and special needs education became a

focus. The most comprehensive change was the Curriculum 2005 implementation in 1997. To underpin this curriculum, the OBE approach was used. Then followed the Revised National Curriculum Statement (NRCS) in 2007. The Curriculum and Assessment Policy Statement (CAPS) was produced in 2011 and phased into primary schools 2012."

Discussion:

All the departmental officials agree that there have been major changes in the curriculum during the last decades (§ 2.6.1). The transformation process for 17 education systems to become only one is not something to ignore. Teachers cannot adapt the curriculum to suit their context by changing the curriculum that many times (§ 2.6.4).

5.5.2.4 In-service training education to adapt to changes.

Respondents CSA 1.1 to CSA 2.5: "In-house and through subject advisors. Ongoing workshops and training are available through DBE and teacher's development".

Discussion:

All the departmental officials agree that in-service training in South Africa is the responsibility of the DoE, the subject advisors of the different provinces through subject meetings, workshops and two or three days in trying to upskill teachers (§ 2.3.3; § 2.6.6). In-service training is inadequate when such major changes are made. They envisaged quality training right down to the teacher, but that did not happen. The lack of knowledge, understanding and implementation has been/is a big problem for many facilitators. Two or three days in trying to upskill teachers to such a change is not sufficient. To understand such a change with regard to content coverage and assessment is not possible (§ 2.6.1; § 2.6.5; § 2.7.2).

5.5.2.5 Monitoring system.

Respondent CSA 1.1: "Subject improvement Plan (SIP), Monitoring and Support of SIP, weekly planning and reporting, class visits twice a term and integrated quality management system (IQMS)."

Respondents CSA 1.2 to CSA 2.5: "Weekly meetings in specific grades and in districts to discuss preparation, according to the curriculum. Training sessions presented by district officials, HODs or senior teachers to evaluate learners progress, their written work, admin files, etc. Curriculum advisors support educators at primary schools, e.g., lesson clinics."

Discussion:

Most of the departmental officials agree that, in South Africa, it is the initiative of the DoE and subject advisors to visit primary schools to reflect on the quality of teaching and learning. The subject advisors use a monitoring tool to monitor curriculum coverage and primary school-based assessment (§ 2.3.3). The integrated quality management system (IQMS) also assists teachers in the execution of the curriculum and instructional design in primary schools as well as Continuous Professional Teacher Development (CPTD) (§ 2.8.1).

5.5.2.6 Requirements of promotion.

Respondent CSA 1.1: "Minimum requirements: REQV 13 (entry level); HOD: three years of teaching; deputy principal: five years of teaching; and principal: seven years of teaching."

Respondent CSA 1.2: "Firstly, experience, proper qualifications as advertised, and to be honest ... must be in with the crowd."

Respondents CSA 1.3 and CSA 2.5: "To have the appropriate qualifications, to be registered with South African Council for Educators (SACE), and have sufficient experience."

Discussion:

The departmental officials agree that teachers in South Africa need appropriate qualifications (REQV 13), at least three years' teaching experience, must be registered with

the South African Council for Educators (SACE), and must have subject knowledge in the field needed to be promoted (§ 2.7.2.1; § 2.8.1). Teachers need to be consulted and trained to implement curriculum in their classrooms hassle-free (§ 2.8.1)

5.5.2.7 Requirements for a teacher to become a principal.

Respondents CSA 1.1 to CSA 2.5: "Seven years teaching experience with a B.A. or B.Ed. degree. REQV 13 + 3 years teaching diploma."

Discussion:

All the departmental officials agree that, in South Africa, a teacher could become a principal with a B.A. or B.Ed. degree in Education and seven years of experience in teaching, with proper management skills. The teacher must be registered with SACE (§ 2.7.2; § 2.7.2.1; § 2.8.1).

5.5.2.8 Management of primary schools.

Respondents CSA 1.2 to CSA 2.5: "Private pre-primary primary schools (day care) sometimes unqualified managers. Pre-primary departmental primary schools (Gr. R) on premises of primary schools are the responsibility of the HOD Foundation Phase. Foundation Phase (Gr. R – 3) and Intermediate Phase (Gr 4-6), responsibility of HOD Intermediate Phase. The SMT forms an integral part of primary school management across the phases. Principal, deputy principal, HODs (Foundation Phase/Intermediate phase), grade heads, subject heads. HOD is appointed per level or subject. If not enough HODs [*sic*], the subject head will be appointed to manage a subject or phase."

Discussion:

All the departmental officials agree that the management of primary schools in South Africa depends on the principal, deputy principal, phase departmental heads, grade heads and subject heads (§ 2.7.2.1). The management of the primary school is the responsibility of the School Management Team (principal, deputy principal, phase departmental heads, and/or grade heads and subject heads) (§ 2.7.2.1), but also the responsibility of the SGB (§ 2.5).

Management and control of the school and recommendations of the appointment of teachers are the function of the SGB. Efficient governing bodies always act in an accountable, responsible, fair and transparent manner to ensure effective management in coordination with the school management team (§ 2.5).

5.5.2.9 Prepare learners 0–12 years to meet the demands of the 21st century.

Respondent CSA 1.1: "Curriculum diversity."

Respondent CSA 1.2: "Early childhood is the focus and primary school readiness in terms of emotional, developmental, social and physical needs. Revise curriculum accordingly to learners' needs. Smaller classes, at least two assistant teachers in every

class. Teach learners in mother tongue and separate primary schools from LSEN as in the past."

Respondents CSA 1.3, CSA 1.4, CSA 1.6, CSA 1.7, CSA 2.1 and CSA 2.3: "Be technology-driven, e.g., using tablets in classrooms. Teachers to all have laptops for administration tasks and teaching and learning [sic]."

Respondent CSA 1.5: "There probably will be a curriculum change/adjustment, because how are we going to prepare our learners for a future that does not even exist? The focus will have to change to problem solving, creativity, collaboration with their peers, critical thinking skills, and to be accountable. Teachers need to be encouraged. The learners will have to be encouraged to focus on the future. They will have to think with their heads and acquire skills with their hands."

Respondent CSA 2.4: "Teachers need to prepare their work when they go to class. Be prepared to go an extra mile . Research more before delivering the content Give learner's feedback after each and every activity."

Respondent CSA 2.5: "Learners should be taught in LOLT. Learners should be encouraged to use technology for research projects. Learners should be taught how to use electronic devices to gain more knowledge."

Discussion:

Departmental officials agree that learners must be encouraged to make use of technology by using laptops and tablets. Learners should also use technology to do research projects (§ 1.1; § 3.6). Teachers need to prepare their work when they go to class and be prepared to go an extra mile (§ 1.4.2; § 2.7.1; § 2.7.2.1). Research should be done before delivering the content. Learners should be given feedback after each activity. There probably will be a curriculum change/adjustment and the focus will have to shift to problem solving, creativity, collaboration with their peers, critical thinking skills and accountability (§ 1.2; § 1.4). Teachers need to be encouraged and poor skills must be addressed through CPTD and IQMS (§ 2.8.1). The learners will have to be encouraged to focus on the future through well skilled teachers (§ 2.7.1; § 2.7.2). Teachers should discuss real-life issues and teach life skills according to Bronfenbrenner's ecological system theory (§ 2.9).

5.5.2.10 Enhance teacher's training to meet the demands of the 21st century.

Respondents CSA 1.1, CSA 1.3, CSA 1.4, CSA 1.6, CSA 1.7, CSA 2.1 and CSA 2.5: "Migrate from blackboard to computers/laptops (IT). Teachers need to upskill their technology approach to be involved in online learning and action learning."

Respondent CSA 1.2: "Parent involvement programmes to inform them to prevent neglect, abuse, learning disabilities and awareness programmes on emotional, physical, social and psychological needs of learners. Adapt salaries of educators for teaching over weekends. Counsellors available for educators as well as at primary schools."

Respondent CSA 1.5: "Educators will have to be lifelong learners. Teachers will have to prepare themselves for technology in the class. Training programmes will have to be put in place to deal with the skills and competences for the 21st century teacher. Programmes for training will have to be developed. They will have to change their mindset."

Respondent CSA 2.2: "More practical training during years of study. In-service training. More in-service monitoring and training for younger educators. Invigilation for newly appointed educators."

Respondent CSA 2.3: "Digitale en nie-digitale opleiding. Toepaslike leerstrategieë. Teoretiese vakkennis en aansluiting by aanbieding."

Respondent CSA 2.4: "Facilitators need to fully prepare before teaching. Identify teacher needs so that they can be able to address them. Monitor and support teachers. Encourage technology use."

Discussion:

The departmental officials agreed that South Africa teachers needed to migrate from the blackboard to computers (§ 1.1; § 1.2; § 3.6). Teachers need to prepare and upgrade their own technology skills to encourage technology in the classroom. Therefore, teachers need to upgrade and teach the skills and competencies for the 21st century (§ 1.1; § 1.2).

Teacher's training colleges closed down after the transformation of 1994 and a policy of moving forward towards all-graduated training force was implemented (§ 1.4.2; § 2.7.1). Teacher's training can be enhanced to meet the demands of the 21st century skills by including the necessary knowledge, attitudes behaviours and skills to perform the teacher's tasks effectively in the classroom (§ 2.7.1). It is necessary to compare the teacher's training from a developed country (the Netherlands) to the teacher's training in a developing country (South Africa) to implement good practise and effective teaching and learning in primary schools.

5.5.3 Questionnaire: Selected primary school teachers in South Africa (Appendix F)

Twenty-three primary school teachers from South Africa – 13 teachers from the Eastern Cape and 10 teachers from Gauteng – were selected to answer a questionnaire comprising 15 questions (Appendix F) (§ 1.7.4; § 4.3.3.1; § 4.3.3.3). Due to the social emotional conditions/challenges in South Africa, primary school teachers in South Africa were selected to represent and include Gauteng and the Eastern Cape to collect representative and trustworthy data. The researcher selected information-rich participants (§ 1.7.4; § 4.3.2.1; § 4.3.2.2). All participants have been part of the primary school system in the South Africa over the last two decades (§ 1.7.4). The participants are a fair representation of the population in South Africa (§ 4.3.2.1). (Colour coded raw data: Appendix H).

5.5.3.1 Equipped to teach in the phase.

All respondents in SA 1.1 to SA 1.10: "Yes, I had training in all subjects and still attend workshops with the Department of Education."

Discussion:

All the teachers agree that they feel equipped to teach in the phase they are teaching due to their teacher's training, good primary school management teams and attending workshops presented by the Department of Education (§ 2.3.3; § 2.7.1; § 2.7.2; § 2.7.2.1). The initial training of teachers in South Africa is a B.Ed. degree which is on level 6-7, and the B.Ed. (Hons) at level 8 (§ 2.7.2) as discussed in chapter 2 (§ 2.7.2).

5.5.3.2 Trained for this specific phase.

Respondent SA 1.1 to SA 1.8 and SA 1.10 to SA 2.10: "Yes, I am trained for this specific phase."

Respondent SA 1.9: "No, I was trained for intermediate phase."

Discussion:

Most of the teachers agree that they have appropriate training for the specific phase they work in. One respondent indicated that he/she was trained for another phase but attend workshops to be assisted in related issues (§ 2.3.3). Departmental officials and different unions are assisting teachers with continuous teacher's training in the different phases (bands) and subjects of the primary school (§ 2.3.1; § 2.3.3) The unions and departmental officials also assist teachers in the different phases (bands) with curriculum implementation (§ 2.3.3).

5.5.3.3 Assessment as an important part of the school day.

Respondent SA 1.1 to SA 2.10: "Yes, because it shows you the reflection of where your child is and to determine strengths and weaknesses of learners to be able to support and give intervention or enrichment. Assessment is more marks-driven, sometimes not taken into consideration the whole child, e.g., emotional, physical, socially etc. But admin on the moment is a lot [sic]

]."

Discussion:

All the selected teachers in South Africa agree on the value of assessment for learning to determine the strengths and weaknesses of learners. Some of the selected teachers had major concerns about time-consuming assessment, and some complained about too much paperwork and administration work in classes. The assessment policy which was ushered during OBE amplified teacher's workload drastically (§ 2.6.5). Norm-referenced tests were replaced with criterion-referenced tests which involved informal continuous assessment on a daily base as well as formal assessment (§ 2.6.6). Assessment is an essential feature of the teaching and learning process. The teachers must understand the purposes, methods and assessment to be able to provide feedback to learners and parents. The teachers are responsible for both formative and summative assessments (§ 2.6.5). The SMT's and SBST's assist teachers with the assessment of learners who experience learning problems or learning gaps in mainstream education (§ 2.7.2.1).

5.5.3.4 Execution of assessment.

Respondents SA 1.1: "South Africa works from CAPS. I feel this system does not always work in our primary schools especially in overcrowded classrooms. We are given a short space of time to teach then we need to assess. I feel like CAPS is more assessment drilled rather than true teaching and learning."

Respondents SA 1.2 to SA 1.12 and SA 2.1 to SA 2.10: "Informal and formal assessment. Formal Assessment consists of learners being assessed each term but it's too much paperwork because they (dept) want evidence of practical, oral and written work. Heavy

task on educators to be able to finish each term's curriculum as well. Time is sometimes limited, and 10 weeks mostly need to be pocket into 8 weeks [sic]."

Respondent SA 1.13: "At my primary school we do mostly observation checklists and reports right through the year (Pre-primary school) [sic]."

Discussion:

Most of the selected teachers agree that assessment is curriculum compliant and compulsory. Assessment includes both informal assessment (continuously) and formal assessment (assessment tasks) per subject (§ 1.2; § 2.6.5;). Some of the teachers feel that assessment in primary schools is too much and takes too much teaching and learning time to allocate for assessment. Informal continuous assessment on a daily base as well as formal assessment are part of learning and teaching (§ 2.6.6). The DBE promulgated the Policy on Screening, Identification, Assessment and Support (SIAS) as a national policy in all schools and districts to enhance the standardisation of procedures to identify, assess and provide programmes to the diverse needs of the learners. The adaptive methods of assessment enable learners to give a true account of their knowledge and/or skills (§ 2.6.4).

5.5.3.5 Policy regarding second- and third-language learners.

Respondent SA 1.1: "At our primary school we are dual-medium, it is best for learners to learn in their mother-tongue. We do not have isi-Xhosa at our primary school [sic]." Respondent SA 1.2, SA 1.7, SA 1.10, SA 1.3 and SA 2.5, SA 2.6 and SA 2.8: "Our primary school only offers Afrikaans and English."

Respondent SA 1.3: "We only teach our First Additional Language, but we do not have a third language."

Respondent SA 1. 4: "Intervention should be done. More teachers should be trained to help learners with third language (Xhosa)."

Respondent SA 1.5: "Our Xhosa learners get taught in English."

Respondent SA 1.6: "An African language is being implemented."

Respondents SA 1.8: "Leerders het Huistaal en 1ste Addisionele taal. Soms vat leerders huistaal wat nie hul huistaal is nie. Graad 4 -6 toetse in meer as 1 taal [sic]."

Respondent SA 1.9: "We only do a second language which is Afrikaans. It is called FAL (First Additional Language)."

Respondent SA 1.11: "Skole moet ten minste tweetalig wees, waarvan die tweede taal Engels is. Leerders moet tot in Graad 3 in hul moedertaal onderrig word."

Respondent SA 2.7: "Second language – 40% to pass. Third language – not part of progression."

Respondent SA 2.9: "Third language is implemented as from Gr 1-3 on the moment [sic]. Third language is isiZulu."

Discussion:

Most teachers agree that the primary schools in South Africa teach Afrikaans and English (dual- or parallel medium) and an African language as a third language only in some primary schools (§ 2.6.3). Government tried to ensure that schools adopt a number of strategies to assist learners in embracing the new patriotism. Therefore, currently there are policies that maintain learners to acquire knowledge in their own mother-tongue because learners acquire knowledge better when they study in their mother-tongue, especially in the formative years (§ 2.6.3). The system promotes a sense of pride and identity in the multicultural nature of the South African society.

5.5.3.6 Teaching and learning material.

Respondent SA 1.1, SA 1.7, SA 1.8: "No, with our primary school being a government primary school, we have to raise funds for everything. A lot of my resources is out of my pocket."

Respondent SA 1.2 to SA 1.6 and SA 1.9 to SA 2.10: "Yes we buy ourselves or use our annual budget for that"

Discussion:

The teachers in South Africa agree that most of the primary schools are equipped with the necessary learning and teaching material. Some primary schools experience challenges with learning material and some primary schools make use of their budget (norms and standards) to provide for the necessary material (§ 2.3.2.1; § 2.5). Some teachers must use their own money to buy resource material for their classes. It is part of a teacher's responsibility to be an interpreter of learning and teaching material according to the collective role of teachers in a school's everyday function (§ 2.7.1). Schools receive norms and standards to assure quality learning and teaching which includes the provision of the necessary teaching and learning materials needed (§ 2.3.2.1). The SGBs of schools are also responsible for efficient learning and teaching at schools which includes the equipping of resource material at schools (§ 2.5).

5.5.3.7 Resources available and accessible.

Respondents SA 1.1 to SA 2.10: "Yes some of the resources are available, the rest I have provided. Textbooks, wall charts can be ordered as needed yearly and other teaching aids".

Discussion:

All the teachers agree that resources are available and accessible in South Africa. Some of the lower quintile primary schools were not fully equipped. Some respondents had to buy their own resource material due to learning material and resources that were supposed to be produced by expert writers and publishers but unfortunately have little understanding of curriculum content (§ 2.6.6).

5.5.3.8 Use of technology.

Respondents SA 1.1 to SA 2.10: "We have the basic technology, printers, copiers, computers etc. Teachers have laptops, visualisers and data projectors they can use".

Discussion:

All teachers agree that primary schools in South Africa have access to and use technology daily. Teachers have interactive boards, laptops, computers, visualisers and data projectors

for teaching and learning. Factors that play an important and significant role in the unique context of the current learning and teaching in South Africa are poverty, unemployment, drug abuse, single parenthood, violence, crime and gangsterism cause a backlog to the provision of technological equipment to some of the schools (§ 2.1; § 2.2.2; § 2.9). It is difficult for some communities to live up to the challenges in South Africa. Participants were influenced and involved in specific problems in their natural settings by different challenges as mentioned above. The socio-economic climate and environment of some of the primary schools differs from each other and the quintiles of schools are an indication of what technology can be afforded to offer in some of the primary schools. The micro-, meso-, and ecosystem of Bronfenbrenner's ecological systems theory are clear indications of the interaction between reality (real world), the current educational landscape in South Africa and the ideal circumstances for learning and teaching (§ 1.3; § 2.1; § 2.2.1; § 2.2.2; § 2.9).

5.5.3.9 Inclusiveness in primary schools.

Respondent SA 1.1: "Yes and no. We have a team that work works with them, but we cannot always accommodate them as our classes are too big. No remedial classes."

Respondent SA 1.2 and SA 1.12: "No, we have big numbers in our classes. This cause lots of problems because you cannot give that extra attention to those who need it."

Respondent SA 1.3, SA 1.4, SA 1.8, SA 11: "Yes, we are currently a full-service primary school. We get help from department of Education [sic] to assist us with inclusive needs."

Respondent SA 1.5 and SA 1.6: "Our learners with special educational needs (LSEN) are in mainstream classes. This cause problems as we do not have special classes. They become frustrated and disruptive."

Respondent SA 1.9: "Yes and No. If they have special needs when writing exams, we provide They are put into the mainstream with big classes. The system does not them.

provide anything extra."

Respondent SA 1.10: "Ja en Nee. Ons het leerders wat spesiale aandag nodig het maar dis nie altyd moontlik in 'n groot klas nie. Kinders gaan verlore omdat hulle nie die aandag kry wat hulle nodig het nie."

Respondent SA 1.13: "Yes and No. Children with autism, but not physical challenges."

Respondent SA 2.1: "Ja ons het remediëring in klastyd vir individuele leerders. Ons het assistente wat leerders help in klastyd. Ekstra klasse na skool. Spraakterapeute and arbeidsterapeute. Plaas leerders voor in die klas. Akkommodeer gestremde leerders. Projek Hoop help met fondse vir terapie vir behoeftige leerders."

Respondent SA 2.2: "Ja, inklusiwiteit. Het gestremde leerders wat ons hanteer, ook gehoor en gesiggestremdes. Sit voor in die klas. Gee konsessies – skryf afsonderlik ens."

Respondent SA 2.3: "Ja a.g.v. kleiner klasse kan ons omsien na 'n kind wat spesiale aandag nodig het [sic]."

Respondents SA 2.4, SA 2.5 and SA 2.6: "Yes. Speech therapist, occupational therapist (part of staff establishment), extra class for remedial work during primary school hours."

Respondent SA 2.7 and SA 2.10: "Yes, up to grade 3 they stay in mainstream classes and teachers adapt work for them. Also adapt assessment."

Respondent SA 2.8: "Yes from Gr 4-6 we have a special class for those learners."

Respondent SA 2.9: "Yes. Primary school Based Support Team (SBST) is involved. Have a Down Syndrome learner as well as Autistic learner. Both are accommodated with class group [sic].

Discussion:

All the teachers agree that inclusiveness is accommodated in mainstream primary schools in South Africa. A challenge is overcrowded classes in some of the schools with learners with learning barriers (§ 2.2.1; § 2.6.4). Some of the primary schools have classes for learners with special needs or they use adaptive curriculum and adaptive assessment to teach and learn learners with learning barriers. Some of the schools have speech therapists and occupational therapists as part of their staff establishment. Learners with special educational needs cause disruptive problems and become frustrated in some of the mainstream primary schools. Inclusive education is defined as a learning environment that

promotes the full personal, academic and professional development and support to all learners by Education White Paper 6 (2006) (§ 2.6.4).

5.5.3.10 Homework policy.

Respondents SA 1.1 to SA 2.10: "We send homework daily which children has to do for the next day. We do give homework, but we understand that many learners do not have support from parents. It is each teacher own interpretation of how they give homework.

Discussion:

According to participants, South Africa has no formal homework policy – it depends on the primary schools' policy and teachers can choose whether or not to give homework. Mostly, homework is given daily in the foundation phase to enhance mathematical concepts, reading and spelling. In the intermediate phase, homework entails unfinished classwork and tasks that have to be done at home. Some of the respondents agree that learners do not get support from their parents due to some socio-economic environments (§ 2.2.2). Single parenthood, alcohol and drug abuse and some socio-economic environments have a negative influence on homework (§ 1.3; § 2.2.2; § 2.9).

5.5.3.11 Parents/guardians involvement.

Respondents SA 1.1, SA 1.3 and SA 1.4: "We have parent meetings and teacher/parent conferences where we meet with every parent to discuss their child's progress."

Respondent SA 1.2: "We have a 40% parent ratio that assists at home and the majority do not assist at home."

Respondents SA 1.5 and SA 1.6: "Not at all. Not all have the knowledge or time. Many are brought up by grannies."

Respondents SA 1.7 and SA 1.8: "Baie van die Gr. 1 ouers [sic] is ywerig om leerders te help en te ondersteun, maar in hoër grade is ouers minder betrokke."

Respondents SA 1.9, SA 1.10 and SA 2.9: "The parents vary. Some are very involved and others not Parents are called in when needed. They are all on a WhatsApp group."

for easy communication. We have to cover ourselves with everything as the system is more on the parent's side. We are always wrong."

Respondents SA 1.11, SA 1.12 and SA 2.10: "Ek kan sê die meeste van die ouers is betrokke maar daar is 'n paar wat nie betrokke is nie."

Respondents SA 1.13, SA 2.1, SA 2.2, SA 2.4, SA 2.6, SA 2.7 and SA 2.8: "Regular parents' meetings once a term and relation building functions."

Respondent SA 2.3: "Ouers moet saam huiswerk doen. Hulle moet lees saam met hulle kinders doen anders sal die kinders nooit lees nie. Te min tyd in die klas."

Respondent SA 2.5: "Ouers help veral met Grondslagfase in die middae, waar ouers in die Intersenfase mag help met navorsingsmateriaal [sic] versamel, maar take/opdragte word in klastyd gedoen."

Discussion:

Teachers agree that some parents/guardians are involved in learners' progress and wellbeing in the primary school. Frequent discussions on progress occur during parent meetings, open-days and WhatsApp groups in some primary schools in South Africa.

Parents of foundation phase learners are more involved in learners' progress than parents of intermediate phase learners. Some of the primary schools are high performing schools and some are underperforming schools. The same with the parent/guardian involvement. It also correlates with some social-economic climate and environment of the natural setting (primary school). Teachers struggle with ethnic diversity, single parent families, and poverty, to name but a few. All those aspects are aggravating circumstances for parents/guardians to be involved in the learning and teaching of some primary schools (§ 2.2.2; § 2.9).

5.5.3.12 Extramural activities.

Respondents SA 1.1 to SA 2.10: "Yes, we do have a variety of sports and cultural activities and a holistic approach to learner's development".

Discussion:

Teachers agree that primary schools in South Africa have a variety of sport and cultural activities. Most of the primary schools have a holistic approach when deciding on extramural activities. They have sport and cultural activities for learners. Primary schools have the right to an own identity as long as it falls within the framework of its duty to be a primary school (§ 2.7.2.1). This is the right to have an own name, colours, traditions, songs and extramural activities (§ 2.4). One of the priorities of the governing body (SGB) of primary schools is to unlock the full potential of the primary school, teachers and learners. Curriculum and extramural activities are intertwined in the unlocking of potential (§ 2.5).

5.5.3.13 Structures needed to optimise the curriculum and instructional design.

Respondent SA 1.1: "We have a support team for learners, we have a pastor that works with them as well as a learner support agent."

Respondents SA 1.2, SA 1.3 and SA 1.4: "We need more classroom space with big classes, discipline problems with learners, occupational therapists or remedial teachers."

Respondent SA 1.6: "A simplified curriculum. Intervention from the Department of Education."

Respondent SA 1.8: "Benodig LSEN klasse by skole."

Respondents SA 1.10 en SA 2.6: "Minder assessering en meer klastyd. Daar is ook geweldig baie admin en papierwerk wat baie tyd steel."

Respondents SA 2.1, SA 2.2 and SA 2.9: "We need qualified Remedial teachers. Psychologist, and assistants to help learners keep up with the Therapists to assist learners with problems from department. Primary school therapists to assist immediately."

Discussion:

Teachers agree that the main concern in some primary schools in South Africa is a lack of specialised personnel (remedial teachers, occupational therapists, pastors, psychologists at primary schools, etc.) to assist teachers to cope with learners with learning barriers and to assist leaners to keep up the pace. Some teachers need a system where the discipline of

learners can improve, overcrowded classes and less assessment and paperwork (§ 2.2.1; § 2.6.5) Some schools should adopt new strategies and structures to optimise the curriculum and instructional design through the introduction of religion education into primary schools, making multilingualism happen, making some primary schools safe and upholding the rule of law and nurturing patriotism which includes a shared sense pride of in commonly values (§ 2.6.3). The most significant problem learners and teachers are currently facing in some primary schools, is the overcrowded classrooms. This makes it difficult for teachers to invest in, support and nurture all their learner's wellbeing (§ 2.2.1).

5.5.3.14 Current curriculum appropriate for the phase.

Respondents SA 1.1 to SA 1.5: "Yes, but this curriculum doesn't always work with big classes."

Respondents SA 1.6, SA 1.7, SA 1.8, SA 1.13: "No, too much content. No time for revision or basics."

Respondents SA 1.9 to SA 1.12: "Yes the work is appropriate, but the workload is not. I feel the learners need more time to learn in a fun way and have as much pressure at such a young age."

Respondents SA 2.1, SA 2.2, SA 2.3, SA 2.4, SA 2.8 and SA 2.9: "Ja die kurrikulum voldoen."

Respondent SA 2.1: "Ja die kurrikulum dek wel alles maar dit is te veel vir die kinders. Ons jaag deur alles."

Respondent SA 2.4: "Yes our primary school add [sic] extra work to the curriculum to lift the standard in preparation for high primary school standards."

Respondent SA 2.7: "No, maths sometimes jumps around between concepts."

Teachers agree and are positive about the current curriculum (primary school system) because they have equipment in their primary schools to use to determine the primary school's curriculum. Some of the teachers feel the curriculum is not suitable in terms of the standard and logical sequence in mathematics, too much content for too little time to

consolidate concepts, and the classes in some primary schools are overcrowded (§ 2.2.1). South Africa is currently experiencing a shortage of teachers due to overloaded work expectations, poor teaching conditions and above all a lack of resources in some communities and overcrowded classrooms (§ 2.2.1; § 2.2.2; § 2.9).

5.5.3.15 Current system prepares learners (0–12 years) to meet the demands of the 21st century.

Respondent SA 1.1, SA 1.2, SA 1.4, SA 1.5, SA 1.6, SA 1.7, SA 1.8, SA 1.12, SA 2.1, SA 2.2, SA 2.4, SA 2.8, SA 2.10: "No, not with the continuous drop of percentages of certain subjects and requirements. Too many changes. We are not focussed enough on technology. We still cling to old methods. The system is failing the kids. Do not prepare learners for the demands of the 21st century."

Respondents SA 1.3, SA 1.10, SA 1.11 "Yes."

Respondents SA 1.9, SA 2.5, SA 2.6 and SA 2.7: "Yes and No. The technology in our country is not up to the same standards as private primary schools."

Discussion:

Most of the selected teachers in South Africa agree that the curriculum and instructional design in some primary schools are not good enough to prepare learners to meet the demands of the 21st century (§ 1.1; § 1.2; § 1.3; § 3.6). The system is failing some learners due to too many changes, and the curriculum is not focussed on technology. There are many schools in SA within areas of socio-economic environmental deprivation and therefore the demands of the 21st century skills cannot be met (§ 2.2.2; § 2.9).

5.5.4 Field observations in South Africa (Appendix G1)

The following field observation schedule was used by the researcher in selected primary schools in South Africa to collect data during primary school visits. The field observation schedule (Appendix G1) was qualitative by nature. The following data were collected through this informal information and written down in the researcher's reflective journal after visiting each and every selected school to maintain the researcher's accuracy (§ 1.7.5; §

4.3.3.5). The observation data (Appendix H) was quantified by the researcher on Appendix G2. The themes and subthemes were colour coded in Appendix G1 as indicated below.

5.5.4.1 Learning and teaching environment (classroom, primary school safety and ventilation)

The learning and teaching environment of some primary schools in South Africa are not safe anymore due to accumulative bullying, crime, violence, single parenthood, social-economic climate, alcohol and drug abuse within some schools and all these factors involve some of the primary school communities (§ 2.2.1; § 2.2.2, § 2.6.1; § 2.9).

5.5.4.2 Population in class (learner/teacher ratio)

The ratio in primary school classes in South Africa are 35:1 per class without assistants and with inclusive education in mainstream education. Population in classes is in accordance of policy 35:1, but in practice some overcrowded classes are part of teacher's daily lives (§ 1.4.1; § 2.2.1). Too many learners and inclusive education in some mainstream classes negatively affect quality learning and teaching in some primary schools (§ 2.6.4).

5.5.4.3 Lesson plans/lesson preparation

Each primary school teacher does his/her own lesson preparation with the assistance of the grade- or departmental heads for the specific grade or phase. Some teachers use the National Education Collaboration Trust (NECT) lesson plans for preparation. NECT is an active collaboration of the different unions who constructively participate in developing learning material to enhance effective learning and teaching (§ 2.3.1). The initiative started in 2016 to develop lesson plans, learning material and pace setters according to curriculum.

5.5.4.4 Timetable/Formal primary school hours

Every class in the primary schools has a timetable in accordance with the prescribed regulations of the compulsory curriculum. Formal primary school hours are curriculum compliant. Timetables are visible in all the classrooms.

5.5.4.5 Informal and formal assessment

Assessment in primary schools in South African is done by means of informal assessment and formal assessment tasks to determine individual learner's progress (§ 1.2; § 2.6.4; § 2.6.5; § 2.6.6; § 2.7.1).

5.5.5 Field observation sheet in South Africa (Appendix G2)

The field observation sheet (Appendix G2) is a quantitative (%) interpretation by the researcher of field observations during primary school visits in South Africa (§ 1.7.5; § 4.3). The quantification of the observations serves for the purpose of methodological triangulating of data (§ 1.9; § 4.6.4).

Table 5.2: The criteria, rating code, percentage and description of competence (Appendix G2)

Criteria	Primary schools in South Africa (n=13)	Percentages and description of competence
Infrastructure of primary school (safe environment, ventilation, etc.)	3	50%–69% Satisfactory achievement
2. Classroom (physical, tables, chairs, resources, etc.)	3	50%–69% Satisfactory achievement
Timetable, lesson plans and teacher's preparation	3	50%–69% Satisfactory achievement
Assessment (SBA formal and informal, intervention plans)	2	35%–49% Partial achievement
5. 5.1 Learning and teaching support and;	3	5.1 50%–69% Satisfactory achievement
5.2 inclusive education	3	5.2 50%- 69%

6.Technology	2	35%–49% Partial achievement
7. Management of primary schools	3	50%–69% Satisfactory achievement
8. Wellbeing of teachers, learners and parents, stakeholders	2	35%–49% Partial achievement
9. Parent involvement and feedback	2	35%–49% Partial achievement
10. General impression of primary schools	3	50%–69% Satisfactory achievement

Discussion:

According to the researcher's quantification of observations in Table 5.2, the primary schools in South Africa obtained a satisfactory achievement (50% - 69%) in infrastructure of primary schools, classrooms, timetables and lesson plans, learning and teaching support (LTS), inclusive education, and general impression. All schools, quintile 1 – 5 schools (§ 1.7.4) receive norms and standards for school funding which is calculated according to a formula from government (§ 2.3.2.1). These primary schools obtained partially achievement (35% - 49%) in assessment, technology, wellbeing of teachers, learners and parents, and parent involvement and feedback and is also evident in chapter 2 (§ 2.2.2; § 2.5; § 2.6.1). Parent and community involvement are not as it supposed to be due to socio-economic factors (§ 2.2.2; § 2.5). Management differs from primary school to primary school according to context differences in quintile one to five schools. The effectiveness of management is not the same in quintile 1 – 3 primary schools than in quintile 4 - 5 primary schools but the average allocated to management of primary schools in South Africa is satisfactory (§ 2.3.3), 50% - 69%.

5.6 COLOUR CODING OF THEMES AND SUB-THEMES

The following table gives a summary of themes and sub-themes identified for the Netherlands and South Africa selected primary schools from different data sources as highlighted in this chapter and indicated by the following colours:

Table 5.3: Colour-coding of identified themes

Colour	Themes	Sub-themes
	Determining factors of learners and context in South African schools	 1.1 Learner/teacher ratio 1.2 Promote parent involvement 1.3 Create a safe learning and teaching environment 1.4 Enhance social emotional wellbeing of community 1.5 Community involvement 1.6 Anti-bullying policy
	2. Proficient teacher's training for primary school teachers in South Africa	 2.1 Quality of training 2.2 Uniformity of teacher training 2.3 Core elements in teacher training 2.4 Adaption of 21st century skills in curriculum of teacher training 2.5 Emphasis of morals and values 2.6 Encourage teachers to do research before delivering content 2.7 All teachers must be computer literate 2.8 Invigilation of newly appointed teachers 2.9 Reconsider the number of extramural activities 2.10 Indigenisation of training

	2.11 Align training with the economy market in South Africa
3. Challenges in terms of curriculum and assessment	 3.1 Avoid too many changes 3.2 Curriculum adaption 3.3 Reconsider in-service training 3.4 Compulsory mother tongue teaching 3.5 Revise curriculum in terms of learner needs and content knowledge 3.6 Implement parent involvement programmes 3.7 Reconsider the number of assessments 3.8 Avoid too much paper and administration work 3.9 Focus on learner support
4. Problems within the education system	 4.1 Focus on well-qualified principals 4.2 Managers of schools need extra qualifications 4.3 Focus on teacher/learner ratio 4.4 Migrate from blackboard to computers 4.5 Focus on 21st century needs 4.6 Reconsider duel/parallel-medium schools 4.7 Indigenous languages need well trained teachers 4.8 Deliver enough learning and teaching material to schools 4.9 Build enough schools according to the needs of all learners in South Africa 4.10 Prioritise and focus on core elements

5. Lack of 21st century skills and equipment	5.1 Schools need to be technology-driven5.2 Expose teachers and learners to technology
	5.3 Focus on core 21st century skills5.4 Paradigm shift for teachers, learners
	and parents to think with their heads and acquire skills with their hands.

Discussion of themes and sub-themes:

As mentioned in chapter 1 (§ 1.7.1) and chapter 4 (§ 4.2; § 4.3; § 4.3.1) interpretivism as worldview emerge from the following categories, namely actions, circumstances (situations) and results (consequences) and exist in social, historical or political situations. From the table above (table 5.3) it is clear that the main themes and sub-themes identified for South Africa primary schools were determining factors of learners and context, proficient teacher's training for primary school teachers, challenges in terms of the curriculum and assessment, problems within the education system and a lack of 21st century skills and equipment. Teachers use information about the learning/teaching context and learner individual differences to set learning objectives, benchmark and plan instruction and assessment. Factors to keep in mind for this study include age, special needs, developmental levels, culture, language and learner's abilities (§ 1.4.1; § 2.1; § 2.2.2, § 2.6.4; § 2.6.3; § 5.5; § 5.5.3.5; § 5.5.3.9; § 6.4). Contextual factors are part of sociological concepts and can be defined as environmental factors that explain or justify individuals' life experiences (§ 1.4.3; § 2.2.1; § 2.2.2). The socio-cultural and environmental background influence learners' development (§ 2.1; § 2.2.2; § 3.2.1; § 6.4). Therefore, learner/teacher ratio, parent involvement, a safe teaching and learning environment, the social emotional wellbeing and involvement of the community and an anti-bullying policy are relevant factors to promote efficient learning and teaching (§ 1.4.1; § 2.1; § 2.2.2; § 5.5.1; § 5.5.3.10; § 5.5.3.11; § 5.5.4.1; § 5.5.4.2; § 6.4). **Proficient teachers** are bodies of professional knowledge of pedagogical principles and skills and knowledge of the subject/phase matter to be taught (§ 1.4.1; § 2.7.2.1). Teachers need a variety of skills, education and training to become

proficient in their careers. They also need interpersonal skills, such as patience and the ability to remain calm in stressful situations (§ 2.7.1; § 2.7.2; § 3.5; § 6.4). Collaborative skills enable them to work productively with their colleagues (§ 2.6.2). Teacher quality is essential to get the best out of learners. Therefore, the quality and uniformity in teacher's training, the adaption of 21st-century skills in the curriculum, morals and values, invigilation of newly appointed teachers, reconsidering of extramural activities and the indigenization of teacher's training will enable proficient teachers to start their career (§ 2.7.1; § 2.7.2; § 5.5.1; § 5.5.2.2; § 5.5.2.4; § 5.5.2.9; § 5.5.2.10; § 5.5.3.12; § 5.5.3.15; § 6.4). The purpose of the curriculum in South Africa is to outline the concepts to be taught to learners to assist them to meet the content standards (§ 2.6.6; § 2.6.9; § 5.5.2.1; § 5.5.3.13; § 5.5.3.14; § 6.4). Too much change in the curriculum aggravates the task of teachers to adapt the curriculum to suit their context (§ 2.6.5; § 5.5.2.3). Assessment is an approach to teaching and learning that creates feedback which is then used to improve students' performance (§ 1.2; § 2.6.5; § 3.4.2; § 5.5.3.1; § 5.5.3.4 § 6.4). The goals for each subject/phase are not just for learners, they are also for teachers to standardize the learning goals for an entire school and provides a clear path for learners to progress from one grade to another (§ 2.6.2; § 2.6.3; § 3.3; § 3.3.1; § 5.5.3.4; § 6.4). Therefore, to improve instruction and learning too many changes must be avoided, curriculum must be adapted to include all learners, in-service training to demonstrate success must be reconsidered, and mother tongue teaching in the formative years must be considered to adopt a better understanding of the curriculum which will assist learners to develop their critical thinking and literacy skills (§ 2.6.3; § 2.6.4; § 2.6.5; § 5.5.2.3; § 5.5.2.4; § 6.4). To meet content standards through curriculum and assessment it is important to identify key needs in terms of the current level of knowledge and skills, and the level of knowledge and skills required to perform in the 21st century (§ 1.1; § 1.3; § 5.5.2.9; § 5.5.2.10; § 5.5.3.15). The number of assessments must be minimized to avoid too much paperwork and focus must be on learner support and motivation of parent involvement (§ 5.5.3.1). The **education system** is a group of institutions, ministries of education, local education, authorities, teacher training institutions, schools and universities, whose primary purpose is to provide education to children and young people in educational settings (§ 1.1; § 1.2; § 2.2; § 3.3; § 3.4; § 5.5.2.1; § 6.4). Good leadership in primary schools helps to foster both a positive and motivating culture for teachers and a high-quality experience for learners. Therefore, the focus in the education system must be on well-qualified principals

or managers of schools. Principals have a key role to play in setting direction and creating a positive school culture including a proactive mindset in terms of teacher/learner ratio, well trained teachers for indigenous languages, the delivering of enough learning of teaching material to teachers, learner's priorities and to focus on core elements needed for the 21stcentury (§ 2.6.3; § 2.7.2.1; § 2.8; § 5.5.2.7; § 5.5.2.8; § 5.5.2.9; § 5.5.3.5; § 5.5.3.6; § 5.5.3.7; 5.5.4.2; § 6.4). The education system of the 21st century has changed radically with the need of integrating technology in schools. Teachers and learners need to be exposed to technology (§ 5.5.3.8). The 21st century skills and equipment are intended to assist learners to keep up the lightning pace of today's modern markets by giving learners the skills they need to succeed in this new world and helping them grow the confidence to practice those skills (§ 1.1; § 5.5.2.9; § 5.5.2.9; § 5.5.3.8). Each skill is unique in how it assists learners; however, they all have one quality in common; they are essential in the age of the internet. The 21st century skills and equipment are important to learners to provide a framework for successful learning in the classroom, but also to ensure learners can thrive in a world where change is constant and learning never stops (§ 1.2; § 1.3; § 3.6; § 5.5.2.9; § 5.5.2.10; 5.5.3.8; § 5.5.3.15; § 6.4). All the above-mentioned themes and sub-themes are interpreted according to Bronfenbrenner's ecological system theory in the following section.

5.7 INTERPRETATION OF BRONFENBRENNER'S ECOLOGICAL SYSTEMS THEORY

The dimensions of Bronfenbrenner's ecological systems theory interact in different levels in the social context of human beings. The different levels are person factors such as behaviour tendencies; process factors such as patterns of interaction and contexts such as schools and families; and time, as changes take place in the environment due to history (§ 2.9). Table 5.4 indicates how Bronfenbrenner's ecological systems theory is applied in the lives of children comparing the theory in the Netherlands and South Africa based on data findings and literature.

Table 5.4: Interpretation of Bronfenbrenner's ecological systems theory

Bronfenbrenner's	The primary school	The primary school
Ecological Systems	system of the	system of South Africa
Theory	Netherlands	
1. Macrosystem of	1.1 Socio-economic	1.1 Socio-economic
Bronfenbrenner's	climate:	climate:
ecological systems theory.		
	The Netherlands is	The South African
	densely populated, highly	economy is not a wealthy
	urbanised and a wealthy	country compare to the
	country (§ 3.2.1).	Netherlands. South Africa
	Globalisation has a major	faces key challenges in
	impact on the economy in	some schools such as
	the Netherlands, given its	poverty, low levels of
	important role as a	education and
	European trade and	unemployment. Poor
	transportation (§ 3.2.1).	people struggle to pay for
	The Netherlands is a safe	basic needs. Hunger, lack
	country to live in. They see	of houses and living in poor
	the family as the	conditions lead to
	foundation of the social	unhealthy habits. Factors
	structure. Families tend to	that play a significant role
	value healthy family time (§	in some schools of the
	3.3). Parents take care of	unique context in the
	children under the age of	current school system in
	compulsory school (§	South Africa are
	3.4.1). Schools dismiss	gangsterism, violence,
	learners on Wednesdays	drug and alcohol abuse,
	around noon to enhance	school dropouts, illiteracy,
	the value of healthy family	•
	time (§ 3.3).	children and HIV (§ 1.3;
		,

ξ.	§1.7.1; § 2.1; § 2.2.2; § 2.9;
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	§ 5.5.1).

Macrosystem

of 1.2 Government:

Bronfenbrenner's ecological systems theory.

The Netherlands is a parliamentary democracy with a king as head of the state and a prime minister as head of government.

The Hague is the seat of government (§ 3.2.1). The central government determine standards provided by the education authority of the Ministry of Education, Culture and Science (§ 3.3; § 5.4.2.1).

1.2 Government:

The Department of
Education (DoE) is divided
into two national
departments, namely the
DBE (primary and
secondary schools) and
DHET (tertiary- and
vocational training) (§
2.3.3). Each has a
minister.

Political views of the ruling party in South Africa dictate the education policy and national education system (§ 2.3.2).

The education policy control structures, type of education institutions, curriculum structures.

Values of individuals and groups determine the whole education system, provision, and teaching

activities (§ 2.3.3; §
2.6.2).
The NQF provides for the
development and
implementation of a single
national core syllabus for
all schools in South Africa
(§ 2.3.2.2; § 2.6.1; §
5.5.2.1).

Macrosystem

Bronfenbrenner's ecological systems theory.

of 1.3 Teacher's training:

Teacher's training in the Netherlands is a highly sophisticated training sector consisting of both university and college training institutes (§ 3.5; § 5.4.2.2).

It takes four years to obtain a mainstream teaching qualification.
Teachers are trained to teach all curriculum phase/ subjects but also a specialist subject (§ 3.5; § 5.4.2.2).

Initial teacher's training includes an introduction to teach learners with special needs. Teachers with initial teacher's training are able to teach all groups in the primary school sector (§ 1.5.2; § 5.4.2.2).

1.3 Teacher's training: In South Africa teacher's training changed with the closure of teacher's training colleges and the amalgamation of some colleges with universities in 2001 (§ 1.5.1; § 2.6.1; § 2.7.2).

Initial teacher's training is a four-year Bachelor of Education (B.Ed.) degree or one-year post-graduate diploma. Teachers are qualified to teach in different phases (§ 2.7.2; § 2.7.2.1; § 5.5.2.2; § 5.5.3.1).

These phases are,
Preschool (ECD) (3 – 5
years), Foundation Phase
(Grade R – Grade 3),
Intermediate Phase
(Grade 4 – Grade 6),
Senior Phase (Grade 7 –
Grade 9), and Further
Education and Training
(FET) (Grade 10 – Grade
12) (§ 2.2.1; § 5.5.3.2).

Macrosystem of	1.4 Compulsory	1.4 Compulsory
Bronfenbrenner's	education:	education:
ecological systems theory.		
	Compulsory education in	Compulsory education in
	the Netherlands, by law,	South Africa, by law,
	implies to all learners of all	implies to all learners of all
	nationalities from four	nationalities from six years
	years to 18 years (§ 3.4.1;	to 16 years (§
	§ 3.4.2).	1.5.1).
2. Exosystem of	2.1 Local authority:	2.1 Local authority:
Bronfenbrenner's		
ecological systems theory.	The Netherlands is divided	South Africa is divided into
	into 12 provinces (§ 3.3).	nine provinces (§ 1.4.2).
	The central government	Each of the nine provinces
	sets objectives and quality	has its own education
	standards that apply to	department and enjoys
	public and private schools.	their own autonomy,
	All schools are on equal	implements national
	footing, receiving public	policy, and dealing with
	funding, provided they all	local issues on their own
	meet the requirements for	(§ 2.6).
	schools.	
		The education
	Schools are free to	departments are divided
	determine content	into districts and circuits
	(curriculum) and methods	with their own
	of teaching within the	departmental officials to
	parameters of the	monitor and support
	Constitution (§ 3.3; §	implementation of
	5.4.2.1).	curriculum and deal with
		local issues.

The Inspectorate of Education monitors and evaluates schools in the Netherlands at least every four years to determine quality teaching and learning (§ 5.4.2.5). The Netherlands do not have departmental officials to monitor and support quality teaching and learning. School level information and performance are available through online information systems (§ 3.3; § 3.3.1).

Dutch is the language of the Netherlands and instruction (§ 3.2.1).

English is implemented as second language in most of the primary schools (§ 1.4.3; § 3.3; § 5.4.2.3).

Departmental officials are responsible for in-service training and workshops with teachers (§ 2.3.3; § 5.5.3.2).

South Africa has 11 official languages to accommodate in the country and instruction (§ 1.4.2).

Primary schools have a main language as medium of instruction and a first additional language as determined by the language and culture of the parents and the SGB of the school (§ 2.5; §

5.5.2.8).

Exosystem of	2.2 Professional	2.2 Professional
Bronfenbrenner's	development:	development:
ecological systems theory	•	·
3 , ,	Ongoing professional	South Africa teacher's
	development in the	skills can be developed
	Netherlands is optional. It	through Continuous
	is offered by teacher's	Professional Teacher
	training colleges,	Development (CPTD).
	universities or commercial	Although skills
	institutes, as well as	development is not the
	organisations offering	main focus of initial
	educational advice and	teacher's training, CPTD is
	support, subject-related	compulsory for teachers to
	workshops or conferences	remain up to date with
	(§ 3.5.3; § 5.4.2.4).	curriculum development in
		different phases (§ 2.8.1; §
		5.5.2.5; § 5.5.2.9).
Exosystem of	2.3 School fees:	2.3 School fees:
Bronfenbrenner's		
ecological systems theory.	Free primary and	Schools in South Africa are
	secondary education in	divided into different
	the Netherlands is	quintiles. Quintile one to
	available to everyone (§	quintile three schools pay
	1.4.3).	no school fees, but quintile
		four to quintile five schools
	Parents pay a voluntarily	pay school fees (§ 1.7.4).
	contribution to certain	
	special activities and	
	events (§ 3.3).	

Exosystem of	2.4 Unions:	2.4 Unions:
Bronfenbrenner's		
ecological systems theory.	In the Netherlands unions	South Africa has different
	representing teachers and	teachers' unions to
	school leaders, umbrella	support the rights of their
	organisations of school	members (teachers) (§
	boards, which includes the	2.3.1; § 5.5.3.2).
	five teachers'	
	organisations. Their main	FEDSAS is an
	aim is to support and	organisation to assist in
	guarantee the quality of	organising, management
	the teaching profession (§	and financing of schools
	3.3.1; § 5.4.2.1).	and to set minimum
		standards for the provision
		of education (§ 2.4).
	0.4 5:6	0.4.5:
•	3.1 Different types of	3.1 Different types of
Bronfenbrenner's	schools in the	schools in South
ecological systems theory.	Netherlands:	Africa:
	In the Netherlands are	South Africa do not have
	public schools (all of them	state schools, only public or
	are state-run schools),	independent schools (§
	private schools	2.4). Independent schools
	(Independent schools),	in South Africa are private
	international schools	•
	(provide education for	schools for example Curro
	global students), iPad	schools, Crawford
	schools, special need	Preparatory school,
	schools (teach learners	Excelsior Akademie etc.
	with more severe learning	The schools are divided in
	disabilities (§ 3.3; § 3.4.3)	different education bands
	a.casimics (3 0.0, 3 0. 1.0)	

Schools in the
Netherlands is divided into
different groups. Group
one (4 years) to group
eight (12 years) (§
1.4.3; § 3.4.2).

All the schools have a fair degree of autonomy in determine class size and composition. Learner-teacher ratio: 20-25:1 in primary schools (§ 3.4.2; § 5.4.2.1; § 5.4.4.2)

(phases) from Grade R to Grade 12 (§ 2.2.1).
Foundation Phase (Grade R – Grade 3),
Intermediate Phase
(Grade 4 – Grade 6),
Senior Phase (Grade 7 –
Grade 9), and Further
Education and Training
(FET) (Grade 10 – Grade 12) (§ 2.2.1; § 5.5.3.2).

Learner-teacher ratio in primary schools: 35:1 (§ 2.8; § 5.5.3.9; § 5.5.4.2).

Mesosystem

Bronfenbrenner's ecological systems theory.

of 3.2 Human resources:

In the Netherlands it is the responsibility of the competent authority of each school to establish human resource policies to ensure teachers' competencies are maintained. Regular teacher appraisal and teacher interviews are compulsory by central regulations to evaluate teachers' performance

3.2 Human resources:

In South Africa the school governing body (SGB) forms an integral part of the school system. A public school is governed by its governing body comprise representatives of parents, students, teachers, nonof teaching staff the school, the principal and co-opted members from the local community (§ 2.5). The function of the

(§ 3.3; § 5.4.2.1).

SGB is the management and control of a school, and to make recommendations on the appointment of teachers to provincial offices to ensure efficient learning and teaching at primary schools (§ 2.5; § 5.5.3.6).

Mesosystem

Bronfenbrenner's ecological systems theory.

3.3 Twenty-first-century skills:

In the Netherlands the teachers focus on the nine pillars of effective schooling which include the demands of the twenty-first century skills (§ 3.6; § 5.4.2.9; § 5.4.3.8). The focus of the nine pillars is to enhance life-long learning as a central of great schooling, based on a "growth mindset" philosophy and ethos (§ 5.4.3.15). Great leaders and great teachers are being delivered through inspirational leadership,

3.3 Twenty-first century skills.

The data analysis of all the purposefully sampled respondents in South Africa (departmental officials and primary school teachers), shows that the current curriculum and instructional design need to upgrade to teach skills and competencies needed for the 21st century (§ 1.1; § 1.3; § 5.5.2.9; § 5.5.3.15).

Some schools do not have resources and teachers are not trained with new technology to implement

where the main aim is the promotion of high-quality learning and teaching. The school community has a responsibility to support and motivate learners and teachers, through day-today management and opportunities in every classroom. All mentioned lead to the prioritizing of highly qualified teaching staff with excellent subject knowledge and a passion for the curriculum of the school (§ 5.4.3.7; § 5.4.3.8).

lifestyles, Healthy successful relationships, managed emotions and responsible actions are key concepts taught to learners to meet the demands of the 21st century skills. Different skills and attitudes are needed to have a global understanding of crosscultural aspects (§ 3.6; § 5.4.3.1).

and enhance 21st century skills due to the socio-economic climate and environment of the school (§ 5.5.2.10; § 5.5.3.8; § 5.5.3.15).

4. Chronosystem Bronfenbrenner's ecological systems system.

of 4.1 Special education:

In the Netherlands special education is intended for Inclusive education allows learners who need more support and guidance due to a mental, sensory, or 5.5.3.9; § 5.5.3.13). problem. physical The admission age varies from three years to six years (§ 5.4.3.9; 3.4.3; § 5.4.3.13).

4.1 Inclusive (special) education:

all learners equal access to education (§ 2.6.4; § Education in South Africa moved away from special education towards a policy of inclusion through curriculum adaptation and curriculum differentiation as discussed in § 2.6.4.

Full-service schools in South Africa admit support all learners from their locality according to the principle of natural proportion whether the needs learner low. moderate or high levels of support (§ 2.6.4).

Chronosystem of Bronfenbrenner's ecological systems theory.

- of 4.2 Early childhood education: The main aim of early childhood Netherlands is to foster equity and increase the participation of disadvantaged backgrounds. Therefore, all fouryear-old children were entitled to enrol early childhood education for free. Provisions provide for children below the age of four that include childcare from birth to four-yearold's as well as play groups (two- to - four-
- 4.2 Early childhood education: Government prioritized early childhood development (ECD) within its National Development Plan for 2030. The main aim is to focus on equity and building strong economic growth. The long-term goal is to guarantee a full comprehensive age- and developmentally stage appropriate quality in terms of availability and accessibility to all infants, young children, parents, and all stake holders (§ 2.6.8; § 2.6.9).

Chronosystem

Bronfenbrenner's ecological systems theory

of 4.3 International studies:
The TIMMS and PIRLS
results (2015; 2016; 2019)
show the Netherlands is
among the top 15 out of
45 countries that
participated (§ 1.1).

year-old's (§ 3.4.1).

4.3 International studies:
The TIMMS and PIRLS
results (2015; 2016; 2019)
show South
Africa's performance is
very close to the bottom of
the surveyed countries (§
1.1; § 1.3; § 2.1; § 2.2.1).

Discussion:

Bronfenbrenner's ecological systems theory focuses on the quality and context of the child's environment. The development of children becomes more complex while interacting within these environments as discussed in table 5.4. This complexity can arise as the child's physical and cognitive structures grow and mature. The microsystem (child's family, friends, peers, school, social relationships) is the primary system of influence therefore, keeping secure, positive and healthy relationships will encourage the child's development as they begin to feel the effects of the other systems (§ 1.3; § 1.7.1; § 2.2.2; § 2.9; § 5.4.2.1; § 5.4.2.2; § 5.4.3.1; § 5.4.3.4; § 5.4.3.11; § 5.4.3.12; § 5.5.2.1; § 5.5.2.2; § 5.5.3.1; § 5.5.3.4; § 5.5.3.11; § 5.5.3.12). The **chronosystem** (special education, early childhood education, international studies) representing dynamic environmental transitions such as milestones that affect the development of the learner in this study (§ 1.1; § 1.3; § 2.1; § 2.2.2; § 2.6.4; § 2.6.8; § 2.6.9; § 3.4.1; § 3.4.3; § 5.4.3.9; § 5.5.3.9). The **exosystem** (local authorities, professional development, school fees, unions) influences the child indirectly through other individuals that have an influence on the child's life (§ 2.3.1; § 2.3.2.1; § 2.3.2.4; § 2.6.1 § 2.6.3; § 3.3.3; § 5.4.2.2; § 5.4.2.4; § 5.4.2.5; § 5.4.2.10; § 5.5; § 5.5.2.2; § 5.5.2.4; § 5.5.2.5; § 5.5.2.10; § 5.5.3.2). **Exosystems** can be temporary, like jobless parents, single parents and poverty (§ 1.4.3; § 1.7.4; § 2.3.1; § 2.4; § 2.8.1; § 2.9; § 3.3; § 3.3.1; § 3.5.3). The mesosystem (different types of schools, human resources, 21st century skills, healthy lifestyles, successful relationships, resource provision) consist of interactions which affect the child directly. The child is actively able to engage and socialize with others in the mesosystem (§ 1.4.3; § 2.2.1; § 2.4; § 2.8; § 3.3; § 3.4.2; § 3.4.3; § 5.4.2.9; § 5.4.2.10; § 5.4.3.8; § 5.4.3.15; § 5.5.2.9; § 5.5.2.10; § 5.5.3.8; § 5.5.3.15). The macrosystem (socioeconomic climate, government, teacher's training, compulsory education) is the largest and most distant collection of people and places to the child that is still exercises significant influence on the child. It is composed of the child's cultural patterns and values, specifically the child's dominant beliefs and ideas, as well as political and economic systems (§ 1.3; § 1.5.1; § 1.5.2; § 1.7.1; § 2.1; § 2.2.1; § 2.2.2; § 2.3.2; § 2.3.2; § 2.3.3; § 2.6.1; § 2.6.2; § 2.7.2; § 3.2.1; § 3.3; § 3.4.1; § 3.4.2; § 3.5).

Bronfenbrenner's ecological systems theory for this study is used to identify limiting factors and to enhance effective relationships and to surround the child with positive environments. Immediate good relationships and positive environments, will allow the child to develop and succeed to his or her fullest potential, help teachers and the DBE and DHET to support the learner's learning environment and to establish quality learning and teaching in schools in South Africa. This implies that it results for the common good of all learners, preparing them for the 21st century.

5.8 CONCLUSION AND KEY FINDINGS

In this chapter, I gave a detailed account of the data after the analysis process; I identified core themes; indicated similarities as well as differences; compared the data to the literature as well as the findings that emerged from the analysis. The multiple methods used to collect data as well as the different data sources used, provided different perspectives on the research questions and aims while, at the same time, serving as triangulation to strengthen the findings.

A variety of core themes from the analysis of the data namely determining factors of learners and context in selected South African schools, proficient teacher's training for primary school teachers, challenges in terms of curriculum and assessment, problems within the education system and the lack of 21st century skills and equipment will guide me to find an answer to the research questions:

How do teachers implement curriculum and instructional design in selected South African primary schools?

What are the different teacher education programmes in the mentioned countries?

How should the teachers be skilled and trained in order to meet curriculum and instructional demands for the different primary school phases?

What suggestions can be proposed to enable teachers and learners to meet the demands of the 21st century?

The use of multiple data collection methods provided different perspectives on the phenomenon under study. Semi-structured interviews, questionnaires, field observation schedules and field observation sheets were the primary data collection methods used in order to exploring curriculum and instructional design in selected South African primary schools. The data were analysed, and themes and sub-themes were identified and discussed in order to explore and to gain greater insight into the participants' perspectives of the curriculum and instructional design of their schooling system. Supporting and contradicting data were interpreted through inductive reasoning to get insights about the curriculum and instructional design in selected South African primary schools (§ 4.3.1.1).

The qualitative data – which emerged from semi-structured interviews with selected departmental officials (n=10); the questionnaires with selected teachers (n=23); the observation sheet/field notes during selected primary school visits and quantitative interpretation of field observations during selected primary school visits – indicated that the curriculum and instructional design for learners 0– 12 years do have differences (§ 1.7.4; § 1.7.5; § 4.3.3). It is clear that some social-economic environments in South Africa disrupt the community due to poverty, drug- and alcohol abuse, crime, poor parental involvement, wellbeing of teachers, parents and learners, overcrowded classes, poor teacher training, and a lack of discipline in primary schools. These are some of the problems that influence the curriculum and instructional design in selected South African primary schools (§ 1.3; § 1.4.1; § 2.1; § 2.2; § 2.6.1; § 2.9; § 4.2).

The researcher collected both numeric and text information. The information gathered enhances the understanding of the picture of the research objectives (§ 6.3). The qualitative data are used to explain the quantitative results and to elaborate on the quantitative interpretation of field observations and conversations with teachers (§ 4.3.3.5; § 4.3.3.3). The quantitative interpretation of field observations (Appendix G2) report on the factors and variables that influence the effectiveness of the school systems (§ 4.3.3.5). According to the quantitative data interpretation of the field observation sheet in the Netherlands 70% to 100% were allocated to the infrastructure, classrooms, timetables, lesson plans, assessment, technology, management of primary schools, wellbeing of teachers, learners and parents, parent involvement and the general impression of the selected primary schools as outstanding. Learning and teaching support (LTS) are satisfactory (50% - 69%) and

inclusive education is partially achieved (35% - 49%). The selected primary schools in South Africa obtained a satisfactory achievement (50% - 69%) in infrastructure, classrooms, timetables, lesson plans, learning and teaching support (LTS), inclusive education and general impression. Partially achievement (35% - 49%) is obtained in assessment, technology, wellbeing of teachers, learners and parents, and parent involvement. Management of selected primary schools in South Africa is satisfactory, 50% to 69%. Management differs from primary school to primary school according to the quintiles of the school and the socio-economic level of communities.

According to Bronfenbrenner's ecological systems theory, many indirect and direct influences have an impact on children's development. His theory explains the four levels of environment that have an impact on a child's development, namely the micro-, meso-, exo- and macrosystem, all of which interact with the chronosystem (§ 1.3; § 2.1; § 2.2.2; § 2.9) (Nel *et al.*, 2013:12). The above-mentioned status of some community environments in SA shows a lack of ideal influences on children's development.

The next chapter focusses on the researcher's conclusions of the findings and highlights the essence of the literature and qualitative-methods study to get to the findings and discussion of the research aims. Recommendations are made to improve the primary school system and teacher's training in South Africa with the researcher's contribution of a suggested framework based on an interpretation of Bronfenbrenner's theory and the themes and sub themes and she ends of with her final conclusion on the research.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1 INTRODUCTION

Chapter 5 offered a discussion of the researcher's interpretations of empirical data into themes and sub-themes that emerged from the semi-structured interviews, questionnaires, field observation schedules, field observation sheets and reflective journal while exploring and visiting selected schools in the Netherlands and South Africa.

The main aim of this research was to explore and determine how the teachers implement curriculum and instructional design in selected South African primary schools and the Netherlands to get new insights in the school system and teacher's training and make recommendations to improve primary schools and teacher's training in South Africa. Both countries (South Africa and the Netherlands) were explored and investigated to obtain clarity on the effectiveness of curriculum development, instructional design and teacher's training for children and learners aged 0–12 years (§ 1.6; § 2.7.2; § 3.3.1; § 5.1) and how they are prepared for the demands of the 21st century.

The objectives were as follows:

- to explore and determine how teachers implement curriculum and instructional design in selected South African primary schools;
- to explore and determine the different teacher education programmes of the mentioned countries;
- to explore and determine how teachers should be skilled and trained in order to meet curriculum and instructional demands for the different primary school phases; and
- to explore and determine what suggestions can be proposed to enable teachers and learners in South Africa to meet the demands of the 21st century (§ 1.6).

This chapter presents a summary of and conclusion from an Interpretivist view to the study. The researcher explains the answers to the research questions and aims. Recommendations are made on how the primary school system and teacher's training can be enhanced in South Africa. The limitations and delimitations of the study are also

highlighted, and a framework derived from the literature, themes and subthemes (§ 5.6) from the empirical research on the phenomenon, are given as a contribution of new knowledge from the research.

6.2 OVERVIEW OF THE STUDY

Each chapter in this study is summarised as follows:

Chapter 1 highlights the importance of this study against the background of the current situation of education and teacher's professional training and development in South Africa (§ 1.1; § 1.3; § 1.4.1). Education in South Africa has always been part of a political purpose and has always been influenced by educational systems of other countries (De Vos *et al.*, 2012:16) (§ 1.4.2). Unfortunately, education in South Africa was never an uninhibited system based on the ethos of South African people. Chapter 1 also gives an overview of the research problem, related literature and the research methodology (§ 1.5; § 1.7.2).

Chapter 2 gives a historical overview of South Africa. This chapter grounded the theoretical and conceptual framework to explore the literature and to determine curriculum and instructional design in South African primary schools and their performances in findings from national as well as international findings. This chapter provided evidence of changing family contexts and the importance of family and local community involvement in schools based on Bronfenbrenner's ecological systems theory. This model explains human development in terms of layers of interacting systems influencing a child's development and is applied to the South African context at the end of the chapter (§ 2.9).

Chapter 3 gives a historical overview of the education system in the Netherlands. This chapter discusses the theoretical and conceptual framework to explore the literature and to determine curriculum and instructional design in primary schools in the Netherlands and their teacher's training (§ 3.2.1; § 3.4; § 3.5; § 3.5.2; § 3.5.3; § 3.5.4). This chapter also discusses the quality of education, teacher's training, school governance and financing of schools (§ 3.3.2; § 3.3.3). Effective schooling in the 21st century is discussed by using the nine pillars of greatness to emphasise the influence of shared vision, values, focus and inspirational leadership at all levels throughout the schools in the Netherlands (§ 3.6). Bronfenbrenner's theory is applied to the Netherlands context at the end of the chapter.

Chapter 4 covers the intended research paradigm and methods, data analysis and ethical considerations (§ 4.2; § 4.3.1, § 4.3.1.1; § 4.4; § 4.5). For the empirical study, the researcher formulated a supposition or proposed explanation (Creswell, 2009:99; Creswell, 2014:206; Crosley, 2019:5; Miles, et al., 2019:344). This proposed explanation was made on the basis of limited evidence as a starting point for further investigation (theory) and was tested. This qualitative-methods process is grounded on an interpretivist perspective or worldview (§ 4.1; § 4.2; § 4.3; § 4.3.1; § 4.3.1.1). The concern was to explore schools and collect empirical data (multicase research) to get greater understanding of curriculum and instructional design in selected South African primary schools and their teacher's training. As an interpretivist researcher, I looked at the **what** and the **how** of the research, based on the intended actions, situations and consequences. Creswell (2009:167), Creswell, (2014:215); De Vos et al. (2012:275) and Mouton (2012:108) explain that a researcher interprets data that have been obtained and then provides structural and textual descriptions of the phenomenon under scrutiny. Multiple methods were implemented to collect data, which enabled the researcher in chapter 5, to identify concurring data through repetitions and echoes in participant responses in the different data sources (Hesse-Biber, 2010:14; Nieuwenhuis, 2019:91). The multiple methods of data collection led to data saturation (§ 4.3.3; § 4.3.3.1; § 4.3.3.3; § 4.3.3.4; § 4.3.3.5).

Chapter 5 gives a detailed account of **qualitative-methods** data analysis and findings (§ 5.3; § 5.4.1; § 5.5.2). The identified **themes and sub-themes** (§ 5.6) that emerged from the transcribed data and field observation sheet (Appendix G2 § 5.4.5; § 5.5.5) as well as field notes noted in the researcher's reflective diary. The chapter sets out to discuss these themes and to connect them to the findings from the literature review. The qualitative methods approach allowed the researcher to explore the meanings and interpretations from the semi-structured interviews with selected departmental official/lecturers (Appendix D) (§ 5.4.2; § 5.5.2), questionnaires with selected teachers (Appendix F) (§ 5.4.3; § 5.5.3), and observation schedules (Appendix G1) (§ 5.4.4; § 5.5.4). The transcription of raw data of this study is presented as Appendix H (§ 5.4.2; § 5.5.2). The codes and themes and sub-themes allowed for methodological triangulation of the data collected through the multiple data sources whereby concurrences and clear evidence in the findings were identified, interpreted and explained (§ 5.4.1; § 5.5.1) (Creswell, 2014:217; Mouton, 2012:118).

Through evaluation and critical thinking, the researcher interpreted findings to reach reasonable and supportive conclusions on the research question and aims (§ 5.1).

In **chapter 6** the results are presented and discussed. The researcher, as interpretivist, obtained better insight in the **what** and the **how** of the qualitative research aims, which emerge from actions, circumstances and results (consequences) in everyday life of participants that are a and exist in social, historical and political context.

The researcher explains how the research aim was attained through achieving the respective research objectives. A **framework**, based on the findings from literature as well as data from the empirical study, is suggested to enhance primary school education based on exploring the curriculum and instructional design in selected South African primary schools for the 21st century and their teacher's training.

6.3 RESEARCH OBJECTIVES AS ATTAINED THROUGH THE STUDY

According to the interpretation of Pestalozzi's theory (§ 1.3), schools play a vital role in improving social conditions by active involvement in the community and environment. Bronfenbrenner (§ 1.3; § 1.7.1; § 1.7.5; § 2.6.4; § 2.9) resonates with Pestalozzi's beliefs in terms of his ecological system theory. Bronfenbrenner's ecological system theory focusses on the development of human beings and indicates that the relationship and interdependence between family, school and the social and political environment form the basis of an education system, educational policies and management. All these are influenced by changes over time. This led to theory triangulation.

6.3.1 Discussion: Research aims 1: To explore and determine how teachers implement curriculum and instructional design in selected South African primary schools

According to the literature review and data which gave the researcher better insights and clear understanding on teacher's training and how teachers implement the curriculum and their instructional design, the researcher report as follows:

The problems in South Africa are visible in terms of curriculum design and instruction is clear from the themes derived from the data from selected schools namely determining factors of learners and context in South African schools, challenges in terms of curriculum and assessment, problems within the education system, lack of 21st century skills and equipment and instruction in the schools. In the Netherlands, it is the responsibility of the school to maintain quality of education, and in South Africa, quality assurance is the responsibility of the DoE (§ 2.3.2.1; § 2.3.2.2; § 2.3.3; § 3.3.1; § 3.3.2).

Schools in the **Netherlands** do not have any formal curriculum prescribed by the Department of Education (§ 3.3.1; § 3.4.2; § 5.4.2.1). The teachers of the Netherlands are responsible for the development of their own curriculum. They are free to choose their own content and core aims according to general levels set by the government (§ 3.3; § 3.3.1; § 5.4.2.1). Teachers do assessment on a day-to-day basis. Assessment includes homework, oral exams and classwork. Learning standards are set in language and mathematics, as well as objectives for primary and lower secondary schools. In 2014/2015 external standardised tests (Cito exams) started in the Netherland's schools to assist teachers to guide students through the curriculum. At the age of 12, at the end of primary school learners take a national examination that serves as the main determinant of the type of secondary school that they will pursue (§ 3.3; § 3.4.2). Primary school teacher's training takes four years to obtain, at the higher vocational education programmes level at HEIs (§ 3.5; § 3.5.2; § 5.4.2.2). In the Intermediate Phase in the Netherlands, the learners have a class teacher that do the instruction of all the subjects as they are trained to do the teaching and learning (instruction) of all the subjects.

The DBE in **South Africa** is responsible for the national curriculum (currently CAPS) in primary and secondary schools. The national curriculum is developed internally at the DBE (§ 2.3.2.2; § 2.3.3; § 2.6; § 2.6.2; § 2.6.3; § 5.5.2.1). The DHET is responsible for higher education, including teacher's training (§ 1.4.2; § 2.3.2.3). Curriculum development forms part of the curriculum policy, curriculum support and monitoring by DBE (§ 2.3.2.1; § 2.3.2.2; § 2.3.3; § 2.6; § 5.5.2.1). DBE uses various stakeholders, representatives and groups of curriculum experts to plan and design national curriculum (§ 2.3.3; § 2.6; § 5.5.2.2). After a drafting stage of curriculum, a public comment process follows where all stakeholders give their input (§ 1.4.1; § 2.3.1; § 5.5.2.1). The Minister of Basic Education approves and from there, Umalusi plays the role of a quality council. Umalusi is the quality assurance authority for general and advanced education as well as training curriculum of the National

Qualifications Framework (NQF) (§ 1.4.2; § 2.3.2.2; § 2.6.1; § 5.5.2.1). Assessment changed from historical summative assessment to formative assessment. Informal ongoing assessment on a daily base to enhance teaching and learning is done through observation, discussions, conferences, classroom interaction and informal tests. Formal assessment shows learner's progress in a grade and in a particular subject (§ 2.6.5).

6.3.2 Discussion: Research aims 2: To explore and determine the different teacher education programmes of the mentioned countries

Teacher's training in the **Netherlands** can be obtained at a university or at a teacher's college (§ 3.5; § 3.5.2). Supplementary teacher's training in special education is optional; in fact, there is a growing interest in a special education certificate amongst mainstream teachers (§ 1.4.3). In **South Africa**, teachers are trained only at universities since 2001 (§ 1.4.2; § 2.6.1; § 2.7.1). There is a need for teacher's colleges in South Africa focusing on child development and appropriate didactics and methodologies to be used in teaching and learning (proficient teacher's training for primary school teachers in South Africa) (§ 2.7.2). Unqualified and underqualified teachers can top up their experience with the National Professional Diploma in Education (NPDE). These education courses are validated by the Council on Higher Education (CHE) (§ 2.7.2.1).

The teachers that are trained in the Netherlands at universities or teacher's training colleges can teach learners in the primary school phase in any subject, but also specializes in either primary classes teaching four to twelve, or BO or VBO (§ 3.5; § 3.5.2; § 5.4.2.2). In South Africa there is no general training in education, only specialization in Foundation Phase teaching (Grade R to 3) and Intermediate phases teaching (Grade 4 to 7) in primary schools. The qualification of teachers in the Netherlands is therefore a bachelor's degree or four-year teacher diploma (§ 3.5; § 3.5.2; § 5.4.2.2). The bachelor's degree is structured as follows:

Year 1 and 2: General training in education, and year 3 and 4: Specialized training in terms of BO (4 – 12 years) or VBO (12 + years) (§ 3.5; § 5.4.2.2).

In South Africa teachers are trained at tertiary level (universities) since 2001 to receive a bachelor's degree and enable them to demonstrate general educational principles for the specific phase and to focus on knowledge, skills and competencies to teach in the

Foundation Phase (Grade R - 3/ 4 to 9 years) or in the Intermediate Phase (Grade 4 - 6/ 9 to 12 years) (§ 1.4.2; § 2.6.1; § 2.7.1; § 5.5.2.2).

6.3.3 Discussion: Research aims 3: To explore and determine how teachers should be skilled and trained in order to meet curriculum and instructional demands for the different primary school phases

According to the participants, it is the responsibility of the school and teachers to feel free to be part of ongoing developmental programmes to enhance learning and teaching in the **Netherlands** (§ 3.5; § 3.5.3). Continuous professional teacher development courses are optional and offered by teacher's training colleges and universities. In **South Africa**, the DoE invites teachers to workshops to continuously upgrade their subject knowledge and implement the curriculum in primary schools. The departmental workshops are part of the in-service training handled by departmental officials from the DoE (proficient teacher's training for primary school teachers in South Africa, challenges in terms of the curriculum and assessment, lack of 21st-century skills and equipment) (§ 2.6.6). Teachers can improve their developmental appraisal, performance measurement and whole school environment through IQMS (§ 2.8.1). The purpose of IQMS is to prepare an environment for teacher development, to monitor their overall effectiveness of the school, to evaluate their performance as teacher, to identify specific needs and to promote accountability (§ 2.8.1). The lack of skills of teachers are addressed through CPTD to ensure that teachers remain up to date with developments in their area of expertise (§ 2.8.1).

In-service training of teachers in the Netherlands takes place through ongoing programmes. Teachers are not forced to be part of these programmes, but it depends on the board of the school to decide whether teachers must do in-service training or not (§ 3.5; § 3.5.3; § 5.4.2.4). The EU plays a significant role in the achieving of high-quality education for all learners and, therefore teachers need to upgrade their competencies on a continuous base (§ 3.5.1). If teachers experience any challenges, the departmental head or lead teacher assists them with their challenges (§ 3.4.3; § 5.4.4.3).

In-service training of teachers in south Africa is handled by the DoE. They present workshops for departmental officials. Thereafter, principal's and teacher's training take place and the responsibility for in-service training rests with the departmental officials of the

different districts. Training is normally conducted by subject advisors and local teachers are selected through their unions (§ 2.3.1; § 2.3.3; § 5.5.2.4). Teachers can improve their developmental appraisal, performance measurement and whole school environment through IQMS. Teachers make use of CPTD to improve their skills and area of expertise (§ 2.8.1; § 5.5.2.5).

6.3.4 Discussion: Research aims 4: To explore and determine what suggestions can be proposed to enable teachers and learners to meet the demands of the 21st century

The researcher compiled a framework by interpreting the literature and the data findings and the suggested framework is presented in the following section.

6.4 FRAMEWORK TO ENHANCE PRIMARY SCHOOL EDUCATION BY EXPLORING CURRICULUM AND INSTRUCTIONAL DESIGN IN SELECTED SOUTH AFRICAN PRIMARY SCHOOLS TO MEET THE DEMANDS OF THE 21ST CENTURY

The next **framework** was derived from my research journey to reach the last aim of the research. As researcher I used an Interpretive approach to this phenomenon and gathered data through semi-structured interviews, visiting selected schools in purposefully selected districts, interviewed selected teachers and selected departmental officials in South Africa to experience the participant's experiences and views of the topic under discussion. My concern about primary schools' education and motivation for this research is explained in the rationale (§ 1.3) and background (§ 1.4) in chapter 1. My concern as former Foundation Phase teacher and subject advisor is about the school system, teacher's training and the challenges of the 21st century skills of learners in primary schools in South Africa.

Through this research, I interpreted the what and the how to enhance primary school education by exploring curriculum and instructional design in selected South African primary schools (§ 4.3.1.1; § 5.3).

The what implies what the socio-economic conditions, the schools and teacher's training look like and the how, how effective the schools and teachers are regarding the national curriculum and instructional design (teaching and learning) to meet the demands of the 21st century skills (determining factors of learners and context in South African schools, proficient

teacher's training for primary school teachers in South Africa, challenges in terms of curriculum and assessment, problems within the education system, lack of 21st century skills and equipment). The content of each colour in the framework correlates with the empirical data findings presented in chapter 5 as themes. The main themes are: determining factors of learners and context in South African schools, proficient teacher's training for primary school teachers in South Africa, challenges in terms of curriculum and assessment, problems within the education system and a lack of 21st century skills and equipment. Each bullet under the above-mentioned themes represents a subtheme derived from the data as reported in chapter 5.

Table 6.1: Curriculum and instructional design framework for South African primary schools

Determining factors of learners and context in South African schools	Proficient teacher's training for primary school teachers in South Africa	Challenges in terms of curriculum and assessment	Problems within the education system	Lack of 21st century skills and equipment
 Reconsider the learner/teacher ratio (35:1) to avoid overcrowded classes. Promote parental involvement in schools. Create a safe learning and teaching environment for wellbeing of learners Policy to enhance social-emotional wellbeing of community and stakeholders in the school and community, prevention of bullying, crime, violence, drug and alcohol abuse. Encourage community to be involved in the school environment. 	 Quality of training: Reconsider teacher's training at universities and include a practical part in teacher's training as previous colleges did. Educators are professionally qualified with a B.Ed. degree but are not suitable to start with their teaching career due to a lack of practical knowledge and experience in classrooms. Entry level teachers experience many challenges to cope with implementation of curriculum and basic administration in classes. 	good. Adjust curriculum content knowledge to meet 21st-century skills for teachers and learners. • Teacher education needs to assist teachers to adapt curriculum to suit learners' context. • Reconsider in- service training when major	 Focus on well-qualified principals and teachers. Managers of schools need to have an extra qualification in management so as to avoid unqualified managers in schools. Focus on teacher/learner ratio in different phases of schools. Teachers must migrate from blackboards to computers/laptops. Focus on 21st century needs and provide schools with the necessary technology equipment and help teachers and learners 	 Schools need to be technology orientated by using technology equipment during teaching and learning. Expose teachers and learners to technology through using different methods of teaching and learning resources. Core focus of teachers and learners will have to change to creativity, collaboration with their peers, problem-solving, enhance critical thinking skills and to be

- Policy of socioemotional wellbeing must be implemented in all school environments to prevent bullying, crime, drug and alcohol abuse, violence and crime.
- Pre-primary educators need intensive training. Too many hardly qualified practitioners at schools to teach ECD learners.
- Uniformity of teacher's training is needed in all universities to understand and implement the curriculum.
- The role of leadership in the empowerment process need to emphasise the core elements in teacher education, namely:

facilitating content; interpreting and designing learner programmes and learning material; emphasising leadership to be both an administrator and manager in class and

- common understanding and know-how to implement the changes at classroom level.
- Compulsory mother-tongue teaching and learning for all learners up to Grade 3.
- Revise curriculum in terms of learner needs and content knowledge. Inclusive education is problematic. Mainstream teachers do not have the knowledge as to how to approach LSEN. Separate LSEN from mainstream education so that they have their own qualified remedial

- to use the technology equipment.
- Reconsider dual/parallel-medium schools and focus on mother-tongue education.
- Indigenous languages in pilot schools with well-trained teachers equipped with wellplanned curriculum to teach the indigenous language(s).
- DoE must deliver
 enough learning and
 teaching material
 (LSTM) to schools with
 a well-organised
 management system to
 prevent teachers from
 launching fundraises or
 buy resource material
 from their own pockets.
 Annual budget of the
 DoE must enhance
 schools to attain higher

- accountable to focus on the future.
- Paradigm shift for teachers, learner and parents to think critically and act in a responsible way

- schools; be a valuable and respective person in community, respective citizen and role model for learners and society; be equipped with appropriate knowledge to be an assessor; and be encouraged to be a subject/phase specialist through knowledge.
- Curriculum of teacher education needs to be revised to include 21st century learning and teaching.
- Teacher qualifications need to be obtained before assumption of duty to avoid the ongoing struggle with content knowledge to teach reading skills and higher

- teachers or teachers who specialise in learner support.
- Implement parent involvement programmes through curriculum in all schools to educate parents in terms of responsibilities as parents and their contribution to enhance the social emotional wellbeing of their community. Parents need to take responsibility (partnership) of their community.
- Reconsider the number of assessments in curriculum – too much formal and informal assessment tend to

- norms and standards according to their quintiles.
- Build enough schools according to the needs of all learners of South Africa by using the Annual National Budget for Education.
- The DoE needs to prioritise and focus on the following core elements in all schools in South Africa:
 - the learning and teaching environment of schools' classrooms, safe environment, ventilation, etc.;
 - population in classes; infrastructures of schools; technology equipment; management of all schools;

 mathematical performances. Moral values and stable life skills need to be part of the aspirant teacher (Bring back selection process to eliminate weaker candidates). Encourage teachers to do research before delivering content. Shortage of teachers: adapt teacher's salaries so that they compare with their careers. All teachers must be as mouter literate to the same terminate of the same terminate in the same terminate in the same terminate of the same terminate in the same terminate in the same terminate of the same terminat	demotivate teachers. Develop a good assessment plan for all grades. Avoid too much paperwork and administration. The focus or main aim should be teaching and learning. Focus on learner support agents, pastors, remedial teachers, speech therapists and occupational therapists, etc., to be part of staff establishment in schools.	 wellbeing of teachers, learners, parents and stakeholders; general impression of schools in South Africa 	

 Invigilation of newly 		
appointed teachers		
over the broad		
spectrum in all		
schools needs policy.		
 Reconsider the 		
number of extra mural		
activities per teacher		
in schools		
(management).		
(management).		
 The indigenisation of 		
training: adapt		
education systems to		
be national contexts in		
Africa and incorporate		
the African heritage		
into curricula.		
The alignment of		
training with economy		
market to avoid the		
problem of		
unemployment in		
South Africa.		
Codii / iiiloa.		

DISCUSSION:

From an interpretivist worldview, keeping in mind the social, historical and political situations, the researcher will discuss the **curriculum and instructional design framework for South African schools** under the following headings: circumstances or situations, results or consequences and actions.

Column 1: Determining factors of learners and context in South Africa.

Circumstances or situations: Contributing factors for overcrowded classrooms in South Africa schools include the lack of teachers as well as inadequate infrastructure, such as insufficient schools and classrooms.

Results or consequences: Overcrowding increases classroom discipline issues such as tensions, conflicts and disruptive behaviour (§ 1.4.1; § 2.2.1; § 5.5; § 5.5.3.9; § 5.5.3.13; § 5.5.3.14; § 5.5.4.2). Learners who lack supportive parents have to struggle on their own. When there is poor parental involvement, learners do not learn how to properly respect their teachers and to realise that their education is important.

Actions: Create a safe learning and teaching environment for the well-being of learners in schools and after school care centres. When families and the community are involved in primary schools, learners will improve their academic performance and gain advocates that promote their success and confident at school. Positive socio-emotional development influences a learner's self-confidence, ability to develop meaningful, and a sense of importance and value to those around them in a safe environment (§ 2.2.2; § 2.9; § 5.5.1; § 5.5.3.8; § 5.5.3.10; § 5.5.3.11; § 5.5.4.1). The aim of an anti-bullying policy is to ensure that learners learn in a supportive, caring and safe environment without fear of being bullied. Therefore, it is recommended that primary schools in South Africa must urgently apply policies to be free of bullying, crime, drug and alcohol abuse, and violence.

Column 2: Proficient teacher's training for primary school teachers in South Africa

Circumstances or situations: Teachers are professionally qualified with a B.Ed. degree but are not equipped to start with their teaching career due to a lack of practical knowledge and

experience in classrooms. Newly appointed teachers (on entry level) struggle to cope with the implementation of curriculum, assessment and basic administration in primary schools (§ 1.4.2; § 2.2.1; § 2.7.1; § 2.7.2; § 5.5.2.2; § 5.5.2.4; § 5.5.3.1; § 5.5.3.2; § 5.5.3.14).

Results and consequences: Teacher job satisfaction strongly influence teacher behaviour and are positively related to school and classroom climate and learner's achievement.

Action: Uniformity of teacher's training is needed in South Africa to implement the curriculum.

A practical part in the curriculum of teacher's training is needed, as previous colleges did, for practical knowledge (skills) in classrooms (§ 1.4.2; § 2.6.1; § 5.5.2.4).

Column 3: Challenges in terms of curriculum and assessment.

Circumstances or situations: The South African education system is characterised by too many changes in terms of curriculum and assessment during the last three decades.

Results or consequences: As a result, too much paperwork, administration and assessment required by the BDE tend to demotivate teachers and learners as these tasks consumes the teaching and learning time of teachers.

Actions: The focus must be on teaching and learning and assessment of learners only to improvement of the learning process. The number of assessment tasks per term must be reconsidered and minimised by the DBE (§ 1.1; § 1.3; § 1.4.1; § 2.6.1; § 2.6.5; § 5.5.2.3; § 5.5.2.4; § 5.5.3.3; § 5.5.3.4; § 5.5.3.9; § 5.5.3.13; § 5.5.3.14).

Column 4: Problems within the education system.

Circumstances or situations: Managers of schools need to have an extra qualification in management so as to avoid unqualified managers at schools. Teachers and learners tend to have less experience in technology.

Results or consequences: Poor management in schools lead to poor discipline of teachers and learners. Primary schools in South Africa need to migrate from the blackboard to technology (21st century skills).

Actions: Focus on well qualified principals and teachers. Teachers and learners must be exposed to technology to become technology-driven by using technology equipment during teaching and learning to prepare learners for the demands and challenges of the 21st century.

Column 5: Lack of 21st century skills and equipment.

Circumstances or situations: Schools struggle to keep up with technology-driven education due to a lack of equipment and also knowledge and skills to use technology equipment during teaching and learning.

Results or consequences: The lack of 21st century skills are evident and important in teacher's training now more than ever before (§ 1.3; § 2.7.2; § 5.5.2.9; § 5.5.2.10; § 5.5.3.15). As teachers and learners develop skills such as critical thinking, communication, and collaboration they will be more flexible and adaptable in our constantly changing workforce, increase their ability to work cross-culturally, and be able to take on positions of leadership.

Action: Core focus of teachers and learners will have to change to 21st century skills needed to enhance teaching and learning in the primary schools of South Africa are skills that can be universally applied to enhance ways of thinking, learning, working and living in the world (§ 1.3; § 5.5.2.9; § 5.5.2.10; § 5.5.3.8; § 5.5.3.15). The skills include critical thinking/reasoning, creativity/creative thinking, problem solving, metacognition, collaboration, communication and global citizenship. Paradigm shift needs to take place for teachers, learners and parents to think critically and act in a responsible way as we all are already more than twenty years into the 21st century.

6.5 RECOMMENDATIONS

6.5.1 Recommendation for future research

The research showed that assessment in primary schools in South Africa is time consuming. More time could be spent on teaching and learning instead of assessment. The researcher recommends that an in-depth study must be conducted to investigate the impact of current assessment policy on teaching and learning in primary schools and how the problems with assessment can be for resolved for the benefit of all learners and teachers in South Africa (§ 2.6.5; § 5.5.3.3; § 5.5.3.4).

According to the literature, Netherland's has one of the top education systems in the world and was ranked eighth by Pearson's 2014 global report on education (§ 3.3). Their educational success may be ascribed to their highly educated and well-trained teachers. In this study, the participants in South Africa indicated that they were confident to teach in the phase they were at the time only due to many years of experience in teaching, but they still needed workshops to assist them on changes in the curriculum (§ 5.5.2.2; § 5.5.3.1; § 5.5.3.2). Therefore, further studies should be conducted on the content of teacher's training in South Africa to determine the shortcomings in the training of teachers. This is necessary to ensure highly qualified teachers to take education in South Africa to the next level. The curriculum and instructional design framework for South African primary schools in Table 6.1 must be tested by implementation and then upgraded to a curriculum and instructional design model for South Africa primary schools to enhance curriculum and instructional design in primary schools in South Africa for the common good of all learners.

6.5.2. Recommendation for the Department of Basic Education

The education system of the 21st century has changed radically with the integration of the technology in primary schools all over the world. Generally speaking, the 21st century skills concept is motivated by the belief that teaching learners must include the most relevant, useful, in demand and, universally applicable skills should be prioritised in primary schools (§ 5.5.2.9; § 5.5.2.10; § 5.5.3.8; § 5.5.3.15). The inclusion of 21st century skills into the curriculum will empower learners and teachers to become skilled regarding technology and 21st century demands (§ 3.6; § 5.5.2.9; § 5.5.2.10). Teachers and learners should be exposed to technology through using different methods of teaching and learning resources. All schools need to be equipped with technology equipment to use during teaching and learning (§ 5.5.2.9; § 5.5.2.10).

According to this study the lack of parent involvement due to socio-economic and other factors is a concern of many teachers (§ 2.2.2; § 2.9; § 5.5.3.11). It is recommended that the Department of Basic Education launch parent involvement programmes to emphasise the

importance of healthy families as part of the microlayer according to Bronfenbrenner's ecological system theory (§ 2.9). A policy of socio-emotional wellbeing must be implemented in all schools to prevent bullying, crime, drug and alcohol abuse, violence and crime (§ 2.2.1; § 2.2.2).

6.5.3. Recommendation for the Department of Higher Education

According to this research, the participants indicated that teacher's training for primary school teachers needs further research to assure quality and uniformity teacher's training (§ 2.7.2; § 5.5.2.2; § 5.5.2.4). The researcher recommends that an in-depth study must be conducted to investigate the relevancy and quality of teacher's training in terms of the 21st century skills.

Managers of all the schools need to hold an extra qualification in management so as to avoid incompetent and unqualified managers in schools (§ 2.7.2; § 5.5.2.6). According to the research, teachers still need assistance to migrate from blackboards to computers. Adjustment is needed in teacher's training in terms of content knowledge to meet the 21st century demands for teachers and learners (§ 2.7.2; § 5.5.2.9; § 5.5.2.10; § 5.5.3.15). Uniformity of teacher's training is needed in all universities to understand and implement curricula and assessment in all schools (§ 1.4.2; § 2.7.2; § 5.5.2.2). Teacher's training colleges should be reconsidered for better-qualified teachers empowered by knowledge and skills for the teaching profession demands of South Africa and demands and skills for the 21st century. (§ 2.6.1; § 5.5.2.10). LSEN learners and classes should be separated from mainstream education schools and teachers should obtain a specialised qualification. Mainstream teachers do not have the knowledge and skills and resources to teach and learn LSEN learners. (§ 2.6.4; § 5.5.3.9). Teacher qualifications need to be obtained before assumption of duty to avoid the ongoing struggle with content knowledge to teach reading skills and mathematics.

6.6 LIMITATIONS OF THE STUDY

The study presents a number of weaknesses. Limitations of the study refer to challenges experienced during the research process which could possibly have an impact on the results/findings of the research. These include:

 A purposefully sample was used, and research was done in the southern part of the Netherlands. In South Africa, two selected districts in two provinces, namely Gauteng and Eastern Cape, were visited, and they were chosen as a well performing province (Gauteng) and an underperforming province (Eastern Cape). School visits were done to quintile 1 to 5 schools (§ 1.7.4; § 4.3.2.2) to fairly equal and represent the differences and diversity of the huge South African primary school population and to secure the validity and reliability of the research (§ 4.5.7; § 4.5.8).

- The study included only 13 selected participants for the semi-structured interviews, seven (n=7) participants as selected departmental officials and/or selected lecturers from the Eastern Cape and Gauteng, and only five (n=5) selected participants for the semi-structured interviews in the Netherlands. The Netherlands did not have departmental officials like South Africa. Questionnaires were administered to 20 selected teachers from the Eastern Cape and Gauteng and five (n=5) selected teachers from the Netherlands. The field observation schedule and field observation sheets were used in ten (n=10) selected schools in the Eastern Cape, ten (n=10) selected schools in Gauteng, and five (n=5) selected schools in the Netherlands. Although all the selected participants and selected schools represented the teachers and schools of both countries. A purposeful sampling method was used because the whole population from the Netherlands and South Africa would have been impossible to reach.
- As a researcher my area of knowledge and expertise are in curriculum and instructional design in primary schools. Therefore, I want to make it clear that I am not a comparative and international expert.
- Some of the participants that sign consent for participation were Xhosa-speaking. They
 voluntary completed the questionnaire for teachers (Appendix F) in English which was their
 language of choice.

6.7 DELIMITATIONS OF THE STUDY:

Delimitations refers to both the geographical and contextual delimitation of the study. As researcher I acknowledged in chapter 1 the contextual differences of South Africa and the Netherlands. My approach was that despite these differences, to explore and focus on the learner and how learners in South Africa are being affected by the curriculum (including assessment) and instructional design in schools and to get insights from the Netherlands for the common good of learners in South Africa. As mentioned above the study in South

Africa was conducted in the Eastern Cape (an underperforming province) and Gauteng (a good performing province) as samples of the diversity in the nine provinces of South Africa. The purposeful sampling technique was used to narrow the population to selected representatives of the SA school contexts from different quintiles in the Eastern Cape and Gauteng. Purposeful sampling was done in terms of a diverse staff composition and gender representation for a fair representation. All teachers that participated have been teaching for 20 years and were purposefully selected to be information rich regarding the recent South African system and teacher's training. Therefore, the data and findings from this study can be regarded as representing all the different contexts (quintile 1 to 5 schools) of the total primary school's population in South Africa. Data triangulation from different data sources was done and cross referencing with literature review took place for more triangulation in chapter 5 and 6.

6.8 CONCLUSION

In chapter 1, I stated that the question I wanted to answer to myself:

What could be done to enhance teaching and learning and to prepare primary school learners in South Africa for the demands of the 21st century.

As an Interpretivist researcher, my final conclusion as a reflection on this research and to answer my question is as follows:

To me this study provided valuable information and insights after exploring curriculum and instructional design in selected South African primary schools. The information obtained through the literature study and empirical data highlighted the positive and negative factors of the school systems, curriculum and instructional design and teacher's training of South Africa. Five main themes with sub-themes were obtained from the literature study and empirical data. The most highlighted themes were the lack of proficient teacher's training for primary schools with 11 sub-themes, problems within the education system with 10 sub-themes and challenges in terms of curriculum and assessment with 9 subthemes. This attained insight can be used to enhance the schools in South Africa regarding exploring the curriculum and instructional design as contextual determinants were taken into account (§ 1.3; § 3.6). This research

therefore is a contribution for the common good of all learners (0 to 12 years) empowering them for the 21st century demands.

Strengths and weaknesses throughout the study were used as basis for the suggested framework (§ 6.4) to enhance exploring the curriculum and instructional design in selected primary schools in South Africa with its diversity and as a developing context. From the framework it is clear that the social, historical and political factors play a major role in the education system and distracts the focus from the best interest of the learners in South Africa. The DBE and DHET in South Africa have to reconsider the current teacher's training by including 21st century skills, good classroom practice and in-depth understanding of the curriculum and assessment in primary schools. The lower quintile schools have to be better equipped for the demands of the 21st century. Some teachers need to be supported to reflect on their own practice and that of others to identify strong and weak areas, to find alternative strategies and resources to address their challenges and enhance a good teaching and learning environment for all primary school learners. Learners need to be exposed to 21st century skills and equipment in all primary schools to meet the demands of the 21st century, and technology should form part of daily teaching and learning activities at primary school level. The importance of ECD in an informal play-based structured way needs attention and mother tongue teaching must be ensured for each learner until the age of nine. Promotion of and guidance to parents regarding parental involvement in schools is very important. South Africa needs healthy families with values and norms to ensure a safe home environment to all children. Healthy families promote social-emotional wellbeing and communities should take hands to prevent crime, violence, gender violence, bullying, drug and alcohol abuse where it is needed.

The DBE and DHET (macro layer) should be held accountable to improve the training of teachers and standards in schools so that what is written in the Constitution is provided for every learner in South Africa. Section 29 (1) of the Constitution states the following:

"Everyone has the right (a) to basic education including adult basic education, and (b) to further education, which the state through reasonable measures, make provision available and accessible." As a civil right, the right to education provides freedom....

LIST OF REFERENCES

Anon. 2015. Education system South Africa. www.nuffic.nl/en/home/ Date of access: 17 May 2018.

Ary, D., Jacobson, L.C. & Sorensen, C. 2009. Introduction to research in education. 8th ed. Belmont: Wadsworth.

Basic Education Statistics in South Africa (Stats SA). 2018. https://www.southafricanmi.com Date of access: 7 Oct.2019.

Bernas, V. 2015. The Netherlands Fundamental Structures of the Constitution of the Netherlands. https://dspace.library.uu.nl Date of access: 30 Aug. 2019.

Besselink, L.F.M. 2014. The Kingdom of the Netherlands. https://pure.uva.nl Date of access: 13 Sep. 2019.

Bhattacherjee, A. 2012. Social Science (Sampling) Research Principles, Methods, and Practices. 2nd ed. University of South Florida: USA https://schollarcommons.usf.edu/oa_texbooks Date of access 30 Dec. 2019.

Boer, N. 2018. Curriculum and Instructional Design for learners 0-12 years and their teachers in the Netherlands. (Personal interview). 24 Nov., Gouda.

Booyse, J.J., Le Roux, C.S., Seroto, J. & Wolhuter, C.C. 2011. A history of schooling in South Africa. Method and Context. Pretoria: Van Schaik Publishers.

Bosland, W.J. 2018. The Dutch Education System. (Personal interview). 23 Nov., Gouda.

Bredenkamp, P. 2019. Education in South Africa. (Personal interview). 24 Apr. Pretoria.

Brewer, J.A. 2007. Introduction to early childhood education: Preschool through to primary grade. 6th ed. Boston: Pearson.

Brinkel, T. 2019. The status of Indigenous and Minority People in the Netherlands. https://www.ejcl.org/64/art64-1.html Date of access: 21 Jul. 2019.

Brown, Z.S. 2016. Erasmus and the Transformation of Early Modern Political Authority in "*The Education of Christian Prince*". 8 (08): 1, Oct.

Bryman, A. 2016. Social Research Methods. 5th ed. United Kingdom: Oxford.

Carl, A.E. 2009. Teacher empowerment through curriculum development. Theory into practice. 3rd ed. Cape Town: Juta & Company Ltd.

Chalhoub – Deville, M. & Deville, C. 2008. Utilizing psychometric methods in assessment. (In Shohamy, E. & Hornberger, N.H. ed. Encyclopedia of language and education 2nd ed. New York NY: Springer Science + Business Media LLC (7) 211-224).

Christie, P. 2008. Open the doors of learning: Changing schools in South Africa. Johannesburg: Heinemann Publishers.

Collins, F. 2017. Feast for some, famine for many this Christmas. Sunday Times: 11, 10 Dec.

Cox, J. 2019. *Characteristics of a 21st- Century Teacher.* www.thougtco.com Date of access: 24 Jan. 2021.

Creswell, J.W. 2009. Research design: Qualitative, Quantitative, and Mixed Methods Approaches. 3rd ed. Thousand Oaks, California: SAGE Publishers, Inc.

Creswell, J.W. 2014. Research Design: Qualitative, Quantitative, and Mixed methods Approaches. 4th ed. Thousand Oaks, California: SAGE Publishers, Inc.

Creswell, J.W. & Plano Clark, V.L. 2011. Designing and Conducting Mixed Methods Research. 2nd ed. Los Angeles: SAGE.

Creswell, J.W. & Poth, C.N. 2018. Qualitative Inquiry and Research Design. Choosing Amongst Five Approaches. 4th ed. Los Angeles: SAGE.

Daniel, E. 2016. The Usefulness of Qualitative and Quantitative Approaches and Methods in Researching Problem – Solving Ability in Science Education Curriculum. *Journal of Education and Practice*, 7 (15): 91-100.

Darling-Hammond, L. 2012. The Flat World and Education.: How America's Commitment to Equity Will Determine Our Future. *AASA Journal of Scholarship and Practice*, 9 (2):2, Summer.

Davidoff, S. & Lazarus, S. 2009. The Learning School. An Organisation Development Approach. Cape Town: Juta.

De Jongh, W. 2018. Curriculum of Education in the Netherlands (personal interview). 26 Nov., Gouda.

De Muynck, B. 2011. Inspiration, Religion and Teacher Training. Gouda: Driestar Educatief.

De Vos, A.S., Strydom, H., Fouché, C.B. & Delport, C.S.L. 2012. Research at Grass Roots. For the social science and human service professions. 4th ed. Pretoria: Van Schaik.

Dehaloo, G. 2011. The motivation and job satisfaction of secondary school teachers in Kwazulu-Natal: an education management perspective. Pretoria: Unisa (Thesis – PhD).

Denzin, N.K. & Lincoln, Y. S. 2011. *The SAGE handbook of qualitative research.* 4th ed. California: SAGE Publishers, Inc.

Devereux, S. 2018. School Feeding in South Africa. https://foodsecurity.ac.za Date of access: 19 Nov. 2019.

Dick, W. 1987. Instructional Design and the Curriculum Development Process. Educational Leadership. Tallahasee Florida: Florida State University.

www.ascd.org/ASCD/pdf/journals/edlead/ed1998612dick.pdf Date of access: 10 May 2017.

Dlamini, B.O. 2015. National Integrated Early Childhood Development Policy. Pretoria: Government Printers.

Dludla, S. 2019. End to abuse of kids is priority. *The Citizen:* 4, 6 Jun.

Donald, D., Lazarus, S. & Lolwana, P. 2009. Educational Psychology in Social Context. 3rd ed. Cape Town: Oxford University Press.

Donald, D. Lazarus, S. & Moolla, N. 2014. Educational Psychology in Social Context. Oxford: Oxford University Press.

Dudovskiy, J. 2018. Formulating Research Aims and Objective – Research – Methodology. https://research-methodology.net/search-methodology/research-aims-and-objectives/ Date of access: 19 Nov. 2020.

Dunn, D. 2011. *How to be an outstanding primary school teacher*. Available from Ebook Centrals. Https://ebookcentral-proquest-

com.nwulib.nwu.ac.za/lib/northwuebooks/reader.action?docID=686929 Date of access: 14 Nov. 2020.

Dutch Inspectorate of Education. 2013. The State of Education in the Netherlands: Highlights of the 2011/2012 Education Report, Dutch Inspectorate of Education, Utrecht.

www.onderwijsinspectie.nl/binaries/content/assets/Actueelpublicaties/2013/the-stateofeducation-in-the-netherlands-2011-2012.pdf Date of access: 10 Jun. 2018.

Dutch Inspectorate of Education. 2018. www.onderwijsinspectie.nl/english Date of access: 2 Jun. 2018.

Earley, P. & Greany, T. 2017. School Leadership and Education System Reform. London: Bloomsbury Publishing.

Education Statistics in South Africa. 2016. Department of Basic Education 2018. https://www.education.gov.za/Portals/0/Documents/Education%20Statistic%20SA%202016.pdf? https://www.education.gov.za/Portals/0/Documents/Education%20Statistic%20SA%202016.pdf? https://www.education.gov.za/Portals/0/Documents/Education%20SA%202016.pdf? https://www.educa

Education system The Netherlands: A Dutch education system described. http://www.nuffic.nl/en/publications/findapublication/education Date of access: 02 Jun. 2018.

Emeagwali, G. 2005. African Indigenous knowledge System (AIK): Implications for Curriculum. www.multiworld.org/mversity/articles/gloria Date of access: 15 Feb. 2018.

Employment Labour Relations Council (ELRC). 2007. Draft Collective Agreement: OSD for Education. Pretoria: ELRC.

Engelbrecht, P., Green, L., Naicker, S. & Engelbrecht, L. 2010. Inclusive Education in Action in South Africa. 10th ed. Pretoria: Van Schaik.

Excell, L.A. & Linington, V. 2011. Move to literacy: Forming emergent literature in early childhood education in a pedagogy of play. *South African journal for early childhood, (1),1-23.*

Farber, T. 2019. Academic says right laws can beat gangs. Sunday Times: 8, 7 Apr.

FEDSAS (Federation of Governing Bodies of South African Schools). 2009. Schools: Laws and Governance. South African Schools Act, National Education Policy Act, Employment of Educators Act and regulations & Related Materials. Cape Town: Juta.

FEDSAS (Federation of Governing Bodies of South African Schools). 2017. A practical guide to school governance. www.fedsas.org.za Date of access: 2 May 2019.

Felix, J. 2018. Another year of jobless looms for South Africa. The Star: 4, 4 Jan.

Flick, U. 2015. Introducing Research Methodology. A Beginner's Guide to Doing a Research Project. 2nd ed. Los Angeles: SAGE.

Follari, L.M. 2011. Foundations and best practices in early childhood education: History, theories, and approaches to learning. Upper Saddle River, Ney Jersey: Pearson.

Folmunyam, K. G. 2016. Theorising student constructions of quality education in a South African University. *In Southern African review of education*, 22:46-63.

Fouché, C.B. & Schurink, W. 2012. In Research at Grass Roots. 4th ed. Pretoria: Van Schaiks.

Fullan, M. 2018. The New Meaning of Educational Change. 5th ed. New York: Teachers College Press.

Foster, C. 2017. Which should assume more importance in Universities - research or teaching

https://www.researchgate.net/post/which should more importance in universities research or teaching Date of access: 8 Dec. 2017.

Fraser, L. 2023. South Africa's massive reading problem.

https://www.bussinessnesstech.co.za/news/government/688439/south-africas-massive-reading-problem/ Date of access: 25 May 2023.

Gagné, R.M. 2012. Biographies. Retrieved Apr. 18, from Answers.com Web site: http://answers.com/topic/robert-mills-gagn Date of access: 18 Apr. 2017.

Gay, L.R., Millis, G.E. & Airasian, P.W. 2011. Education research – Competencies for analysis and applications. 10th ed. Boston: Pearson.

Glenn, C.L. 2018. Look to The Dutch for true Educational Pluralism – Analysis. https://www.eurasiareview.com Date of access: 29 Aug. 2019.

Glesne, C. 2016. Becoming Qualitative Researchers an Introduction. 5th ed. United States of America: Pearson.

Gorard, S. & Taylor, C. 2011. Combining methods in educational and social research. Berkshire: Open University Press.

Govender, P. 2019a. Disruptive pupil terrorizes teachers. Sunday Times: 8,16 Jun.

Govender, P. 2019b. New rule to carb school sex crime. Sunday Times: 6, 31 Mar.

Govender, P. 2019c. Parents say tests aim to exclude. Sunday Times: 6, 7 Apr.

Gray, D.E. 2018. Doing Research in the Real World. 4th ed. Los Angeles: SAGE.

Guba, E.G. & Lincoln, Y.S. 1989. Competing Paradigms in Qualitative Research. Thousand Oaks: SAGE.

Gunther, M.A., Estes, T.H. & Mintz, S.L. 2010. Instruction: A models Approach. 5th ed. Boston: Pearson.

Guion, L.A. 2017. Triangulation: Establishing the Validity of Qualitative Studies. University of Florida, Gainesville, 32611

https://sites.duke.edu/.../w13Guion2002Triangulation Establishing the Validity of Qualitativ e Research.pdf Date of access: 22 Jun. 2017.

Gustafsson, J. 2017. Single case studies versus multiple case studies. Halmstad University Sweden.

Hannah, R. 2013. The effect of classroom environment on student learning. Michigan: Lee Honnors College. (Thesis - Hons.).

Hendrick, J. & Weissman, P. 2010. The whole shield: Developmental education for the early years. 9th ed. Upper Saddle River, New Jersey: Pearson.

Hesse-Biber, S.N. 2010. Mixed Methods Research. Merging Theory with practice. London: The Gilford Press.

Homan, D. 1966. Constitutional Reform in the Netherlands in 1848. Wiley online Library. https://doi.org/10.111/j.1540-6563.1966.tb01749.x Date of access: 18 Sep. 2019.

Hörner, W. 2007. The education system of Europe. Dordrecht: Springer.

Howie, S.J., Combrinck, C., Roux, K., Tshele, M., Mokoena, G. & Mc Leod, P.N. 2017. South Africa Grade 4 PIRLS Literacy 2016 Highlights Report South Africa. https://www.researchgate.net/publication/326588545 Date of access: 25 May 2023.

Howie, S. 2016. An Educational Interpretation of Standardised Testing- Why bother? A South African perspective – SAOU. www.saou.co.za/wp-content/uploads/2016/05/sarh-Howie.pdf Date of access: 03 Aug. 2019.

Howie, S., Venter, E., Van Staden, S., Zimmerman, L., Lang, C., Scherman, V. & Archer, E. 2007. PIRLS 2006 Summary Report. South African Children's Reading Achievement. Director: CEA Co-National Research Coordinator: PIRLS 28 Nov. 2006.

Human, I. 2016a. Teacher training. Update skills regularly. Your guide to Education: 14 Jun. 2016. Northern Ireland: Department of Education.

https://www.google.co.za/search?q=department+of+education+northern+ireland&sa=x&ved=ZahUKEwiU7KXittrjAhVhgHE... Date of access: 30 Nov. 2018.

Human, J. 2016b. Update skills regularly. *The Teacher:* 14, 8 Jun.

Information on Education in Netherlands. OECD

(https://gpseducation.oecd.org/CountryProfile?primaryCountry=NLD) — Contains indicators and information about Netherlands and how it compares to other OECD and non-OECD countries. Date of access: 02 Apr. 2018.

IQMS, 2014. Teacher Development: *Department of Basic Education and SACE briefings*. Basic Education. https://pmp.org.za Date of access: 17 Oct. 2019.

Janse van Rensburg, J.M. 2006. Die invloed van 'n konseptuele stimuleringsprogram op Graad 1 leerders. Potchefstroom: Noord Wes-Universiteit. (Thesis – PhD).

Janse van Rensburg, J.M. 2015. The school readiness performance of a group of Grade R learners in primary schools in the Gauteng Province of South Africa. *South African Journal of Childhood Education*, 5(1): 1, Jan.

Janse van Rensburg, J.M. 2016. Guidelines for Masters and PhD students. (Oral communication). Potchefstroom: Noord Wes-Universiteit.

Jansen, J. & Taylor, N. 2003. Education Reform. *Country studies Education Reform and Management Publication Series,* 11 (1), Oct.

https://www1.worldbank.org/education/globaleducationreform/pdf/SouthAfricasestudy.pdf.

Date of access: 15 Dec. 2017.

Jaynes. C., Rossignoli, S. & Fenyiwa Amonoo – Kuofi, E. 2019. 21 st Century Skills: Evidence of issues in definition, demand and delivery for developmental contexts. Brighton, UK: Institute of Development

Assets.publishing.service.gov.uk/media/5d71187ce5274a097c07b985/21st_century.pdf Date of access: 25 May 2023.

Kelly, M., Dowling, M. & Miller, M. 2018. The research for understanding: The role of paradigmatic worldview. *Nurse Researcher*, 25 (4): 9-13.

Kivunja, C. & Kuyini, A. B. 2017. Understanding and Applying Research Paradigms in Educational Contexts. *International Journal of Higher Education*, 6(5):26-41.

Krige, E. 2018. Taalplan vir skole. Rapport: 1, 22 Apr.

Kruger, C.G. 2015. Applied Competence in a distance learning programme for the professional development of Foundation Phase teachers. Potchefstroom: NWU (Thesis – PhD).

Kruger, H. 2018. Lesufi se Taalbeleid. Outokraties, nie ongrondwetlik. *Beeld:* 10, 19 Apr.

Küsel, A. 2017. Baie onnies nie opgelei vir taak. *Beeld:* 3, 8 Jun.

Ladbrook, M.W. 2009. Challenges experienced by educators in the implementation of inclusive education in primary schools in South Africa. Pretoria: Unisa (Thesis – PhD).

Leavy, P. 2014. The Oxford Handbook of Qualitative Research. Oxford: Oxford University Press.

Le Cordeur, M. 2018. Leerplan wat SA pas. Beeld: 9,27 Nov.

Le Grange, L.L.L 2013. Sustainability and Higher Education: From arborescent to rhizomatic thinking. *Educational Philosophy and Theory,* 43, (7):1

tandfonlinecom/doi/abs/10.1111/j.1469-2008. 00503.x Date of access: 26 Oct. 2021

Leedy, P.D. & Ormrod, J.E. 2010. Practical Research. Planning and Design. 9th ed. Boston:

Pearson.

Leeman, Y. 2008. *Education and Diversity in the Netherlands – SAGE Journals*. http://journals.sagepub.com Date of access: 13 Sep. 2019.

Letaba, P. 2017. South African Performance on the Trends in International Mathematics and Science Study. https://naci.org/za/index.php/south-african-performance-on-the-trends-ininternational-mathematics-and-science-study/ Date of access: 03 Aug. 2019.

Lichtman, M. 2010. Qualitative research in education: A user's guide. 2nd ed. Thousand Oaks, California: SAGE Publications, Inc.

Lichtman, M. 2011. Understanding and Evaluating Qualitative Educational Research. Thousand Oaks, California: SAGE Publications, Inc.

Linde, D. & Parker, R. 2019. Navigating the rights and responsibilities in the growing role of private actors in education. *Sunday Times:* 20, 16 Jun.

Locke, L.F., Silverman, S.J. & Spirduso, W.W. 2010. Reading and Understanding Research 3rd ed. Washington DC: SAGE.

Louw-Carstens, M. 2018. In Limpopo is daar net een van elk. Beeld: 1, 13 Jul.

Luijkx, R. & De Heus, M. 2018. The Educational System of the Netherlands.

http://www.mzes.uni_mannheim.de/publications/misc/isced_97/luij08_the_education_al_system_of_the_nederlands.pdf. Date of access: 3 Jun. 2018.

Machi, L.A. & Mc Envoy, B. 2009. The Literature Review. California: Corwin Press.

Majewski, E. 2018. Five Things That Make the Education in the Netherlands Work Well. https://borgenproject.org/education-in-the-netherlands-work-well/ Date of access: 17 Jul. 2018.

Makhubu, W. 2014. Changing Mindset. the Teacher: 10, 1 May.

Malaika, M. 2017. Our education needs urgent attention. *Sunday Times:* 6, 16 Jun.

Maree, K. 2019. First steps in Research. 3nd ed. Pretoria: Van Schaik Publishers.

Marshall, J. 2018. Contemporary Debates in Education Studies. London: Routledge.

Mashaba, S. 2018a. I heard a child cry, followed by a gunshot, then silence. The Star: 2, 21 Jun.

Mashaba, S. 2018b. Pit-death mom's questions. *The Star:* 2,16 Jul.

Matar, N. 2017. Any suggestions how to develop students' 21st century critical thinking skills? http://www.researchgate.net/post/Any suggestions how to develop students' 21st century thinking skills Date of access: 8 Dec. 2017.

Matseke, P. 2018. Private and public health sectors not enemies. *The Star:* 11, 16 Jul.

Maynier, D. 2023. South African Government Progress on International Reading and Literacy. www.gov.za/speeches/mec-david-maynier-progress-international-reading-and-literacy-study-2021-results-16-may Date of access: 25 May 2023.

Mc Combes, S. 2020. Sampling methods. Types and Techniques Explained. www.scribbr.com/methodology/sampling-methods/ Date of access 10 Nov. 2020.

McMillan, J.H. 2018. Classroom Assessment. Principles and Practice that Enhance Student Learning and Motivation. United States of America: Pearson.

McMillan, J.H. & Schumacher, S. 2010. Research in Education. 6th ed. Boston: Pearson Publishers.

Meijer, H., Wintle, M.J., Heslinga, M.W. & Rowen, H.H. 2019. Holland, Kingdom of the Netherlands, Koninkrijk der Nederlanden, Nederland.

https://www.britanica.com/place/Netherlands Date of access: 10 Aug. 2019.

Mertens, D.M. 2018. Mixed Methods Design in Evaluation. Los Angeles: SAGE.

Ministerie van Onderwijs, Cultuur en Wetenschap (OCW). 2007. Primair onderwijs, The Hague: Ministerie van Onderwijs, Cultuur en Wetenschap.

http://minocw.nl/onderwijs/393/index.html Date of access: 18 Jun. 2018.

Ministry of Education, Culture and Science. 2012. Key Figures 2007-2011: Education, Culture and Science. Ministry of Education, Culture and Science, The Hague.

www.onderwijsinspectie.nl/binaries/content/assets/Documents+algemeen/2012/netherlandsk ey-figures-2007-2011-ocw.pdf. Date of access: 25 Jun. 2018.

Miya, N. 2017. Why teacher Are Leaving Their Profession. News 24.

https://m.news24.com/SouthAfrica/news/why-teachers-are-leaving-their-profession-20170830 Date of access: 22 Nov. 2020.

Monama, T. 2018. Tears and Ecstasy. National matric pass rate dips slightly to 75%. *The Star:* 1, 5 Jan.

Mooki, O. 2018. Beating joblessness, Chinese Way. *The Star:* 6, 21 Jun.

Motshekga, A. 2009. "We've signed OBE's death certificate". Statement by minister Of Basic Education, Angie Motshekga, on curriculum review process, National Assembly, Nov. 5, 2019. Pretoria: Department of Basic Education.

Motshekga, A. 2015. The South African National Curriculum Framework for children from birth to four (NCF). Pretoria: Department of Basic Education.

Motshekga, A. 2016. Personnel Administrative Measurements (PAM). *Government gazette,* 39684:3, 12 Feb.

Mouton, J. 2012. How to succeed in your Master's & Doctoral Studies. A South African Guide and Resource book. 17th ed. Pretoria: Van Schaik Publishers.

Mullis, I.V.S., Martin, M.O., Goh, S. & Cotter, K. 2016. Educational Policy and Curriculum in Mathematics and Science. Retrieved from Boston College, TIMMS & PIRLS International Study Centre. http://timmsandpirls.bc.edu/timms2015/encyclopedia/ Date of access: 17 Dec. 2018.

Msila, V. 2007. Apartheid Education to the Revised National Curriculum Statement: Pedagogy for Identity formation and Nation Building in South Africa. *Nordic Journal of African Studies* 16 (2):146-160 South Africa: University of South Africa.

Nastasi, B.K. & Hitchcock, J.H. 2016. Mixed methods Research and Culture – Specific Intervention Program Design and Evaluation. Boston: SAGE.

National Education Collaboration Trust (NECT). 2016. www.nect.org.za Date of access: 10 May 2019.

Nederlands Jeugd Instituut. 2007. Ontwikkelingsstimulering, Utrecht: Nederlands Jeugd Instituut. http://www.ontwikkelingsstimulering.nl/smartsite.dws?id=10184 Date of access: 3 Jun. 2018.

Nel, N., Nel, M. & Hugo, A. 2013. Learner Support in a Diverse Classroom. A guide for Foundation, Intermediate and Senior Phase teachers of language and mathematics. Pretoria: Van Schaik.

Nieuwenhuis, J. 2019. (In Maree, K. First steps in research). 3rd ed. Pretoria: Van Schaik Publishers.

Nkosi, B. & Mashaba, S. 2018. Surge in crimes against women. The Star: 2, 21 Jun.

Nombembe, P. & Hyman, A. 2019. Living and Dying in Tin-Can-Town. Sunday Times: 6, 16 Jun.

NORRIC (Nordic Recognition Network). 2005. The system of Education in Russia. www.norric.org
Date of access: 20 Sep. 2017.

Nusche, D., Braun, H., Halász, G. & Santiago, P. 2014. OECD Reviews of Evaluation and Assessment in Education: Netherlands. OECD Publishing.

http://dx.doi.org/10.1787/9789264211940-en Date of access: 30 Jun. 2018.

Nutbrown, C., Clough, P. & Selbie, P. 2008. Early Childhood Education: History, philosophy and experiences. Thousand Oaks, CA: SAGE.

Nzimande, B. E. 2011. National Qualifications Framework Act 67 of 2008: Policy on the Minimum Requirements for Teachers Education Qualifications. Government gazette 34467: 553 www.dhet.gov.za/.../joint-dhet-che-communiqu-implementation-new-policy-teacher Date of access: 07 Jul. 2017.

Nzimande, B.E. 2014. White Paper for post-school Education and Training. Government gazette, 37229:3 www.gpwonline.co.za Date of access: 08 May 2017.

Ocampo, L. 2004. Global Perspectives on Human Language: The South African Context – Timeline of Education and Apartheid. http://www.stanford.edu/jbaugh/saw/Lizet_timeline.html Date of access: 10 Jan. 2018.

OECD (Organisation for Economic Co-operation and Development). 2008. Reviews of National Policies for Education South Africa. http://www.oecd.org/publishing/corrigenda Date of access: 10 Nov. 2017.

OECD (Organisation for Economic Co-operation and Development). 2012. PISA 2012 Results: What Makes Schools Successful (Vol iv): Resources, Policies and Practices. Paris: OECD Publishing. https://dx.doi.org/10.1787/9789264201156-en Date of access: 12 Sep. 2018.

OECD (Organisation for Economic Co-operation and Development). 2013. Synergies for better Learning: An International Perspective on Evaluation and Assessment, OECD Reviews of Evaluation and Assessment in Education. Paris: OECD Publishing. http://dx.doi.org/10.17879789264190658-en Date of access: 29 Jun. 2018.

OECD. 2014. Education Policy Outlook Netherlands. www.oecd.org/edu/policyoutlook.html Date of access: 26 Jun. 2018.

Okeke, C., Abongdia, J., Olusola Adu, E., Van Wyk, M. & Wolhuter, C. 2016. Learn to Teach. A Handbook for teaching Practice. Cape Town: Oxford University Press.

Onderwater, P. 2018. Domestic Politics and Neutrality (The Netherlands). https://encyclopedia.1914-1918-online.net Date of access: 24 Aug. 2019.

Ostinelli, G. 2009. Teacher Education in Italy, Germany, England, Sweden and Finland. *European Journal of Education,* Vol 44, No 2, 2009, Part II. Oxford: Blackwell Publishing.

Padayachee, S.G. 2013. Education Statistics in SA. Department of Basic Education. Pretoria. www.educatio.gov.za Date of access: 29 Sep. 2017.

PAM (Personnel Administrative Measures). 2016. Education Law and Policy Handbook. Johannesburg: Juta.

Patton, M.Q. 2008. Utilization – focused evaluation. 4th ed. Thousand Oaks, California: SAGE.

Patrinos, H.A. 2009. "Private Education Provision and Public Finance: The Netherlands," prepared for School Choice and School Improvement: Research in State, District and Community Context, Vanderbilt University.

https://researchgate.net/.../228305057 Private Education Provision Date of access: 15 Jan. 2019.

Perry, B.D. 2008. The power of Early Childhood Kansas Health Foundation Leadership Institute. http://www.childorg.com Date of access: 6 Jan. 2018.

Pestalozi, J.H. 1946. Complete works and letters. In E. Dejung (Ed.), *Critical education*. Zürich: Orell Fussli Verslag Date of access: 14 Nov 2020

Phebe, E.J. 2014. PRAGMATISM. Philosophy of Education. https://images.app.goo.gl/JMdPVMQyLK3in8jZ6 Date of access 3 Dec. 2020.

Poggenpoel, M. & Myburgh, C. 2004. The researcher research instrument in education research: A possible treat to trustworthiness. *Education*, 124 (2):418-422.

Potgieter, F.J. 2013. Faculty of Education Sciences. Med and PhD Education Research Support Programme. Potchefstroom: North-West University.

PSA The Union of Choice. 2018. *In-service training of teachers (INSET) Strategies for Improvement. Public Servant Association.* https://psa.co.za/docs/default-source/psa-documents/psa-opinion/in-service training of teachers inset October 2018.pdf?sfvrsn=83707887 3 Date of access: 25 May 2023.

Puckett, M.B. & Diffily, D. 2003. Teaching young children: An introduction to the early childhood profession. 2nd ed. New York: Delmar Learning.

Rakometsi, M.S. 2008. The Transformation of Black School Education in South Africa, 19501994: A Historical Perspective. Bloemfontein: University of the Free State (Thesis – PhD).

Rahman, S. 2017. The Advantages and Disadvantages of Using Qualitative and Quantitative Approaches and Methods in Language "Testing and Assessment" Research: A Literature Review. *Journal of Education and Learning,* (6) 1: 102 – 112.

Reddy, V. 2021. HSRC (Human Science Research Council) of Department: Science and Innovation Republic of South Africa Review, 19 (2):3, Jun.

Retief, H. 2018. Apartheid se nalatenskap 'n probleem. Rapport: 3, 20 May.

Rotherham, A.J. & Willingham, D. 2009. 21st Century Skills: The Challenges Ahead. Eduwork.com: arotherham@educationsector.org Date of access: 25 Sep. 2017.

Roidi, M.M. 2015. *Synergy: The online Journal for the Association for the Tutoring Profession,* v. 7, Tutor Training Procedures in Higher Education: Creating a Community of Lifelong Learners. http://www.//G:/Synergy-Vol-8-Roidi.pdf Date of access: 20 Nov. 2016.

Ross, D. 2017. Empowering our students with 21st century skills for today. https://www.gettingsmart.com Date of access: 12 Oct 2019.

SAOU (Suid-Afrikaanse Onderwysers Unie/South African Teachers' Union). 2018. Alternative and Adoptive Methods of Assessment for Learners Experiencing Barriers to Learning Manual. Pretoria: SAOU.

Schunk, D.H., Pintrich, P.R. & Meece, J.L. 2010. Motivation in Education. Theory, Research, and Applications. 3_{rd} ed. New Jersey: Pearson.

Slattery, P. 2006. Curriculum Development in the Postmodern Era. 2_{nd} ed. New York: Routledge Tayler & Francis Group.

SNAP Survey. 2013. Overview of the Education System in South Africa. http://www.statssa.gov.za/publications/Report%2092 01 03 Date of access: 10 May 2018.

South Africa. Department of Basic Education (RSA). 2010a. Guidelines for Fullservice/Inclusive Schools. Pretoria: Department of Basic Education.

South Africa. Department of Basic Education (RSA). 2010b. Guidelines for Inclusive Teaching and Learning. Pretoria: Department of Basic Education.

South Africa. Department of Basic Education (RSA). 2010c. Making all Schools Inclusive. www.education.gov.za Date of access: 10 Feb. 2019.

South Africa. Department of Basic Education (RSA). 2011. Programme and Promotion Requirements. http://education.gov.za Date of access: 16 May 2018.

South Africa. Department of Basic Education (RSA). 2012. National Policy Pertaining to the Programme and Promotion Requirements of the National Curriculum Statement Grade R-12. Pretoria: Department of Basic education.

South Africa. Department of Basic Education (RSA). 2014. Policy on Screening, Identification, Assessment and Support. Pretoria: Department of Basic Education.

South Africa. Department of Education (RSA), 1996. National Education policy act.1996 (Act no. 27 of 1996): to provide for the determination of policy on the conditions of employment of educators; and to provide for matters connected therewith. (Notice 697) *Government gazette*, 2 (17118), 24 April.

South Africa. Department of Education (RSA). 1999. National policy on HIV and AIDS for schools. *Government gazette*, 410 (20372), Aug. 1999.

South Africa. Department of Education (RSA). 2000. *Norms and Standards for Educators*. Pretoria: Department of Education.

South Africa. Department of Education (RSA). 2002a. *Revised National Curriculum Statement Grades R-9 (Schools) Policy, Arts and Culture*. Pretoria: Government Printers.

South Africa. Department of Education (RSA). 2002b. *Revised National Curriculum Statement Grades R-9 (Schools) Policy, Social Sciences*. Pretoria: Government Printers.

South Africa. Department of Education (RSA). 2002c. *Revised National Curriculum Statement Grades R-3 (Schools) Foundation Phase.* Pretoria: Government Printers.

South Africa. Department of Education (RSA). 2003. *Revised national Curriculum Statement Grades R-9 (Schools)*. Teacher's guide for the development of learning programmes. Foundation Phase. Pretoria: Department of Education.

South Africa. Department of Education (RSA). 2006. Education White Paper 6. Special Needs Education. Building an inclusive education and training system. Pretoria: Department of Education.

South Africa. Department of Education (RSA). 2007. National Policy on Assessment and Qualifications for Schools in the GET Band. Pretoria: Department of Education.

South Africa. Department of Education (RSA). 2008. National Curriculum Statement. Subject Assessment Guidelines. Pretoria: Department of Education.

South Africa. Department of Education (RSA). 2009. National Qualification Framework Act, 2008. *Government Gazette*, 167 (31909), Feb. 2009.

South Africa. Department of Education (RSA). 2015. *Education statistics in South Africa*. Pretoria.

South Africa. Department of Education (RSA). 2017. Procedure manual for promotion and Submissions of 2017/11 GET Grades R-3, Grades 4-9, and NSC Grades 10 and 11 Schedules and Summaries. Pretoria: Department of Education.

South Africa. Department of Health, South Africa. 2000. *HIV/AIDS/STD strategy plan for south Africa 2000-2005*. Pretoria: Department of Health.

South African Council of Educators (SACE). 2005. Professional Development Portfolios. Pretoria: SACE.

South African Human Rights Commission (SAHRC). Charter of Children's Basic Education Rights. The right of children to basic education 2012. www.sahrc.org.za. Date of access: 15 Nov. 2020.

South Africa. 1996. Constitution of the Republic of South Africa. Act No 108,1996. Cape Town: Government Printer.

South Africa. 2015. National Qualifications Framework Act,2008 (ACT NO.67 of 2008). Revised Policy on The Minimum Requirements for Teacher Education Qualifications. (Notice 111). *Government gazette*, 38487:14, 19 Feb.

Statistics South Africa (Stats SA). 2016. Statistical Community Survey Release. Pretoria: Statistics South Africa. www.statssa.gov.sa Date of access: 17 Oct. 2019.

Sterne, M. 2021. The true state of South Africa's schools. https://mg.co.za/education/2021-10-03-the-true-state-of-our-schools/ Date of access: 27 May 2023.

Steyn, S.C. 2008. The educational system of South Africa. (*In:* Steyn, H.J. & Wolhuter, C.C. *eds.* Education Systems: The Challenges of the 21st Century. Noordbrug: Keurkopie).

Steyn, H.J., Steyn, S.C., De Waal, E.A.S. & Wolhuter, C.C. 2003. Suid-Afrikaanse Onderwysstelsel. Noordbrug: Keurkopie.

Stolk, S. 2019. Education in South Africa: South Africa. (Personal interview) 24 Apr. 2019.

Sturm, J., Groenendijk, L., Kruithof, B. & Rens, J. 1998. Educational Pluralism – a historical study of so-called 'pillarization' in the Netherlands, including a comparison with some developments in South African education, Comparative Education, 34:3, 281 – 297, DOI:10.1080/03050069828144 https://doi.org/10.1080.03050069828144 Date of access: 10 Dec. 2018.

Teddlie, C. & Tashakkori, A. 2009. Foundations of mixed methods research integrating qualitative and quantitative approaches in the social and behavioural science. Thousand Oaks, CA: SAGE.

www.scrip.org/(s(351jmbntvnsj1aadkposzje))/reference/ReferencesPapers.aspx?... Date of access: 23 Mar. 2019.

Ten Napel, H.M. 2013. Constitutionalism, Democracy and Religious Freedom to Be Fully Human. https://hansmartientennapel.com Date of access: 14 Jul. 2018.

Thomas, A. 1997. Pestalozzi and American Education. https://education.stateuniversity.com Date of access: 11 Oct. 2019.

TIMMS & PIRLS. 2015. Teacher Education and Professional Development.

http://timmsandpirls.bc.edu/timms2015/encyclopedia/countries/netherlands/tea... Date of access: 21 May 2018.

Tracy, J.D. 2019. Desiderius Erasmus. https://britanica.com/biography/Erasmus-Dutchhumanist Date of access: 21 Aug. 2019.

United Nations International Children's Education Fund (UNICEF). 2012. *UNICEF is committed to ensuring quality learning for every child*. education">www.unicef.org>education. Date of access 9 December 2020.

United Nations Educational, Scientific and Cultural Organization (UNESCO). 1997. International Standard Classification of Education (ISCED).

http://www.unesco.org/education/information/nfsunesco/doc/ised_1997.html
Date of access:
12 Dec. 2017.

United Nations Educational, Scientific and Cultural Organization (UNESCO). 2012. Education for sustainable development. Retrieved from https://en-unesco.org/themes/education-sustainabledevelopment Date of access: 26 Nov. 2020

United Nations Educational, Scientific and Cultural Organization (UNESCO). 2017. Education transforms lives. http://www.unesco.org/education/information/nfsunesco/doc/ised_2017.html Date of access: 10 Nov. 2020.

United Nations Statistics Division. 2016. Millennium Development Goals: Netherlands. http://www.indexmundi.com/netherlands/millennium-development-goals.html Date of access: 10 Nov. 2016.

Van Dam, J. 2018. Curriculum and Netherlands' Schools System. (Personal interview) Gouda. 24 Nov. 2018.

Van Zyl, S. 2017. 80% van SA Gr. 4's kan nie met begrip lees nie. Beeld: 1, 6 Dec.

Venter, B. 2011. Exploring Educationists and Officials' Understanding of Early Childhood Development in the Dr. Kenneth Kaunda District: Potchefstroom: NWU (Dissertation – M.Ed.).

Verma, G. 2019. Exploration-Based Learning.

https://www.linkedin.com/pulse/explorationbased-learning-geeta-verma Date of access: 26 May 2022.

Visser, L. 2018. Curriculum and Instructional Design: Netherlands. (Personal interview) Gouda. 25 Nov. 2018.

Visser, A. 2019. Education in South Africa: South Africa. (Personal interview) 26 Apr. 2019.

Whittle, G. 2018. Department Basic Education TDCM Legotla. 2018. *Repositioning the curriculum for 21 st century education and skills development.* https://www.educationgov.za/TDCMLegotla2018.aspx

Date of access: 25 May 2023.

Wikipedia. 2018. Bronfenbrenner's Ecological System Theory. http://whatmakespeopletick.blogspot.com/2010/07bronfebrenners-ecological-systems-html

Date of access: 17 Feb. 2018.

Wolhuter, C.C. 1996. Historiografie van die Suid-Afrikaanse Onderwysgeskiedenis soos beskou vanuit 'n histories-opvoedkundige pespektief. *Suid Afrikaanse Tydskrif vir Opvoedkunde,* 16 (4): 180-185.

Wolhuter, C.C. 2006. Recent developments in history of education in Western Europe and their Significance for Southern Africa. *South African Review of Education* 12 (2): 21-33.

Wolhuter, C.C. 2011. History of Education as a field of scholarship and the historiography of South African education. Pretoria: Van Schaik.

Wolhuter, C.C., Meyer, L.J. & Steyn, H.J. 2014. Education in Historical Context. South Africa: Van Schaik.

Woolfolk. A. 2007. Educational Psychology. Boston: Pearson.

World Maps. 2019. Ontheworldmap.com Date of access: 5 Oct. 2019.

Wu, C. 2017. The Relationship between Reformed Teaching and Students creativity in a Chinese Middle School. University of Kansas. (Thesis – PhD).

Yin, R.K. 2011. Qualitative Research from Start to Finish. New York: The Guilford Press.

Zali, M. 2019. How curiosity is feeding a community. *Pretoria News:* 5, 20 Jun.

Zimmerman, L. & Van Staden, S. 2007. Reading Curriculum and Language Policies in South Africa. Pretoria: Department of Education.

APPENDIX A 1 Language editing



LANGUAGE EDITING

25 January 2020

To whom it may concern

This letter serves to confirm that the following thesis was edited:

"Curriculum and Instructional design in primary schools in South Africa and the Netherlands"

The onus is on the client(s) to work through the proposed track changes and to accept or reject proposed changes. Clients might amend the content after the editing process. Clients should also make certain that all sources/references have been cited.

APPENDIX A 2

UNISA College of Education ethics review committee



UNISA COLLEGE OF EDUCATION ETHICS REVIEW COMMITTEE

Date: 2019/02/13

Dear Mrs Thiart

Decision: Ethics Approval from 2019/02/13 to 2024/12/13

Ref: 2019/02/13/61958999/29/MC

Name: Mrs AH Thiart Student: 61958999

Researcher(s): Name: Mrs AH Thiart

E-mail address: eldathiart0@gmail.com

Telephone: +27 82 821 1244

Supervisor(s): Name: Dr JM van Rensburg

E-mail address: ona.jansevanrensburg@nwu.ac.za

Telephone: +27 82 374 6027

Title of research:

The curriculum and instructional design in South Africa and Netherland's schools for learners 0-12 years and their teacher's education.

Qualification: PhD in Curriculum and Instructional Studies

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 2019/02/13 to 2024/02/13.

The **low risk** application was reviewed by the Ethics Review Committee on 2019/02/13 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:

- The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
- 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.



University of South Africa Preller Street, Muckleneuk Ridge, City of Tshwane PO Box 392 UNISA 0003 South Africa Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150 www.unisa.ac.za

- 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.
- 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.
- No field work activities may continue after the expiry date 2024/02/13.
 Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

Note:

The reference number 2019/02/13/61958999/29/MC should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.

Kind regards,

Prof AT Motihabane CHAIRPERSON: CEDU RERC

motlhat@unisa.ac.za

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



posate

APPENDIX B The Department of Education ethics review committee



Curriculum Studies

University of South Africa

City of Tshwane

South Africa

20 November 2018

The Department of Education

CONSENT TO DO RESEARCH IN SOUTH AFRICA AND THE NETHERLANDS

I am currently enrolled for a PhD (Doctor of Education) at the University of South Africa. The title of my thesis is: Exploring the curriculum and instructional design in primary schools in South Africa and the Netherlands.

The primary of the research is to explore and to determine how the school systems of South Africa and the Netherlands can enhance the school system and teacher's training in South African primary schools.

As part of my PhD, I use qualitative- methods research methods that include a literature study, an empirical investigation by means of a questionnaire with teachers of both countries, semi

structured interviews with lecturers in the Netherlands and semi-structured interviews with departmental officials in South Africa, and document analysis. Purposeful sampling will be used for the qualitative empirical investigation by means of field observation and reflection, a questionnaire with teachers in different phases (learners aged 0-12 years) in primary schools in South Africa and the Netherlands, as well as document analysis. Qualitative research will be conducted by means of questionnaires and semi-structured interviews that will comprise qualitative and quantitative questions. Quantitative research will be conducted by means of a field observation schedule and a field observation sheet. Statistical and text analysis and interpretation across databases on national results of learners from both South Africa and the Netherlands will be done.

Information-rich participants from pre-primary and primary schools in both countries will be purposefully selected. Teachers from pre-primary and primary schools are going to be purposefully selected to participate in the research. These participants who form the sample group are going to be selected from schools that have a cosmopolitan staff composition, that is a fair representation of the population of each country (South Africa and the Netherlands). Various racial groups, males and females, and participants will be selected. Five teachers (n=5) from the Netherlands and 23 teachers from South Africa ten (n=10) teachers from Gauteng and thirteen (n=13) teachers from the Eastern Cape will be selected to answer a questionnaire with 15 questions. Five (n=5) teacher education lecturers will be selected from the Netherlands, and 13 departmental officials will be selected in South Africa that were part of the past two decades in education of South Africa and the Netherlands. Semi-structured interviews will be conducted with these selected lecturers (Netherlands) and departmental officials (South Africa).

The school's names and the names of respondents will not be disclosed. No names are written or mentioned during the semi-structured interviews or questionnaires. Any information regarding this research will be kept strictly confidential. I do not foresee any potential risks or discomfort related to the participation in this research. Respondents must answer the questions as objectively as possible. I can assure you that with this research, I will not disturb the usual routine of the school or university. Respondents may choose whether they want to be part of this research or not. Respondents may also refuse to answer any questions or withdraw from this process at any time.

I believe the results of this research will help to enhance the quality of education and the alignment of education with economy market. This study may contribute to the body of scholarship by addressing the following: problems with regard to the ongoing struggle with content knowledge; teaching reading skills; improving mathematical performances; and exploring the curriculum and instructional design for learner's 0-12 years and their teacher's training.

If you have any question or comments about the research the researcher Mrs A.H. Thiart can be contacted at 0828211244 or the research supervisor Dr (Ona) Janse van Rensburg at 0823746027.

Yours faithfully	
Mrs A.H. Thiart	Dr (Ona) J.M. Janse van Rensburg

APPENDIX C Principles of the school: Consent to do research in South Africa and the Netherlands



Curriculum Studies

University of South Africa

City of Tshwane

South Africa

20 November 2018

To the principal of the school

CONSENT TO DO RESEARCH IN SOUTH AFRICA AND THE NETHERLANDS

I am currently enrolled for a PhD (Doctor of Education) at the University of South Africa. The title of my thesis is: Exploring curriculum and instructional design in selected primary schools in South Africa and the Netherlands.

The primary of the research is to explore and to determine how the school systems of South Africa and the Netherlands can enhance the school system and teacher's training in South African primary schools.

As part of my PhD, I use qualitative- methods research that include a literature study, an empirical investigation by means of a questionnaire with teachers of both countries, semi

structured interviews with lecturers in the Netherlands and semi-structured interviews with departmental officials in South Africa, and document analysis. Purposeful sampling will be used for the qualitative empirical investigation by means of field observation and reflection, a questionnaire with teachers in different phases (learners aged 0-12 years) in primary schools in South Africa and the Netherlands, as well as document analysis. Qualitative research will be conducted by means of questionnaires and semi-structured interviews that will comprise qualitative and quantitative questions. Quantitative research will be conducted by means of a field observation schedule and a field observation sheet. Statistical and text analysis and interpretation across databases on national results of learners from both South Africa and the Netherlands will be done.

Information-rich participants from pre-primary and primary schools in both countries will be purposefully selected. Teachers from pre-primary and primary schools are going to be purposefully selected to participate in the research. These participants who form the sample group are going to be selected from schools that have a cosmopolitan staff composition, that is a fair representation of the population of each country (South Africa and the Netherlands). Various racial groups, males and females, and participants will be selected. Five teacher education lecturers (n=5) from the Netherlands and 13 teachers from South Africa five (n=5) departmental officials from Gauteng and eight (n=8) departmental officials from the Eastern Cape will be selected to answer a questionnaire with 10 questions. The total time to complete the questionnaire will take about 30 minutes.

The institutes' names and the names of respondents will not be disclosed. No names are written or mentioned during the questionnaires. Any information regarding this research will be kept strictly confidential. I do not foresee any potential risks or discomfort related to the participation in this research. Respondents must answer the questions as objectively as possible. I can assure you that with this research, I will not disturb the usual routine of the institute. Respondents may choose whether they want to be part of this research or not. Respondents may also refuse to answer any questions or withdraw from this process at any time.

I believe the results of this research will help to enhance the quality of education and the alignment of education with economy market. This study may contribute to the body of scholarship by addressing the following: problems with regard to the ongoing struggle with

content knowledge; teaching reading skills; improving mathematical performances; and exploring the curriculum and instructional design for learner's 0-12 years and their teacher's training.

If you have any question or comments about the research the researcher Mrs A.H. Thiart can be contacted at 0828211244 or the research supervisor Dr (Ona) Janse van Rensburg at 0823746027.

Yours faithfully	
Mrs A.H. Thiart	Dr (Ona) J.M. Janse van Rensburg

APPENDIX D

Teachers' training lecturers and departmental officials:

Consent to do research in South Africa and the Netherlands



Curriculum Studies

University of South Africa

City of Tshwane

South Africa

20 November 2018

To teacher's training lecturers and departmental officials

CONSENT TO DO RESEARCH IN SOUTH AFRICA AND THE NETHERLANDS

I am currently enrolled for a PhD (Doctor of Education) at the University of South Africa. The title of my thesis is: Exploring the curriculum and instructional design in selected primary schools in South Africa and the Netherlands.

The primary of the research is to explore and to determine how the school systems of South Africa and the Netherlands can enhance the school system and teacher's training in South African primary schools.

As part of my PhD, I use qualitative-methods research that include a literature study, an empirical investigation by means of a questionnaire with teachers of both countries, semi structured interviews with lecturers in the Netherlands and semi-structured interviews with departmental officials in South Africa, and document analysis. Purposeful sampling will be used for the qualitative empirical investigation by means of field observation and reflection, a questionnaire with teachers in different phases (learners aged 0-12 years) in primary schools in South Africa and the Netherlands, as well as document analysis. Qualitative research will be conducted by means of questionnaires and semi-structured interviews that will comprise qualitative and quantitative questions. Quantitative research will be conducted by means of a field observation schedule and a field observation sheet. Statistical and text analysis and interpretation across databases on national results of learners from both South Africa and the Netherlands will be done.

Information-rich participants from pre-primary and primary schools in both countries will be purposefully selected. Teachers from pre-primary and primary schools are going to be purposefully selected to participate in the research. These participants who form the sample group are going to be selected from schools that have a cosmopolitan staff composition, that is a fair representation of the population of each country (South Africa and the Netherlands). Various racial groups, males and females, and participants will be selected. Five teacher education lecturers (n=5) from the Netherlands and 13 teachers from South Africa five (n=5) departmental officials from Gauteng and eight (n=8) departmental officials from the Eastern Cape will be selected to answer a questionnaire with 10 questions. The total time to complete the questionnaire will take about 30 minutes.

The institutes' names and the names of respondents will not be disclosed. No names are written or mentioned during the questionnaires. Any information regarding this research will be kept strictly confidential. I do not foresee any potential risks or discomfort related to the participation in this research. Respondents must answer the questions as objectively as

possible. I can assure you that with this research, I will not disturb the usual routine of the institute. Respondents may choose whether they want to be part of this research or not.

Respondents may also refuse to answer any questions or withdraw from this process at any time.

I believe the results of this research will help to enhance the quality of education and the alignment of education with economy market. This study may contribute to the body of scholarship by addressing the following: problems with regard to the ongoing struggle with content knowledge; teaching reading skills; improving mathematical performances; and exploring the curriculum and instructional design for learner's 0-12 years and their teacher's training.

If you have any question or comments about the research the researcher Mrs A.H. Thiart can be contacted at 0828211244 or the research supervisor Dr (Ona) Janse van Rensburg at 0823746027.

Yours faithfully	
Mrs A.H. Thiart	Dr (Ona) J.M. Janse van Rensburg
Question 1. Who is responsible for curriculum design country?	n and instruction in the schools of your

Question 2. How are teachers trained in terms of the curriculum and instruction for the different	
Lestion 3. Has your country experienced any major changes during the last two decades? 997-2017) Tes No Divate your answer. Lestion 4. How are teachers skilled by means of in-service training to adapt to changes in the stem and curriculum.	
	
Question 3. Has your country experienced any major changes during the last two decades? (1997-2017)	
Yes No	
Motivate your answer	
Montate year anower.	
	
Question 4. How are teachers skilled by means of in-service training to adapt to changes in the system and curriculum.	
Question 5. What monitoring system do you have in place to assist teachers in the execution of	
and damestan and mediacidital addigit (mediac of mortonially in deficie).	
	

Question 6. Explain the requirements of promotion for teachers in your country.
Question 7. What are the requirements for a teacher to become a headmaster?
Question 8. Explain the management of schools in the different phases from 0-12 years.
Question 9. What can be done to improve and prepare learners 0-12 years to meet the demand of the 21st century?
Question 10. What can be done to enhance teacher's training to meet the demands of the 21st century?

If you have any questions or comments about the research the researcher Mrs A.H. Thiart can be contacted at 0828211244 or the Research supervisor Dr J.M. Janse van Rensburg at 0823746027.

Yours Faithfully

Mrs A.H. Thiart Dr J.M. Janse van Rensburg

Post- graduate Student Research supervisor

APPENDIX E

Teachers of the school: Consent to do research in the Netherlands and in South Africa



Curriculum Studies

University of South Africa

City of Tshwane

South Africa

20 November 2018

To the teachers of the school

CONSENT TO DO RESEARCH IN THE NETHERLANDS AND SOUTH AFRICA

I am currently enrolled for a PhD (Doctor of Education) at the University of South Africa. The title of my thesis is: Exploring the curriculum and instructional design in selected primary schools in South Africa and the Netherlands.

The primary aim of the research is to explore and to determine how the school systems of South Africa and the Netherlands can enhance the school system and teacher's training in South African primary schools.

As part of my PhD, I used qualitative-methods research, that include a literature study, an empirical investigation by means of a questionnaire, field observation schedule, field

observation sheet and document analysis. The total time of the questionnaire will take about 30 minutes.

If you have any questions or comments about the research the researcher Mrs A.H. Thiart can be contacted at 0828211244 or the Research supervisor Dr J.M. Janse van Rensburg at 0823746027.

Yours Faithfully	
Mrs A.H. Thiart	Dr J.M. Janse van Rensburg
Post-graduate student	Research supervisor

APPENDIX F

Questions to teachers



Questions to teachers:

Question 1. Do you feel equipped to teach in the phase you are teaching on this moment and motivate your answer?
Question 2. Are you trained for this specific phase?
Question 3. Do you think assessment is an important part of the daily school day and motivate your answer?
Yes No

Question	4.	Describe	how	assessment	is ——	being	executed	in	your	country
Question 5	5. WI	nat is the po	olicy rega	arding second	and	third lanç	guage learn	ers in	your co	ountry?
		re your sch ng and leari		ipped with the	e ned	cessary t	eaching an	d lear	ning m	naterial to
Question 7	7. Are	e these reso	ources a	vailable and a	cces	sible to th	nose who ne	eed th	em?	
Question 8	 3. De:	scribe the us	se of ted	chnology in yo	ur scl	nool?				

Question 9. Does your system provide for learners with inclusive needs!	
Yes No	
Please elaborate your answer. Question 10. Explain the homework policy of your school and country. Question 11. Describe how parents/guardians are involved in the teaching and learning school?	
Question 10. Explain the homework policy of your school and country.	
Question 11. Describe how parents/guardians are involved in the teaching and learning of yoschool?	
Question 12. Do your school provide extra-mural activities for the learners to develop holisticall	
(rugby/soccer, netball, hockey, swimming, tennis, athletics, art and music, etc.)	

design	(method	of	intervention)
Question 14. Do yo	ou find the current curriculu	m appropriate for the phase	you are teaching in?
Yes No			
May motivate your	answer.		
	you think the current syst	em (curriculum and instruction the 21st ⁻ century?	ctional design) prepare
		the research the researcher h supervisor Dr J.M. Jar	
Yours Faithfully			
Mrs A.H. Thiart		Dr J.M. Janse van F	Rensburg

Appendix G1

Observation schedule (Field notes during observation in schools and classrooms)



OBSERVATION SCHEDULE (G1) (FIELD NOTES DURING OBSERVATION IN SCHOOLS AND CLASSROOMS)

The following observation schedule will be used by the researcher in South African and the Netherlands schools to gather data by means of informal observation during visits to sampled schools:

1. Learning and teaching environment (classroom, school safety, ventilation)

2.	Population in class (learner/teacher ratio):
3.	Lesson plans/ preparation of lessons:

١.	Timetable/ Formal school hours:	
5.	Informal and formal assessment (CASS and SBA):	
S .	Well-being of teachers, learners, parents and feedback/reporting to parents stakeholders:	0
	StakeHolders.	
7 .	Resource material:	

8.	How does technology enhance teaching and learning in the school?				
9.	Learning and teaching support (LTS) and Inclusive education:				
10.	Intervention programs:				

APPENDIX G2

Observation sheet (Field notes during observations in schools and classrooms)



OBSERVATION SHEET (FIELD NOTES DURING OBSERVATION IN SCHOOLS AND CLASSROOMS)

School Nr:	Remarks/field notes	Rubric/Scale
Infrastructure of school (safe environment, ventilation, etc.)		
Classroom (physical, tables, chairs, resources etc.)		
Timetable, lesson plans and teacher's preparation		
Assessment (SBA formal and informal; intervention plans		
5.1 Learning and teaching support (LTS) and;		
5.2 Inclusive education		
6.Technology		
7. Management of school		
8. Well-being of teachers, learners and parents, stakeholders		

9. Parent	6	and
invol	vement	
feedback		
10. General	impression	of
school		

Rubric/Scale for Observation Sheet (Appendix G2)

Rating Code	Percentages	Description of Competence	
4	70% - 100%	Outstanding/ Excellent	
		Achievement	
3	50% - 69%	Satisfactory Achievement	
2	35% - 49%	Partial Achievement	
1	1% - 34%	Not Achieved	

APPENDIX H

Raw data



Raw data: Appendix H.

Data analysis: the Netherlands.

Interviews in the Netherlands (Appendix D)

Abbreviation: N1 to N 5 (Lecturers/participants from the Netherlands)

Question 1: Who is responsible for curriculum design and instruction in the primary schools of your country?

Respondent N 1: "No formal curriculum prescribed by the department (government). Responsible for own curriculum in primary schools and free to choose own content but must meet the standards of the Dutch education system standards."

Respondent N 2: "There is no curriculum only general levels or aims. Have to do a test, not only the CITO-test to keep up with important changes in primary schools' curriculum."

Respondent N 3: "Choice of primary schools themselves."

Respondent N 4: "The basics are made by the government. Further interpretation is left to the primary school."

Respondent N 5: "The government and specialist [sic] of education. "Conclusion question 1: The respondents agree on the fact that the Netherlands does not have any formal curriculum prescribed by the government. Primary schools in the Netherlands are responsible for their

own curriculum. They are free to choose their own content according to general levels set by government, and further interpretation is left to the primary school itself (§ 3.3.1).

Question 2: How are primary school teachers educated in terms of the curriculum and instruction for the different phases in your primary school system for learners 0–12 years?

Respondent N 1: "Teachers are trained at Universities and/or Teacher's Training Colleges. Qualifications of teachers in the Netherlands is a bachelor's degree [sic] or 4-year teacher's diploma."

Respondent N 2: "Teachers' Training Colleges on different subjects and pedagogy (how to teach). The 3rd and 4th year focus on conceptual thinking from their own theory."

Respondent N 3: "University follows the curriculum. In the 1st and 2nd year, general curriculum, and in 3rd and 4th year, specialise in subjects."

Respondent N 4: "You can choose yourself which age you are interest in. You specify [sic] in the last two years of primary school college. However, you can teach each grade after getting your diploma."

Respondent N 5: "Four years college. The last 2 years, you can specialise in 4- to 8-year children or 9- to 12-year children [sic]. You can teach every grade."

Question 3: Has your country experienced any major changes during the last two decades (1997–2017)?

Respondent N 1: "To include English in the primary schools and the 21st-century skills are part of the curriculum."

Respondent N 2: "Inclusive education: inclusiveness in the mainstream primary schools.

Teachers are not trained teachers."

Respondent N 3: "More attention to focus on personal growth, but it also depends on which primary school you are going to. More learner centred."

Respondent N 4: "They change slowly. Basically, English and 21st-century skills."

Respondent N 5: "More English in primary schools, 21st-century skills and ICT (tablets)." Question

4: How are teachers skilled by means of in-service education to adapt to changes in the system and curriculum?

Respondent N 1: "All depends on the teacher's interest. Some are interest in management, and some are interest in teaching and learning. Skilled by own interest through ongoing developmental programmes."

Respondent N 2: "Ongoing developmental programmes. How it is been done is the responsibility of the lead teachers or departmental heads [HODs]. Subject specialists give workshops or training sessions. It is optional [sic]."

Respondent N 3: "Depends on the choice of the primary school makes. Some teachers are trained to be teacher leaders, and some are trained to be part of primary school management (board of the primary school) or lead teachers in subjects."

Respondent N 4: "You have informal help from colleagues."

Respondent N 5: "If you need help, you can ask a colleague to help you. No subject advisors, only inspectors to check, they don't help."

Question 5: What monitoring system do you have in place to assist teachers in the execution of the curriculum and instructional design (method of intervention) in primary schools?

Respondent N 1: "Lead teachers and head of departments [HODs] help to assist teachers with their work [curriculum in the primary school]."

Respondent N 2: "No formal system in primary schools. Only in-service monitoring and own initiative to do reflective skills."

Respondent N 3: "No one does. No time for that. Inspection once in five years. The principals have to look in the classes."

Respondent N 4: "Cito is national decided. Temporary tests are taken according to the methods you are using."

Respondent N 5: "Cito (formal test) in February and June and informal tests three time weekly." **Question 6:** Explain the requirements of promotion for teachers in your country.

Respondent N 1: "No extra requirements for promotion."

Respondent N 2: "There are not many promotion opportunities. Teachers can teach learners from group 1 (4 years) till Group 8 (12 years) with a bachelor's degree or 4-year teacher's diploma."

Respondent N 3: "Hard for teachers to get promotion. Different grades are not connected with promotion. If a teacher wants to teach in VBO (12 years+), the requirement of a specialise subject is needed [sic]."

Respondent N 4: "You need experience and skills. Four years bachelor's and an extra study to gain more skills for whatever you want to do in financial or management bachelors."

Respondent N 5: "If you want to have another function, you have to do a new study e.g. management, special needs or gymnastics."

Question 7: What are the requirements for a teacher to become a principal?

Respondent N 1: "Master's in Education or at least a bachelor's degree."

Respondent N 2: "Must have good leadership skills to become a principal at a young age."

Respondent N 3: "Four years [*sic*] bachelor's degree. Headmaster has to do a master's degree in Education leadership in the same time."

Respondent N 5: "Degree."

Conclusion question 7: The respondents agree that, in the Netherlands, a teacher can become a principal at a young age with a bachelor's or master's degree and good management and leadership skills (§ 3.5).

Question 8: Explain the management of primary schools in the different phases from 0–12 years

Respondent N 1: "Primary schools have directors or principals with co-ordinators in the different year groups."

Respondent N 2: "Director and co-ordinators, it differs from primary school to primary school." Respondent N 3: "Director, principal, HODs and co-ordinators in different groups."

Respondent N 4: "Headmaster, lower-class co-ordinator [Group 1–3], middle-class coordinator [Group 4–5] and higher-class co-ordinator [Group 6–8] and teachers."

Respondent N 5: "Principal/director, primary school management team [SMT] and teachers."

Question 9: What can be done to improve and prepare learners 0–12 years to meet the demands of the 21st-century?

Respondent N 1: "21st-century skills are already part of and included in curriculum of primary schools and teacher's training. Not necessary for extra improvement or preparations to be done."

Respondent N 2: "21st-century skills are popular depending on what you do with them. What is needed is already included. All depends on your view of teaching."

Respondent N 3: "They were spoon-fed in basis primary school."

Respondent N 4: "We already are taking it [21st-century skills] in our curriculum [sic]."

Respondent N 5: "It [21st-century skills] is already in the curriculum [sic]."

Question 10: What can be done to improve teacher education to meet the demands of the 21st century?

Respondent N 1: "The demands of the 21st century is [sic] already included in the teacher's training."

Respondent N 2: "Holistic view of development, not only cognitive, but personally part, incorporate the 21st-century skills [sic]."

Respondent N 3: "Long-life learning [sic] – every teacher must have a master's degree. Constructive learning must take place."

Respondent N 4: "Gain more attention for the 21st-century skills [sic]."

Respondent N 5: "From now on [21st-century skills] are in the curriculum of the college."

Questionnaire: Primary school teachers in the Netherlands in different phases (Appendix F)

Question 1: Do you feel equipped to teach in the phase you are teaching on this moment? Motivate your answer.

Respondent NT 1: "Yes, I feel equipped although you always need to learn more about certain barriers for the children with specific needs".

Respondent NT 2: "Ik geef les in de middenbouw groep 5. Ik voel mij voldoende toegerust om daarin les te geven. We hebben voldoende materialen voor di kinderen en de leerkrachten".

Respondent NT 3: "Yes, I feel equipped to teach but specially the learning experience is what me feel equipped to work with these children".

Respondent NT 4: "Yes, motivation is all about good teacher training at Teachers' College".

Respondent NT 5: "Yes, the reason is because I do have learning experience to work with learners. Very good teacher education".

Question 2: Are you educated for this specific phase?

Respondent NT 1: "Yes, I am. But I'm never too old to learn."

Respondent NT 2: "Ja, door opleiding en nascholing."

Respondent NT 3: "Yes. I studied social pedagogisch worker, social pedagogisch hulpverlener and management in health care."

Respondent NT 4: "Yes."

Respondent NT 5: "Yes, I am trained for this specific phase."

Question 3: Do you think assessment is an important part of the daily primary school day? Motivate your answer.

Respondent NT 1: "Yes, assessment is important because it shows us (and parents) how the children progress and what education and (extra) explanation they need."

Respondent NT 2: "Ja, kinderen worden gestimuleerd en krijgen complimenten. Weih word bekeken an beoordeeld waarbij de mogelykheden van de kinderen worden weegewogen. Elk

kind wordt beoordeeld op sijn eigen kunnen. Dat betekent niet dat ei geen eisen worden gesteld. Dee worden ook duidelijk naan de kinderen gecommuniceerd."

Respondent NT 3: "Yes, if you don't do assessment, you forget things, with assessment you get your intuition on paper with marks."

Respondent NT 4: "Yes, shows learners competencies."

Respondent NT 5: "Yes, shows children's progress and what extra explanation they need." Question

4: Describe how assessment is being executed in your country.

Respondent NT 1: "Assessment is used in every primary school in our country. Teachers keep up the marks during the year and 2–4 times a year, the children get a primary school report to show the parents how they are achieving."

Respondent NT 2: "2x per jaar worden the kinderen getoets d m v een landelijke toets."

Respondent NT 3: "The learners doing the Cito test. Before they filled in this test in the last two classes from primary school age 10-12 years. At the moment they start already at the age 7–8 years. This is a landelike toets."

Respondent NT 4: "Used in every primary school before the learners carry on with the next year."

Respondent NT 5: "Assessment is used in every primary school. Learners get reports to show their progress. Cito Test."

Question 5: What is the policy regarding second- and third-language learners in your country?

Respondent NT 1: "They have to learn Dutch because that is the most spoken language in the country. At most primary schools, English is the second language that children learn.

Sometimes from the age of four years most primary schools offer English from the age of 9– 11 years."

Respondent NT 2: "Door heel de primary school heen wordt in alle groepen Engels als 2e taal aangeboden."

Respondent NT 3: "In every primary school they get English as a 2nd subject, they do exams in this. At the moment they start already at age 7 years."

Respondent NT 4: "English as 2nd language. Dutch as first language."

Respondent NT 5: "Dutch as first language because it is the spoken language. English as second language."

Question 6: Are your primary school equipped with the necessary teaching and learning material to enhance teaching and learning?

Respondent NT 1: "Yes, it is. There are methods for the most subjects and there is extra material as well. For example, there's extra materials for smart kids, and also for children who need extra help."

Respondent NT 2: "Ja, en sijn voldoende materialmen voor alle kinderen."

Respondent NT 3: "Yes, the learning material is quite good in the Netherlands and we have primary school teachings of the newest developments."

Respondent NT 4 & 5: "Yes."

Question 7: Are these resources available and accessible to those who need them?

Respondent NT 1: "Yes, if it's necessary, there are a lot of possibilities."

Respondent NT 2: "Ja. De overheid stelt geld besckikbaar voor scholen om de benodigde middelen aan te schaffen."

Respondent NT 3: "Yes, only some things are quite expensive, but all the necessary things are available in all the primary schools."

Respondent NT 4: "Yes, it is."

Respondent NT 5: "Yes, in all the primary schools."

Question 8: Describe the use of technology in your primary school.

Respondent NT 1: "It is not a very important subject at our primary school, it's more in the higher groups than in the lower groups. It has a combination with our method for biology. As teachers and children, we use computers and digital smartboards every day."

Respondent NT 2: "Alle klassen beschikken over een diqibord. Per klas zijn er gemiddeld 5–6 computers/laptops besckikbaar voor leerling gebruik."

Respondent NT 3: "We use in almost all the classes' computers/laptops. We make use in every class from [sic] smartboards (Interactive boards)."

Respondent NT 4: "Yes, it is."

Respondent NT 5: "Yes, in all the primary schools."

Question 9: Does your system provide for learners with inclusive needs? Yes or no. Elaborate your answer.

Respondent NT 1: "Yes and no. There are a lot of possibilities and we try to see the needs of each child. But some problems are too difficult in our classes and those problems take a lot of energy from teachers and the children."

Respondent NT 2: "Ja, tot op zekere hoogte. Een paar jaar geleden is passend onderwijs geintroduceerd met als doel kinderen met extra zorgbehoefte op gebied van leren en/of gedrag binnen het reguliere onderwijs te houden. Veel scholen lopen hierby wel kegen grienzen aan: es is niet altijd genoeg ruimte om deze kinderen goed op te vangen en vaal niet genoeg ondersteuning voor deze kinderen en de leerkrachten."

Respondent NT 3: "Yes, if the child needs more support in anything, they get assessed and get an amount of money and then they can buy extra support for them like physiotherapy, speech therapy or a one-on-one person [sic] next to the child in the primary school. You call it rugzakje/backpack."

Respondent NT 4: "Yes, if a child needs extra support, they get it via speech therapy or a person next to the child."

Respondent NT 5: "Yes, if needed, children can get extra support and go to primary schools for special education."

Question 10: Explain the homework policy of your primary school and country.

Respondent NT 1: "Approximately from the age of 9–10 years, the children will get homework. In the first years, once a week (one subject), at the age of 11–12, there'll be more homework frequently."

Respondent NT 2: "Er is geen landelijke beleid, het is per primary school geregeld. Op onze primary school we dit langzaam vanaf groep 5."

Respondent NT 3: "They get homework for after primary school from the age of 7 years. It is not a big of amount work. But from age 10 you have to learn for assessments and exams and do research."

Respondent NT 4: "No formal homework policy the primary schools decide to give homework or not."

Respondent NT 5: "Primary schools in the Netherlands decide to give homework or not. No formal (landelijk) policy."

Question 11: Describe how parents/guardians are involved in the learning and teaching of your primary school.

Respondent NT 1: "Parents are mostly not involved in the active learning and teaching at primary school. However, we expect them to help their children with their homework if necessary. Twice a year there is an evening for parents where they can learn and talk about their children and their progress at primary school (10 minutes for each child)."

Respondent NT 2: "Ouders worden alleen ingezet voor onder steunende taken."

Respondent NT 3: "They are lot involved. Teachers will phone if the child have problems and then you have to discuss how to go on. Parents have to help with the homework and learners to read. Specially if the child is behind the parents have to do it at home."

Respondent NT 4: "Ongoing parent nights. Parents are informed if learners experience any learning problems. Parents are involved in learner's [sic] progress."

Respondent NT 5: "Very much involved in learner's [sic] progress and well-being of learners for parents to discuss progress."

Question 12: Do your primary school provide extramural activities for learners to develop holistically?

Respondent NT 1: "Sometimes there are extra lessons in some of these subjects. Once a week a group has movement education/gym for one hour. There is a local organisation that offers extra possibilities for such lessons. We can enrol."

Respondent NT 2: "Naast de wekelijkse gym lessen bieldt de primary school geen extra activiteiten op dit gebied maar via een plaatselijke organisatie worden deze activiteiten wel aangeboden."

Respondent NT 3: "In the primary school there is normal P.T., arts and music. The sport is after primary school and you can go to what the child likes to do. Every primary school in the Netherlands gives swimming lessons."

Respondent NT 4: "Swimming lessons in primary schools and gym on a weekly base. Art and music are part of the daily primary school day."

Respondent NT 5: "Music and art are in every primary school. Swimming is compulsory to every primary school. P.T lessons in primary school."

Question 13: What kind of structures are needed to optimise the curriculum and instructional design (method of intervention)?

Respondent NT 1: "It's important to see each child's needs and possibilities. Safety is a main condition for teaching children. A clear structure is necessary. Knowledge about barriers and how to deal with it."

Respondent NT 2: "We hebben een leerstofjaarklassen system. Belangrijk is een goede overdracht v d kinderen tussen de leerkrachten v d verschillende groepen. Daarnaast kijken leerkrachten bij elkaar in de klas, wordt geevalueerd of ons onderwijs nog aansluit wat in het voortgezet onderwijs en in de maatschappy verwacht wordt."

Respondent NT 3: "There are a lot of extra support available, like earphones for kids who are easily distracted or personal desks for kids with autism etc."

Respondent NT 4: "Be aware of the well-being of the learners – curriculum relates to job finding." Respondent NT 5: "Teachers all over the spectrum must be clued up with learners [sic] progress and learning problems. Use extra support available if necessary."

Question 14: Do you find the current curriculum appropriate for the phase you are teaching in? Yes/No. Motivate your answer.

Respondent NT 1: "Yes, we have a lot of equipment method and all we need. There is a lot of support by internal guidance. There is money from the government to provide in our needs."

Respondent NT 2: "Ja, wel bij de aanschaf van nieuwe leermiddelen /methodes goed gekeken of dit past bij het curriculum en of het curriculum nog voldoet."

Respondent NT 3: "Yes, it's good and appropriate for the level."

Respondent NT 4: "Appropriate."

Respondent NT 5: "Appropriate and very good. No need to change."

Question 15: Do you think the current system (curriculum and instructional design) prepares learners (0–12 years) to meet the demands of the 21st century?

Respondent NT 1: "We doen ons best om de leerlingen toe te rusten op het gebied van leerstof, vaardigheden en een houding ten opzichte van social media, computers etc."

Respondent NT 2: "Deels wel, deels is dit niets waar we blijvend over nadenken en met elkaar over in gesprek zijn."

Respondent NT 3: "Yes, we have a lot in store and walking already forward to other countries in the world."

Respondent NT 4: "Yes, we compare good to other countries."

Respondent NT 5: "Yes, we are pro-active in our primary schools."

Data analysis: South Africa

Interviews in South Africa (Appendix D)

Abbreviations: CSA 1.1.to CSA 1.5 (Departmental officials from Gauteng)

CSA 2.1 to CSA 2.7 (Departmental officials from the Eastern Cape)

SA 1.1 to SA 1.13 (Primary school teachers from the Eastern Cape)

SA 2.1 to SA 2.10 (Primary school teachers from Gauteng)

The following answers provide a summary from five (n=5) departmental officials from Gauteng and seven (n=7) departmental officials from Eastern Cape.

Question 1: Who is responsible for curriculum design and instruction in the primary schools of your country?

Respondent CSA 1.1: "National Department of Basic Education. National curriculum is the CAPS, the Curriculum and Assessment Policy Statement. Provincial attached in terms of levels."

Respondent CSA 1.2: "Department of Education. Unfortunately, not professional qualified educators/lecturers with no experience in classroom situations – extremely disappointing."

Respondent CSA 1.3: "The Curriculum Policies and Development Department, stakeholders, representatives and the broader community."

Respondent CSA 1.4: "DBE and Curriculum Policy Monitoring Department at National. Curriculum planners and stakeholders of community and other [sic]. Public comment process is followed and then ministers will sign off and UMALUSI will look at the quality."

Respondent CSA 1.5: "Education is made up of the Department of Education (DBE) – primary and secondary primary schools and Higher Education and Training (DHET). DBE is for schooling curriculum. The curriculum is developed internally at DBE Curriculum. They use

various stakeholders, representatives, and groups of curriculum experts. There after goes through a public comment process where all parties give input. The Minister then approves. UMALUSI plays the role of Quality Council. Curriculum has to be quality assured." Respondent CSA 1.6: "The DBE Curriculum planners and stakeholders are responsible for curriculum design."

Respondent CSA 1.7: "The DoE through curriculum designer serving from the provincial office, DBE and NGO's (Non-Governmental Organisations) are used to assist in the implementation of the policy on the curriculum working in hand with curriculum designers."

Respondent CSA 2.1: "CAPS and ATP-riglyne. Eie lesplanne en voorbereiding. NECT lesson plans."

Respondent CSA 2.2: "Curriculum Advisors. The SMT member responsible for academic management."

Respondent CSA 2.3: "Department Basiese Onderrig Nasionaal [sic]."

Question 2: How are teachers educated in terms of the curriculum and instruction for the different phases in your primary school system for learners 0–12 years?

Respondent CSA 1.1 "Monitored and judged by output. Curriculum development through holiday courses, teachers support through monitoring and support, circuit support and lead teachers."

Respondent CSA 1.2: Pre-primary: hardly any training (mostly) except crash courses. Colleges/Universities lack skills, integrity, hardly no knowledge of learners. Correspondence certificate or diploma or 10 weeks training after Grade 12."

Respondent CSA 1.3 "Educators are given separate training programmes at universities and teacher training colleges, e.g., to develop teaching material, to understand the implementation of the Curriculum and Assessment Policy Statements or teacher professional development, which include resources, administrative and instructional support."

Respondent CSA 1.4: "Educators are trained at tertiary institutions on the methodology in teaching different subjects."

Phase appropriate content and practise teaching and resource making."

Respondent CSA 1.5: "Educators are trained at tertiary level to demonstrate general educational principals and to focus on knowledge, skills and competencies to teach Gr. R–3 (Foundation Phase). They specialise in knowledge of theories or teaching and learning. They are provided with knowledge of the 3 subjects areas – Literacy, Numeracy and Life Skills. The Intermediate and Senior Phase specialise in specific subjects. Within the primary school system, we are finding that the entry level teachers battle because they are ill equipped when it comes to applying and integrating the curriculum into practise. We have grade heads, mentor teachers and subject heads that play a vital role in assisting to be able to carry over the necessary content when using the curriculum."

Respondent CSA 1.6: "Teachers undergo tertiary training at a university. Then teachers are trained by DBE officials and subject advisors specialising in the different phases."

Respondent CSA 1.7: "They go to a university for a B.Ed. training; they attend workshops and support sessions when they are in the field. These support sessions and workshops are conducted by subject advisors."

Respondent CSA 2.1: "Workshops per province. Cluster meetings 1x per term and professional learning committees 1x per term."

Respondent CSA 2.2: "Curriculum advisors facilitate training on specific subjects. Unions (SAOU) have training on subjects, e.g., Mathematics, Languages etc. NECT does training workshops."

Respondent CSA 2.3: "Hoër onderwysinstellings. Indiensopleiding: nie-regerings organisasies, vakbond-unies, hoër onderwysinstellings."

Respondent CSA 2.4: "We choose one HOD plus a teacher in each and every phase per term."

Respondent CSA 2.5: "Content workshops by different stakeholders, e.g., curriculum advisors, NECT and provincial curriculum advisors."

Question 3: Has your country experienced any major changes during the last two decades (1997–2017)?

Respondent CSA: 1.1 "Yes, Curriculum 2005, Revised curriculum, Foundation for Learning. Settled with CAPS."

Respondent CSA 1.2: "Yes, absolute disaster."

Respondent CSA 1.3: "Yes, changing the primary school curriculum so many times, e.g., outcomes-based education, RNCS, NCS, and currently the Curriculum and Assessment Policy Statements."

Respondent CSA 1.4: "Yes, the redress of misplaced learners, Early Childhood Development and Inclusive Education received more focus – changed from OBE – RNC – NCS – CAPS."

Respondent CSA 1.5: "Yes. There has been major reform in South Africa since 1997. A lot of redress and access took place in primary schools. There was more focus on equality and social justice. Inclusive education, early childhood development and special needs education became a focus. The most comprehensive change was the Curriculum 2005 implementation in 1997. To underpin this curriculum the OBE approach was used. Then followed the Revised National Curriculum Statement (NRCS) in 2007. The Curriculum and Assessment Policy Statement (CAPS) was produced in 2011 and phased into primary schools 2012."

Respondent CSA 1.6: "Yes, more focus on social justice and special needs education. Curriculum 2005 implementation in 1997, the OBE approach. In 2007 NRCS (revised), CAPS in 2011 and implemented in 2012."

Respondent CSA 1.7: "Yes. In 1997 C2005 was introduced and in 2007 RNC was revised to NCS and revised in CAPS in 2011 and implemented in 2012."

Respondent 2.1: "Yes, curriculum 2005, foundation for learning till CAPS."

Respondent CSA 2.2: "Yes, curriculum changes OBE to CAPS."

Respondent CSA 2.3: "Ja. Transformasieproses ná 1994. Sewentien onderwysstelsels wat een moes word. Die ontwikkeling van 'n Nasionale Kurrikulum met die gepaardgaande hersienings."

Respondent CSA 2.4: "Yes, teachers cannot adapt the curriculum to suit their context."

Respondent CSA 2.5: "Yes, education changes were Report 105, OBE and CAPS policy. Challenges for educators to adapt to different policies."

Question 4: How are teachers skilled by means of in-service training to adapt to changes in the system and curriculum?

Respondent CSA 1.1: "In-house and through subject advisors."

Respondent CSA 1.2: No response.

Respondent CSA 1.3: "The responsibility lies with the provincial and district officials."

Respondent CSA 1.4: "Ongoing professional teacher development through workshops and seminars by provincial and district departments. It is done by subject advisors and lead teachers."

Respondent CSA 1.5: "In-service training when such major changes are made are inadequate. I am sure they probably envisaged quality training right down to the teacher, but that did not happen. The lack of knowledge, understanding and implementation has been/was a great problem for many facilitators. Two or three days in trying to upskill teachers to such a change is not sufficient. To understand such a change with regards to content coverage and assessment is not possible."

Respondent CSA 1.6: "Ongoing workshops and training are available through DBE and teacher's development."

Respondent CSA 1.7: "Subject meetings, visits to primary schools by subject advisors, unions training their members and subject meetings at primary school by subject heads or HODs."

Respondent CSA 2.1: "Workshops. Negative in terms of change."

Respondent CSA 2.2: "Subject meetings and training. Visits to primary schools by subject advisors. unions training their members. Subject meetings at primary school by subject heads or HODs."

Respondent CSA 2.3: No response.

Respondent CSA 2.4: "We give them material and posters and CDs. They don't read them with understanding."

Respondent CSA 2.5: "Educators are workshopped on new curriculum policies."

Question 5: What monitoring system do you have in place to assist teachers in the execution of the curriculum and instructional design (method of intervention) in primary schools?

Respondent CSA 1.1: "Subject improvement Plan (SIP), Monitoring and Support of SIP, weekly planning and reporting, class visits twice a term and integrated quality management system (IQMS)."

Respondent CSA 1.2: "Weekly meetings in specific grades and in districts to discuss lesson preparation, according to the curriculum. Training sessions presented by district officials, HODs or senior teachers to evaluate learners progress, their written work, admin files, etc."

Respondent CSA 1.3: "At district level, we do primary school visits and primary school-based assessment. Conduct support intervention workshops, especially with highly underperforming primary schools. Conduct workshops on subject content."

Respondent CSA 1.4: "At district level, onsite and SBA monitoring."

Respondent CSA 1.5: "Internal grade meetings need to take place regularly. Book moderation by grade heads, then to HOD and signed off by the principal. Teacher portfolio moderation: Teachers meet per grade groups with files, phase head goes through file with teachers, gives support where needed and recommendations are made. Moderation report issued and signed by principal."

Respondent CSA 1.6: "At district level, the advisors do primary school visits, onsite visits and SBA to monitor curriculum coverage."

Respondent CSA 1.7: "Subject advisors monitor through primary school visits and SBA which check on how much they have covered on the content coverage."

Respondent CSA 2.1: "Annual Teaching Plan (ATP) guidelines and curriculum coverage."

Respondent CSA 2.2: "Monitoring tool (subject heads/HOD) and curriculum advisors. Monitoring tool (Inclusive Education: for intervention)."

Respondent CSA 2.3: "Graadhoof, fasehoof en skoolhoof. Medekollegas (mentors) en IQMS."

Respondent CSA 2.4: "We train them each and every term (beginning) in maths and languages. They are expected to follow a routine provided by NECT programmes (CAPS compliant)."

Respondent CSA 2.5: "Curriculum advisors support educators at primary schools, e.g., lesson

clinics."

Question 6: Explain the requirements of promotion for teachers in your country?

Respondent CSA 1.1: "Minimum requirements: REQV 13 (entry level); HOD: three years of teaching; deputy principal: five years of teaching; and principal: seven years of teaching."

Respondent CSA 1.2: "Firstly, experience, proper qualifications as advertised, and to be honest ...must be in with the crowd."

Respondent CSA 1.3: "To have the appropriate qualifications, to be registered with South African Council for Educators (SACE), and have sufficient experience."

Respondent CSA 1.4: "Registered with SACE and must meet the requirements stipulated in promotion post bulletin as advertised."

Respondent CSA 1.5: "All teachers need to have the appropriate and recognised qualifications. This must include appropriate training and registered with SACE. Qualifications need to be obtained before assumption of duty."

Respondent CSA 1.6: "Teachers must apply for post, must meet requirements, SACE registered, have the qualifications to meet requirements, and must have years of experience in their field."

Respondent CSA 1.7: "To have a driving licence, registered with SACE minimum of three years, and for deputy, at least five years and, in fact, experience is more important than qualifications, but for management, you should have done management course, but for curriculum post, seven years."

Respondent CSA 2.1: "KS 1-opvoeder benodig 'n verdere diploma (ekstra kundigheid), vir HOD, twee jaar, en adjunkhoof, vyf jaar ondervinding."

Respondent CSA 2.2: "Qualification and also qualified for the specific position/subject.

Experience in the specific requirements for the position. Three years teaching experience."

Respondent CSA 2.3: "Onderwyservaring: Vakkennis. Professionele etiek, persoonlike vaardighede en sosiale vaardighede."

Respondent CSA 2.4: "Diploma REQV 13."

Respondent CSA 2.5: "At least three years teaching experience. Level REQV 13. Medical fitness. Registration with SACE."

Question 7: What are the requirements for a teacher to become a principal?

Respondent CSA 1.1: "Seven years teaching experience. REQV 13 + 3 years teaching diploma."

Respondent CSA 1.2: "Suppose [sic] to be experienced, have proper administration skills in specific language of instruction, the required qualifications, B.A., B.Ed. in Education, and a stable life and moral values. But, in reality, it is not the scenario."

Respondent CSA 1.3: "Minimum of seven years' experience in whole primary school management. To meet the specific post requirements and to be registered with SACE."

Respondent CSA 1.4: "Must have a teaching qualification, REQV 13–17. Have at least seven years' teaching experience. Registered with SACE. Advertisement requirement as per post in bulletin."

Respondent CSA 1.5: "You need to have a teaching qualification (REQV 13 – REQV 17) and/or degree (bachelor's). At least seven years of experience. Compulsory registration with SACE."

Respondent CSA 1.6: "Must have a teaching qualification, REQV 13–17 and seven years' teaching experience. SACE registered with management skills."

Respondent CSA 1.7: "Registered with SACE and have management course and seven years of teaching experience."

Respondent CSA 2.1: "Seven years of teaching experience. Four-year diploma or bachelor's degree."

Respondent CSA 2.2: "Graduation, experience in management position, and seven years of experience in teaching."

Respondent CSA 2.3: "Dieselfde as by vorige vraag met leierskap en bestuursvaardighede. Finansiële bestuursvaardighede."

Respondent CSA 2.4: "Experience, some prefer qualification, but some unions discourage that."

Respondent CSA 2.5: "At least five years' teaching experience. REQV 13. Registration with SACE."

Question 8: Explain the management of primary schools in the different phases from 0–12 years?

Respondent CSA 1.1 "IQMS."

Respondent CSA 1.2: "Private pre-primary primary schools (day care) sometimes unqualified managers. Pre-primary departmental primary schools (Gr. R) on premises of primary schools are the responsibility of the HOD Foundation Phase. Foundation Phase (Gr. R - 3) and Intermediate Phase (Gr 4-6), responsibility of HOD Intermediate Phase."

Respondent CSA 1.3: "In the following Foundation Phase Gr. R - 3, we get the grade head, subject head, phase head or HOD."

Respondent CSA 1.4: "Principal, deputy principal, head of department (HOD), grade head and subject head."

Respondent 1.5: "The SMT forms an integral part of primary school management across the phases. Principal, deputy principal, HODs (Foundation Phase/Intermediate phase), grade heads, subject heads."

Respondent CSA 1.6: "In each phase, you have a subject head, grade heads, HOD, and deputy principal." Respondent CSA 1.7: "Subject head, grade head, HOD, deputy principal and, lastly, the

principal."

Respondent CSA 2.1: "Day care, Grade R, Grade 1-3 Foundation Phase HOD, Grade 4-6 Intermediate Phase HOD, deputy principal and principal."

Respondent CSA 2.2: "HOD in Foundation Phase and grade heads, HODs in Intermediate Phase as well as subject heads who oversee the different subjects and curriculum coverage."

Respondent CSA 2.3: "Drie afdelings in primêre skole: grondslagfase, intermediêre fase en senior fase."

Respondent CSA 2.4: "Some primary schools are not well managed. Some primary schools' SGBs are in control."

Respondent CSA 2.5: "HOD is appointed per level or subject. If not enough HODs [sic], the subject head will be appointed to manage a subject or phase."

Question 9: What can be done to improve and prepare learners 0–12 years to meet the demands of the 21st century?

Respondent CSA 1.1: "Curriculum diversity."

Respondent CSA 1.2: "Early childhood is the focus and primary school readiness in terms of emotional, developmental, social and physical needs. Revise curriculum accordingly to learners' needs. Smaller classes, at least two assistant teachers in every class. Teach learners in mother tongue and separate primary schools from LSEN as in the past."

Respondent CSA 1.3: "Be technology-driven, e.g., using tablets in classrooms. Teachers to all have laptops for administration tasks and teaching and learning [sic]."

Respondent CSA 1.4: "To expose learners to technology through using different methods of teaching resources, e.g., e-learning, etc."

Respondent CSA 1.5: "There probably will be a curriculum change/adjustment, because how are we going to prepare our learners for a future that does not even exist? The focus will have to change to problem solving, creativity, collaboration with their peers, critical thinking skills, and to be accountable. Teachers need to be encouraged. The learners will have to be encouraged to focus on the future. They will have to think with their heads and acquire skills with their hands."

Respondent CSA 1.6: "To use different teaching strategies and activities to use technology more."

Respondent CSA 1.7: "To be more fourth industrial revolution in terms of technology and more learner-centred teaching and use of variety of strategies."

Respondent CSA 2.1: "Primary schools try their very best to use laptops and tablets."

Respondent CSA 2.2: "Information sharing and discussing life issues, teaching life skills."

Radio

Sharing information as well as educating parents and communities and TV programmes: educational programmes teaching learners coping skills, distruthfulness and honesty."

Respondent CSA 2.3: "Integrering van tegnologie in lesbeplanning en. Kontekstuele en lewenswerklike aanbi^{aanbieding}

"

Respondent CSA 2.4: "Teachers need to prepare their work when they go to class. Be prepared to go an extra mile. Research more before delivering the content. Give learners feedback after each and every activity."

Respondent CSA 2.5: "Learners should be taught in LOLT. Learners should be encouraged to use technology for research projects. Learners should be taught how to use electronic devices to gain more knowledge."

Question 10: What can be done to improve teacher education to meet the demands of the 21st century?

Respondent CSA 1.1: "Migrate from blackboard to computers/laptops (IT)."

Respondent CSA 1.2: "Parent involvement programmes to inform them to prevent neglect, abuse, learning disabilities and awareness programmes on emotional, physical, social and psychological needs of learners. Adapt salaries of educators for teaching over weekends. Counsellors available for educators as well as at primary schools."

Respondent CSA 1.3: "Teachers need to upskill their technology approach to be involved in online learning and action learning. Do research as educators."

Respondent CSA 1.4: "Educators need to upskill own technological skills and use it in classrooms."

Respondent CSA 1.5: "Educators will have to be lifelong learners

. Teachers will have to

will have to be put in

Is and competenc

prepare themselves for technology in the class. for place to deal with the skil training will have to be deve change their mindset."

Respondent CSA 1.6: "Teachers need to upskill in technology skills and adapt to changes-

More skill base approach [sic] in terms of fourth industrial revolution."

Respondent CSA 1.7: "Teachers need to be more computer literate."

Respondent CSA 2.1: "Training: fourth industrial revolution."

Respondent CSA 2.2: "More practical training during years of study. In-service training. More in-service monitoring and training for younger educators. Invigilation for newly appointed educators."

Respondent CSA 2.3: "Digitale en nie-digitale opleiding. Toepaslike leerstrategieë. Teoretiese vakkennis en aansluiting by aanbieding."

Respondent CSA 2.4: "Facilitators need to fully prepare before teaching. Identify teacher needs so that they can be able to address them. Monitor and support teachers. Encourage technology use."

Respondent CSA 2.5: "Educators/primary schools should be provided with technology – electronic devices to be used in teaching and learning."

Questionnaire: Primary school teachers in different phases in South Africa (Appendix F)

Question 1: Do you feel equipped to teach in the phase you are teaching on this moment? Motivate your answer.

Respondent SA 1.1: "Yes, I have studied a B.Ed. Foundation Phase degree and I was exposed to a few primary schools during my practice teaching."

Respondent SA 1.2: "Yes, I have been teaching for 25 years and have a broad experience of teaching. I taught in the private sector (independent primary school) as well."

Respondent SA 1.3: "Yes, I had training in all subjects and still attend workshops with the Department of Education."

Respondent SA 1.4: "Yes, my experience of 29 years contributes to me feeling equipped."

Respondent SA 1.5: "Yes [sic] I do. I have 30 years of experience and I attend courses or workshops. I am a circuit leader as well and also assist our department with training of other educators [sic]."

Respondent SA 1.6: "Yes I did my training at NMU. I am equipped to teach any subject in the phase."

Respondent SA 1.7: "Ja."

Respondent SA 1.8: "Ja."

Respondent SA 1.9: "Yes I am well versed in the content I am teaching and where the learners need to be at the end of the year to progress to Grade 4 [sic]."

Respondent SA 1.10: "Ja, dis al my 5de jaar wat ek by die Graad 4's is en ek voel baie gemaklik in die fase. Ek is opgelei in die intermediêre fase, so dis lekker om binne my veld te kan skoolhou."

Respondent SA 1.11: "Ja, omdat ek opleiding in die fase het en jare se ondervinding."

Respondent SA 1.12: "Yes, Ek voel baie gemaklik en voel asof ek al jare in hierdie 'phase' onderrig [sic]."

Respondent SA 2.13: "I feel fairly equipped, but there is always room for improvement and of cause many who are not equipped [sic]."

Respondent SA 2.1: "Ja [sic] ek het ondersteuning van my departementshoof, opleiding en kursusse wat aangebied word, vakvergaderings, fase- en graadvergaderings."

Respondent SA 2.2: "Ja ten volle gemaklik in my vak – Wiskunde. Tree ook as departementshoof op. Gee leiding aan ander personeel."

Respondent SA 2.3: "Baie goed."

Respondent SA 2.4: "Yes."

Respondent SA 2.5: "Ja, daar is genoeg leiding en mentorskap in ons fase d.m.v. vakhoofde en departementshoofde. Genoeg ondersteuning word gegee."

Respondent SA 2.6: "Ja, met die nodige opleiding en ondersteuning in die fase kan ek met selfvertroue onderrig gee. Deurgaans doen ek steeds opleiding en woon verskeie kursusse en werkswinkels by."

Respondent SA 2.7: "Ja [sic] voldoende opleiding (studentejare en daarna)."

Respondent SA 2.8: "Yes, I have studied B.Ed. Intermediate- and Senior phase and therefor [sic] teach the age and subject I studied."

Respondent SA 2.9: "Yes, I am a qualified Foundation Phase teacher and had done further studies in Remedial Teaching. I'm in [sic] teaching for 32 years."

Respondent SA 2.10: "Yes, I have 30 years' experience. Been through all the different kinds of systems that was implemented through the years."

Question 2: Are you educated for this specific phase?

Respondent SA 1.1: "Yes, as explained in question 1."

Respondent SA 1.2: "Yes, I have a DE 3 SP and did my ACE in 2012."

Respondent SA 1.3: "Yes."

Respondent SA 1.4: "Yes."

Respondent SA 1.5: "Yes."

Respondent SA 1.6: "Yes 4 – 6 [sic]."

Respondent SA 1.7: "Ja."

Respondent SA 1.8: "Ja."

Respondent SA 1.9: "No, I was trained for intermediate phase."

Respondent SA 1.10: "Ja, soos ek genoem het ek het n 4 jaar graad by die Universiteit van Bloemfontein voltooi in intermediêre fase [*sic*]."

Respondent SA 1.11: "Ja, ek het fondasieslagfase opleiding [sic]."

Respondent SA 1.12: "No, I am B.Ed. Foundation Phase teacher." (Teaches in intermediate phase).

Respondent SA 1.13: "I have NQF level 5 training."

Respondent SA 2.1: "Ja."

Respondent SA 2.2: "Seniorfase studeer aanvanklik. Eerste 13 jaar van onderwys loopbaan by die Hoërskool Wiskunde onderrig. Het wel kurrikulum opleiding gedoen vir intermediêre en seniorfase [*sic*]. Woon jaarliks verskeie werkswinkels by."

Respondent SA 2.3: "Ja."

Respondent SA 2.4: "Yes."

Respondent SA 2.5: "Ja. B. Prim Ed."

Respondent SA 2.6: "Ja, 4 jaar HOD Diploma in Pre en Junior Primêr gedoen [sic]. Woon deurgaans werkswinkels en kursusse by."

Respondent SA 2.7: "Ja."

Respondent SA 2.8: "Yes."

Respondent SA 2.9: "Yes, further training as well. Well equipped – study aids and material for classroom, lots of visual and audio equipment to make teaching easy."

Respondent SA 2.10: "Yes. 30 years' experience to teach in intermediate-phase Grade 4-7 [sic]."

Question 3: Do you think assessment is an important part of the daily primary school day? Motivate your answer.

Respondent SA 1.1: "Yes, because it shows you the reflection of where your child is at but no as well [sic] because it is over a short space of time and does not always show the holistic view of the child. Assessment is more marks-driven, sometimes not taken into consideration the whole child, e.g., emotional, physical, socially etc."

Respondent SA 1.2: "Very important because that is how you get to know the child you are working with also for identifying gaps and areas learners struggle with."

Respondent SA 1.3: "Yes [sic] it gives me an overall picture of each learner."

Respondent SA 1.4: "Yes, assessment gives you an indication of the different levels of learning of each learner."

Respondent SA 1.5: "Yes, but rather continuous on an informal way. Too much paperwork and admin take you away from teaching – which is the most important."

Respondent SA 1.6: "Yes and no. Assessment is not always formal. Assessment should not be your main aim. Teaching and learning should be your main aim."

Respondent SA 1.7: "Ja maar assessering neem te veel tyd in 'n Gr 1 klas [sic]. Ek sal baie eerder die leerders wil onderrig as om te assesseer."

Respondent SA 1.8: "Ja om te sien of leerders die werk verstaan en kan aanbeweeg na volgende graad [sic]."

Respondent SA 1.9: "Yes and no. You have to get some indication of where the learners are if they understand where they need help. Daily is may be too intensive but it doesn't always have to be long. It could also be short and fun. But admin on the moment is a lot [sic]."

Respondent SA 1.10: "Assessering is belangrik maar dit is al wat ons heeldag doen. Baie min tyd vir vaslegging, veral in Tale [*sic*]. Ons moet 200 punte per kind per kwartaal insamel. Dit voel soms of ons net assesseer en nie die kinders die taal leer nie."

Respondent SA 1.11: "Yes [*sic*] absolutely. Practitioners get a better idea of the developmental level of the child with thorough and ongoing assessment."

Respondent SA 1.12 "Ja nie formele assessering nie, maar informele dit help my om die kind beter te leer ken [sic]."

Respondent SA 1.13: "Yes, absolutely. Practitioners get a better idea of the developmental level of the child with thorough and on-going [*sic*] assessment."

Respondent SA 2.1: "Ja, deurlopend en formele assessering is baie belangrik. Bepaal of leerder werk verstaan en of onderwyser "hands on" is met werk. Om vas te stel of leerder werk verstaan [sic]."

Respondent SA 2.2: "Ja, daar moet gekontroleer word of leerders die werk verstaan en kan toepas. Assessering hoef nie altyd formeel te wees nie."

Respondent SA 2.3: "Ja, weet of my kinders kan doen wat ek hulle geleer het."

Respondent SA 2.4: "Yes, to keep track of learner's [sic] knowledge and progress."

Respondent SA 2.5: "Ja, 'n onderwyser moet deurlopend haar kinders observeer, assesseer en reflekteer om te sien of onderrig suksesvol was, sodat die nodige heronderrig gegee kan word of aanpassings gemaak moet word [sic]."

Respondent SA 2.6: "Beslis, hierdeur word die leerders se kennis getoets nadat konsepontwikkeling gedoen is. Hiervolgens word die leerder se vordering gemonitor."

Respondent SA 2.7: "Ja, beslis. Hierdeur word die leerders se kennis getoets nadat konsepontwikkeling gedoen is. Hiervolgens word die leerder se vordering gemonitor."

Respondent SA 2.8: "By assessing the learners you can immediately see whether the class or even individuals grasp a concept."

Respondent SA 2.9: "Yes [sic] you have to assess the work that has being done to determine the standard of the subject. Weekly assessment forms part of the assessment plan."

Respondent SA 2.10: "Yes, to determine strengths and weaknesses of learners to be able to support and give intervention or enrichment."

Question 4: Describe how assessment is being executed in your country.

Respondent SA 1.1: "South Africa works from CAPS. I feel this system does not always work in our primary schools especially in overcrowded classrooms. We are given a short space of time to teach then we need to assess. I feel like CAPS is more assessment drilled rather than true teaching and learning."

Respondent SA 1.2: "Formal assessment. Each subject has it set FATs per term. In Term 1 & 3 it is controlled and in term 2 & 4 is examinations [*sic*]."

Respondent SA 1.3: "Informal and formal assessment. Baseline CAPS align with NECT for all subjects. NECT only in Mathematics and First Additional Language."

Respondent SA 1.4: "Learners have to complete too many tasks especially in Languages. There is not enough time for drill work. This cause learning problems."

Respondent SA 1.5: "Formal Assessment (FAT's) consists of learners being assessed each term but it's too much paperwork because they (dept) wants evidence of practical; oral and written work. Heavy task on educators to be able to finish each term's curriculum as well. Time is sometimes limited and 10 weeks mostly need to be pocket into 8 weeks [sic]."

Respondent SA 1.6: "Mostly formal in the form of tests and tasks (Memos or rubrics used)."

Respondent SA 1.7: "Deurlopende assessering, informeel. Formele assessering (Skriftelike take)."

Respondent SA 1.8: "Leerders word formeel (take, toetse en projekte) en informeel (deurlopend) geassesseer."

Respondent SA 1.9: "There are many assessments that need to be done, informal and formal that we feel we are assessing most of the time. There isn't time to recap and reinforce a skill taught as it needs to be assessed and move on."

Respondent SA 1.10: "Ons volg die CAPS beleid [*sic*] en werk volgens hulle riglyne. Soos genome is die take baie assessering waar die inhoudsvakke en wiskunde wissel tussen 2 tot 3 assesseringstake."

Respondent SA 1.11: "Formeel en informeel."

Respondent SA 1.12: "Formele en informele take."

Respondent SA 1.13: "At my primary school we do mostly observation checklists and reports right through the year (Pre-primary school) [sic]."

Respondent SA 2.1: "Deurlopend en formeel en informeel."

Respondent SA 2.2: "Formeel – Volgens assesseringsplan (toetse, navorsing, take, opdragte, mondeling ens.) Informeel – Klein klastoetsies op daaglikse basis, werkkaarte, eksperimente, vraagstelling, en groepwerk)."

Respondent SA 2.3: "Op 'n daaglikse basis."

Respondent SA 2.4: "Both informal and formal. Formal 200 marks per learner per term."

Respondent SA 2.5: "Die Department van Onderwys het duidelike riglyne d.m.v [sic] assesseringsbeleid deurgegee. Daar is voorskrifte vir elke vak en elke graad, waarvolgens die skool hul eie beleid saamstel en toepas."

Respondent SA 2.6: "Die Departement van Onderwys het 'n assesseringsbeleid wat deur die fase gevolg moet word en die skool se beleid rondom assesering word hiervolgens opgestel en gevolg."

Respondent SA 2.7: "Ons assesseer heeltemal te veel. Daar is "common exams" vanaf Graad 1. Grade 3, 6 en 9 moet common exams skryf [sic]."

Respondent SA 2.8: "We do informal assessment after each new maths topic is done. Formal assessment is 2 per term (minimum)."

Respondent SA 2.9: "Assessment in our country is done formally and informally and practical work is done to do proper assessment."

Respondent SA 2.10: "Mainly through formal assessment set according to CAPS document. Informal assessment to prepare learners for formal assessment."

Question 5: What is the policy regarding second- and third-language learners in your country?

Respondent SA 1.1: "At our primary school we are dual-medium, it is best for learners to learn in their mother-tongue. We do not have isi-Xhosa at our primary school [sic]."

Respondent SA 1.2: "Our primary school only offers Afrikaans and English."

Respondent SA 1.3: "We only teach our First Additional Language but we do not have a third language."

Respondent SA 1. 4: "Intervention should be done. More teachers should be trained to help learners with third language (Xhosa)."

Respondent SA 1.5: "Our Xhosa learners get taught in English."

Respondent SA 1.6: "An African language is being implemented."

Respondent SA 1.7: "Leerders by ons skool se Huistaal is Afrikaans en Engels 2de Taal [sic].

As 'n Xhosa-sprekende leerder na ons skool kom sê ons vooraf vir ouers ons is 'n Afrikaanssprekende skool."

Respondent SA 1.8: "Leerders het Huistaal en 1ste Addisionele taal. Soms vat leerders huistaal wat nie hul huistaal is nie. Graad 4 -6 toetse in meer as 1 taal [sic]."

Respondent SA 1.9: "We only do a second language which is Afrikaans. It is called FAL (First Additional Language)."

Respondent SA 1.10: "Ons bied twee tale by die skool aan naamlik; Afrikaans en Engels. Kinders het 'n keuse of hulle Afrikaans of Engels as huistaal wil neem en die ander word dan as 'n tweede taal geneem."

Respondent SA 1.11: "Skole moet ten minste tweetalig wees, waarvan die tweede taal Engels is. Leerders moet tot in Graad 3 in hul moedertaal onderrig word."

Respondent 1.12: "Alle skole moet ten minste in 2 tale onderrig gee."

Respondent 1.13: "Our primary school is Afrikaans so our LOLT at primary school is Afrikaans. We tried both languages in the class, but it is too confusing for young children this age.

Unfortunately, we are not equipped to give lessons in Xhosa."

Respondent 2.1: "Inklusiewe [sic]."

Respondent 2.2: "Inklusiwiteit."

Respondent 2.3: "Tweede taal word aangeleer as die eerste taal vasgelê is."

Respondent 2.4: "Inclusive policy."

Respondent SA 2.5: "Ons skool onderrig Afrikaans as huistaal en Engels as eerste addisionele taal."

Respondent SA 2.6: "Ons skool se onderrig taal is Afrikaans (Huistaal) en Engels addisionele taal. Ons volg dus die Nasionale beleid van doe [*sic*] Departement van Onderwys."

Respondent SA 2.7: "Second language – 40% to pass. Third language – not part of progression."

Respondent SA 2.8: "Our primary school is Afrikaans LOLT therefor the learners receive all classes except English in Afrikaans [sic]."

Respondent SA 2.9: "Third language is implemented as from Gr 1 - 3 on the moment [sic]Third language is isiZulu."

Respondent SA 2.10: "Second language assessment on lower level (FAL). First additional language Afrikaans in our primary school according to CAPS."

Question 6: Is your primary school equipped with the necessary teaching and learning material to enhance teaching and learning?

Respondent SA 1.1: "No, with our primary school being a government primary school, we have to raise funds for everything. A lot of my resources is out of my pocket."

Respondent SA 1.2: "Yes."

Respondent SA 1.3: "Yes."

Respondent SA 1.4: "Yes, but we still need white boards in each classroom."

Respondent SA 1.5: "Yes, we buy ourselves or use our annual budget for that."

Respondent SA 1.6: "Yes."

Respondent SA 1.7: "No."

Respondent SA 1.8: "Nee/Ja ons het handboeke vir sekere vakke en kan afrol [sic]."

Respondent SA 1.9: "Yes. We are lucky that we have access to a wide variety to enhance teaching and learning. Our classes are still "old primary school" but we do incorporate technology and new material."

Respondent SA 1.10: "Ja [*sic*] ons het baie hulpmiddels beskikbaar wat dit vir ons maklik maak om lesse aan te bied. Ons maak gebruik van verskillende handboeke."

Respondent SA 1.11: "Ja [sic] ons het die nodige material om opvoeding te bevorder."

Respondent SA 1.12: "Yes, ek sukkel net met NW en Teg [sic] maar verder het ek alles."

Respondent SA 1.13: "Yes, we are."

Respondent SA 2.1: "Ja, gereelde uitstallers van boeke en leermateriaal word uitgestal by skool."

Respondent SA 2.2: "Ja, voldoende leermateriaal. Dit sluit in handboeke, skrifte, skryfbehoeftes, opvoedkundige hulpmiddels, plakkate vir klasse, benodigdhede vir eksperimente ens."

Respondent SA 2.3: "Ja."

Respondent SA 2.4: "Yes, textbooks, Readers, Dictionaries, Visual aids: Projector and audio aids: Audio books [*sic*]"

Respondent SA 2.5: "Ja, elke kind het 'n handbook [sic] vir elke vak. Dataprojektors in elke klas."

Respondent SA 2.6: "Ja. Ons is in die bevoorregte posisie om deeglik toegerus te wees t.o.v [sic] hulpmiddels. Daar word deurgaans opgevolg sou daar 'n behoefte wees vir nuwe leermateriaal."

Respondent SA 2.7: "Yes."

Respondent SA 2.8: "Yes."

Respondent SA 2.9: "Yes, learning and teaching support material (LTSM) is well developed and visual poster and pictures can be ordered if needed."

Respondent SA 2.10: "Yes, the primary school has a budget to provide LTSM material as needed."

Question 7: Are these resources available and accessible to those who need them?

Respondent SA 1.1: "Some of the resources are available, the rest I have provided."

Respondent SA 1.2: "Yes"

Respondent SA 1.3: "Yes."

Respondent SA 1.4: "White screens are available as well as data projector."

Respondent SA 1.5: "Yes."

Respondent SA 1.6: "Yes."

Respondent SA 1.7: "Nee, tegnologies is ons agter. Ja DBE boeke, ons kan afrol [sic]."

Respondent SA 1.8: "Ja."

Respondent SA 1.9: "Yes they are."

Respondent SA 1.10: "Ja, ons het alles tot ons beskikking, afrolmasjiene wat dit maklik maak om werkkaarte af te rol. Rekenaars en drukkers om werkvelle te druk."

Respondent SA 1.11: "Ja, alle hulpmiddels word uitgedeel as daar benodig word."

Respondent SA 1.12: "Yes."

Respondent SA 1.13: "Yes they are."

Respondent SA 2.1: "Ja."

Respondent SA 2.2: "Ja, klasse is toegerus."

Respondent SA 2.3: "Ja."

Respondent SA 2.4: "Yes available in class."

Respondent SA 2.5: "Ja, te alle tye beskikbaar."

Respondent SA 2.6: "Ja. Te alle tye beskikbaar."

Respondent SA 2.7: "Yes."

Respondent SA 2.8: "Yes."

Respondent SA 2.9: "All LTSM material is distributed and used by teachers and learners."

Respondent SA 2.10: "Yes, textbooks, wall charts can be ordered as needed yearly and other teaching aids e.g., NS and Tech to do experiments."

Question 8: Describe the use of technology in your primary school.

Respondent SA 1.1: "We have the basic technology, printers, copiers, computers etc. No power point [*sic*] screens at our primary school."

Respondent SA 1.2: "We make use of it often."

Respondent SA 1.3: "Each teacher received a laptop and interactive boards."

Respondent SA 1.4: "White screens are available as well as data projectors."

Respondent SA 1.5: "Teachers have laptops, data projectors they can use. Library equipped with data etc."

Respondent SA 1.6: "We have computer lab (no space on the timetable for computers)."

Respondent SA 1.7: "Tegnologie – laptops/skootrekenaars by staat gekry."

Respondent SA 1.8: "Tegnologie word minimaal gebruik."

Respondent SA 1.9: "We have internet, a TV and a laptop. I connect my laptop to the TV and use it for videos linked to my lesson."

Respondent SA 1.10: "Ons gebruik rekenaars in ons klasse en ons het 'n rekenaarsentrum.

Daar is ook televisies in ons klasse wat dit lekker maak om lesse aan te bied."

Respondent SA 1.11: "Tans word daar net opleiding gegee aan onderwysers wat tegnologie betref."

Respondent SA 1.12: "Ons het laptops, komputers [sic] waarop ons as onderwysers werk."

Respondent SA 1.13: "We have a printer, laptop and also a computer for the staff."

Respondent SA 2.1: "Elke klas het 'n visualiser, skootrekenaar vir onderwysers en rekenaar lokaal vir leerders [sic]. Mediasentrum het ook rekenaars vir navorsing."

Respondent SA 2.2: "Ons het 'n projektor en visualizer [sic] in elke klas. Internettoegang vanuit klaskamers. Volledige toegeruste rekenaarsentrum."

Respondent SA 2.3: "Oorhoofse projektor in die klas gee ons toegang tot enige inligting."

Respondent SA 2.4: "Laptops for research. Projectors for visual aids. Computer rooms for student research."

Respondent SA 2.5: "Elke klas het 'n dataprojektor en elke onderwyser het 'n skootrekenaar. Lesse word d.m.v power point en videos [*sic*] aangebied. Ons het ook 'n rekenaarsentrum met 38 rekenaars. Leerders van Gr R–3 kry weekliks rekenaars en Gr 4–7 twee keer per week."

Respondent SA 2.6: "Elke klas is toegerus met 'n data projektor Die personeel is toegerus met 'n skootrekenaar. Die leerders Gr R–3 kry weekliks toegang tot die rekenaarsentrum vir klas."

Respondent SA 2.7: "Interactive white boards: Make own power points for lessons. Wifi: Use You Tube. Laptops: Use other internet content."

Respondent SA 2.8: "Each class has an electronic white board and each teacher uses a laptop."

Respondent SA 2.9: "Technology is being used optimally. Most classes have visualisers which can be used by pre-recorded or pre-setup lessons. Wi-fi is available if real pictures and photos are needed, can also be googled and shown on the white boards – it brings the world to the classrooms."

Respondent SA 2.10: "All teachers are doing assessment planning and preparation on computers. System for assessment, SASAMS."

Question 9: Does your system provide for learners with inclusive needs? Yes or no. Elaborate your answer.

Respondent SA 1.1: "Yes and no. We have a team that work works with them but we cannot always accommodate them as our classes are too big. No remedial classes."

Respondent SA 1.2: "No, we have big numbers in our classes. This cause lots of problems because you cannot give that extra attention to those who need it."

Respondent SA 1.3: "Yes, we are currently a full-service primary school. We get help from department of Education [sic] to assist us with inclusive needs."

Respondent SA 1.4: "Yes, learners with barriers to learning are accommodated especially now that we are a full-service school."

Respondent SA 1.5: "Our learners with special educational needs (LSEN) are in main stream classes. This cause problems as we do not have special classes. They become frustrated and disruptive."

Respondent SA 1.6: "Yes, only to a certain extend. Mild learning problems can be accommodated. Severe problems we do not have resources for."

Respondent SA 1.7: "Ja, Gr 1-3 LSEN klas [sic]."

Respondent SA 1.8: "Yes, [sic] Grade 4 and 5 LSEN class."

Respondent SA 1.9: "Yes and No. If they have special needs when writing exams, we provide them. They are put into the mainstream with big classes anything extra."

Respondent SA 1.10: "Ja en Nee. Ons het leerders wat spesiale aandag nodig het maar dis nie altyd moontlik in 'n groot klas nie. Kinders gaan verlore omdat hulle nie die aandag kry wat hulle nodig het nie."

Respondent SA 1.11: "Yes."

Respondent SA 1.12: "No."

Respondent SA 1.13: "Yes and No. Children with autism, but not physical challenges."

Respondent SA 2.1: "Ja ons het remediëring in klastyd vir individuele leerders. Ons het assistente wat leerders help in klastyd. Ekstra klasse na skool. Spraakterapeute and arbeidsterapeute. Plaas leerders voor in die klas. Akkommodeer gestremde leerders. Projek Hoop help met fondse vir terapie vir behoeftige leerders."

Respondent SA 2.2: "Ja, inklusiwiteit. Het gestremde leerders wat ons hanteer, ook gehoor en gesiggestremdes. Sit voor in die klas. Gee konsessies – skryf afsonderlik ens."

Respondent SA 2.3: "Ja a.g.v. kleiner klasse kan ons omsien na 'n kind wat spesiale aandag nodig het [sic]."

Respondent SA 2.4: "Yes. Speech therapist, occupational therapist (part of staff establishment), extra class for remedial work during primary school hours."

Respondent SA 2.5: "Ja, terapeute op die terrein, heronderrig na skool. Ekstra geleenthede word geskep."

Respondent SA 2.6: "Ja. Die skool het 'n bestuurspan wat die leerders met spesiale behoeftes ondersteun. Terapeute is op die skoolterrein beskikbaar."

Respondent SA 2.7: "Yes, up to grade 3 they stay in mainstream classes and teachers adapt work for them. Also adapt assessment."

Respondent SA 2.8: "Yes from Gr 4-6 we have a special class for those learners."

Respondent SA 2.9: "Yes. Primary school Based Support Team (SBST) is involved. Have a Down Syndrome learner as well as Autistic learner. Both are accommodated with class group [sic]."

Respondent SA 2.10: "Yes. Teacher tries to assist and support with interventions. Follow system provided by Department of Education (SNA files)."

Question 10: Explain the homework policy of your primary school and country.

Respondent SA 1.1: "We send homework daily which children has to do for the next day."

Respondent SA 1.2: "Minimum homework is to be given [sic]."

Respondent SA 1.3: "Homework has to be done regularly on a daily base [sic]."

Respondent SA 1.4: "Parents at my primary school are not all involved when learners have homework to do."

Respondent SA 1.5: "We do give homework but we understand that many learners do not have support from parents."

Respondent SA 1.6: "It is each teacher own interpretation of how they give homework. Mostly it is the work that the learners do not finish in class."

Respondent SA 1.7: "Leerders kry daagliks huiswerk en onderwysers kontroleer of leerders huiswerk gedoen het."

Respondent SA 1.8: "Huiswerk word daagliks gedoen. Onderwyser volg op. Toetse en take word vooruit gegee."

Respondent SA 1.9: "Homework is up to the teacher and a personal decision."

Respondent SA 1.10: "Ons gee huiswerk vir vaslegging omdat daar min tyd in die klas is vir vaslegging."

Respondent SA 1.11: "Leerders kry tuiswerk maar a.g.v. plaas omstandighede [sic] is dit vir leerders onmoontlik om navorsing te doen."

Respondent SA 1.12: "Ons het elke dag huiswerk. Ouers moet teken as bewys dat kind dit self gedoen het."

Respondent SA 1.13: No comment.

Respondent SA 2.1: "Leerders doen nie langer as 30-minute [sic] per dag huiswerk nie."

Respondent SA 2.2: "Leerders kry huiswerk afhangende van hulle ouderdom. Ons gee nie huiswerk voor formele assessering nie en ook nie na groot sportbyeenkomste nie. Daar is 'n gedragskode waarvolgens daar opgetree word as leerders dit nie doen nie."

Respondent SA 2.3: "Huiswerk is inoefening wat die dag in die klas geleer is."

Respondent SA 2.4: "Subject dependant."

Respondent SA 2.5: "Daar word in Grondslagfase weekliks huiswerk gegee en in die Intermediêre fase soos die behoefte ontstaan. Daar word wel inskerping gedoen in Wiskunde (daagliks). Ons het 'n huiswerk periode (35 min) op Maandae, Dinsdae en Woensdae in skooltyd om druk te verlig."

Respondent SA 2.6: "Huiswerk word weekliks in die Grondslagfase deurgegee. Die huiswerk se doel is om inskerping van aangeleerde en nuwe konsepte te doen. Die ouers en na skool personeel ondersteun leerders hiermee."

Respondent SA 2.7: "Home work [*sic*] is work that has been done in class that day. Maths – concepts, mental maths. Language – reading, spelling and concepts."

Respondent SA 2.8: "From Grade 4–7 homework is normally just unfinished classwork except where assignments need to be done at home. For that a 2-week notice period is given."

Respondent SA 2.9: "Daily homework in Maths, English and Afrikaans (FAL). Writing and reading must be done daily."

Respondent SA 2.10: "Every subject has its own number of days per week homework can be given. Depends on subjects. Weekends usually no homework."

Question 11: Describe how parents/guardians are involved in the learning and teaching of your primary school.

Respondent SA 1.1: "We have parent meetings and teacher/parent conferences where we meet with every parent to discuss their child's progress."

Respondent SA 1.2: "We have a 40% parent ratio that assists at home and the majority do not assist at home."

Respondent SA 1.3: "We have our regular teacher/parent meetings throughout the year as well as open days every term. Most parents are highly involved."

Respondent SA 1.4: "Not all parents visit the primary school when you need to discuss their learners progress but other parents visit the primary school on a regular base e.g., open day and parent meetings."

Respondent SA 1.5: "Not at all. Not all have the knowledge or time. Many are brought up by grannies."

Respondent SA 1.6: "Differ from learner to learner. Some have active parents. Some do not have parents and stay with family members."

Respondent SA 1.7: "Baie van die Gr 1 ouers [sic] is ywerig om leerders te help en te ondersteun, maar in hoër grade is ouers minder betrokke."

Respondent SA 1.8: "Gr 6–7 is ouers minimaal betrokke."

Respondent SA 1.9: "The parents vary. Some are very involved and others not. Parents are called in when needed. They are all on a WhatsApp group for easy communication. We have to cover ourselves with everything as the system is more on the parent's side. We are always wrong."

Respondent SA 1.10: "Ouers is betrokke, maar dit wissel maar van huishouding tot huishouding. Sommige ouers gee goeie samewerking waar ander weer heeltemal afwesig is."

Respondent SA 1.11: "Betrokke by leerders se werk."

Respondent SA 1.12: "Ek kan sê die meeste van die ouers is betrokke maar daar is 'n paar wat nie betrokke is nie."

Respondent SA 1.13: "We give out storybooks to parents to read to their children. Regular parents' meetings and relation building functions."

Respondent SA 2.1: "Nuusbriewe, oueraande en kontak telefonies met ouers weekliks as daar 'n probleem is."

Respondent SA 2.2: "Oueraande, oproepe aan ouers. Nuusbriewe, e-posse en sms'e."

Respondent SA 2.3: "Ouers moet saam huiswerk doen. Hulle moet lees saam met hulle kinders doen anders sal die kinders nooit lees nie. Te min tyd in die klas."

Respondent SA 2.4: "Parent evening once a term. Continuous communication with parents in regards to learner's progress."

Respondent SA 2.5: "Ouers help veral met Grondslagfase in die middae, waar ouers in die Intersenfase mag help met navorsings material [*sic*] versamel, maar take/opdragte word in klastyd gedoen."

Respondent SA 2.6: "Ja. Ons ouers ondersteun leerders met huiswerk en speltoetse. Kwartaaliks [*sic*] word ouermiddae gereël waartydens ouers die geleentheid kry om hul kind se vordering te bespreek. Hiervolgens kan hulle hul kind die nodige ondersteuning gee."

Respondent SA 2.7: "They help children with homework. We call parents to primary school if we see that a child has a problem and ask the parents to help."

Respondent SA 2.8: "Parents must see to it that homework and assignments are done."

Respondents SA 2.9: "Parents form part of WhatsApp-groups, communicate via WhatsAppgroups [*sic*] and phone calls."

Respondent SA 2.10: "Some parents are supportive. Many parents are not involved."

Question 12: Do your primary school provide extramural activities for learners to develop holistically?

Respondent SA 1.1: "Yes, we do have a variety of sports and cultural activities."

Respondent SA 1.2: "Yes. Soccer, rugby, cricket, netball, athletics those are active at our primary school."

Respondent SA 1.3: "Yes. United Through Sports as well. A team visits the primary school every week to engage the learners through different activities."

Respondent SA 1.4: "Yes. Rugby, soccer, netball, mini-cricket and cricket."

Respondent SA 1.5: No comment.

Respondent SA 1.6: "Yes. Rugby, soccer, netball, tennis etc."

Respondent SA 1.7: "Ja. Mini-netbal, netball, mini-krieket, rugby, krieket en kultuuraktiwiteite – koor en sanggroep."

Respondent SA 1.8: "Ja, sport en kultuur."

Respondent SA 1.9: "Yes, rugby, netball, swimming, tennis, athletics, music, public speaking, caring kids."

Respondent SA 1.10: "Ons skool bied 'n verskeidenheid buitemuurse aktiwiteite aan. Ons het rugby, krieket, netball, tennis, atletiek, swem, surfing en skaak [*sic*]. Kinders neem ook deel aan koor, debat, drama en skaak."

Respondent SA 1.11: No comment.

Respondent SA 1.12: "Athletics."

Respondent SA 1.13: "No but we have a special time in the day when we do specific discussions or drama."

Respondent SA 2.1: "Ja ons het buitemuurs. Mini-hokkie, mini-netbal, bulletjiedag, landloop, atletiek, redenaars, voordrag en koor."

Respondent SA 2:2 "Ja, ons bied alle sportsoorte aan. Ook kultuuraangeleenthede."

Respondent SA 2.3: "Ja."

Respondent SA 2.4: "Yes, rugby, netball, hockey, tennis, athletica, art and music." Respondent SA 2.5: "Ja, koor, redenaars, kunste akademis, atletiek, rugby, netball, hokkie, tennis en landloop."

Respondent SA 2.6: "Vele buite-kurrikulêre aktiwiteite word aangebied. Sport bv. Krieket, rugby, netball, tennis, asook kultuuraktiwiteite bv. Koor, redenaars en die skool het 'n kunste akademie waar ballet, drama, klavier lesse aangebied word."

Respondent SA 2.7: "Yes, athletics, cross country, rugby, mini-cricket, cricket, netball, tennis, revue and choir."

Respondent SA 2.8: "Yes."

Respondent SA 2.9: "Holistic development primary school -extra mural activities involve athletics, soccer, netball, sole buddies and chess."

Respondent SA 2.10: "Yes, netball, athletics, soccer, chess, Eisteddfod."

Question 13: What kind of structures are needed to optimise the curriculum and instructional design (method of intervention)?

Respondent SA 1.1: "We have a support team for learners, we have a pastor that works with them as well as a learner support agent."

Respondent SA 1.2: "It is more classroom space with big classes."

Respondent SA 1.3: "We have a Primary school Based Support Team (SBST)."

Respondent SA 1.4: "Teachers should get guidelines on how to maintain good discipline in the classrooms."

Respondent SA 1.5: "Will be great to have an Occupational therapist (OT) or Remedial teachers [sic]."

Respondent SA 1.6: "A simplified curriculum. Intervention from the Department of Education. Discipline problems of learners."

Respondent SA 1.7: "Ek benodig 'n onderwyseres – hulp – assistent."

Respondent SA 1.8: "Benodig LSEN klasse by skole."

Respondent SA 1.9: 'I don't feel I need additional structures. Smaller classes and less assessments and admin will help a lot."

Respondent SA 1.10: "Minder assessering en meer klastyd. Daar is ook geweldig baie admin en papierwerk wat baie tyd steel."

Respondent SA 1.11: "Multi-grade training."

Respondent SA 1.12: "Multi-grade training en meer tyd maak vir lees lesse [sic]."

Respondent SA 1.13: "Not applicable."

Respondent SA 2.1: "Spraakterapeute, arbeidsterapeute, voltydse assistente, skoolsielkundiges en berader."

Respondent SA 2.2: "Arbeidsterapeute, spraakterapeute, opvoedkundige sielkundige wel beskikbaar maar ouers moet betaal. Sal graag terapeute by die skool wil hê."

Respondent SA 2.3: "Nvt."

Respondent SA 2.4: No comment.

Respondent SA 2.5: "Personeel word ondersteun d.m.v vakvergaderings, graad en fase vergaderings. Elke onderwyser het 'n mentor. Deurlopende kommunikasie, verskeie kursusse word bygewoon."

Respondent SA 2.6: "Elke personneellid [*sic*] het die nodige blootstelling t.o.v graadvergaderings en fasevergaderings. Mentorskap is altyd sigbaar en deeglike kontrole t.o.v leerderondersteuning, lesvoorberieding [*sic*] ens. Dus is daar altyd ruimte vir intervensie en groei."

Respondent SA 2.7: "We do have student teachers to help us."

Respondent SA 2.8: "None."

Respondent SA 2.9: "We need qualified Remedial teachers. Psychologist, and assistants to help learners keep up with the Therapists to assist learners with problems from department. Primary school therapists to assist immediately. pace of the curriculum."

Respondent SA 2.10: "System where discipline can improve radically. Parent support." Question 14: Do you find the current curriculum appropriate for the phase you are teaching in? Yes/No. Motivate your answer.

Respondent SA 1.1: "Yes, but this curriculum doesn't always work with big classes."

Respondent SA 1.2: "I am in two. I feel too little time is given for the consolidation of concepts in core subjects like Maths and Languages."

Respondent SA 1.3: "Yes, it is well structured and learners are engaged in appropriate activities and lessons."

Respondent SA 1.4: "Yes."

Respondent SA 1.5: "I think it is but just very full – especially Gr 3. Too much info to give those little ones."

Respondent SA 1.6: "No, too much content. No time for revision or basics."

Respondent SA 1.7: "Nee daar is te veel werk vir Gr 1 leerders."

Respondent SA 1.8: "Nee, die werk is te veel vir die leerders. Daar is nie tyd vir vaslegging in belangrike konsepte nie."

Respondent SA 1.9: "Yes the work is appropriate but the workload is not. I feel the learners need more time to learn in a fun way and have as much pressure at such a young age."

Respondent SA 1.10: "Ja en nee. Die kurrikulum maak voorsiening vir 'n wye spektrum leer material [sic], maar nie vir Graad 4 spesifiek is daar te veel werk."

Respondent SA 1.11: "Ja dit is op leerders se vlak."

Respondent SA 1.12: "Ja."

Respondent SA 1.13: "Not applicable."

Respondent SA 2.1: "Ja die kurrikulum voldoen."

Respondent SA 2.1: "Ja die kurrikulum dek wel alles maar dit is te veel vir die kinders. Ons jaag deur alles."

Respondent SA 2.3: "Ja kom terug na basiese leer."

Respondent SA 2.4: "Yes our primary school add [sic] extra work to the curriculum to lift the standard in preparation for high primary school standards."

Respondent SA 2.5: "Ja die kurrikulum is goed versprei tussen die verskillende fases."

Respondent SA 2.6: "Ja die beleid gee geleentheid vir leerders wat ondersteuning nodig het om te ontwikkel maar soms word aanpassings in die leerprogram gemaak om leerders wat verryking nodig het die geleentheid te bied om te groei."

Respondent SA 2.7: "No, maths sometimes jumps around between concepts."

Respondent SA 2.8: "Yes, it took a while but our curriculum is age and subject appropriate."

Respondent SA 2.9: "Yes in a certain way but as a first language as English we add extra language structures as soon as Gr 2 to enhance the quality of work."

Respondent SA 2.10: "Yes and No. Workshops and meetings held to assist teachers. Some teachers are not capable to teach allocated subjects."

Question 15: Do you think the current system (curriculum and instructional design) prepares learners (0–12 years) to meet the demands of the 21st century?

Respondent SA 1.1: "No, not with the continuous drop of percentages of certain subjects and requirements."

Respondent SA 1.2: "No, especially with the fact that learners cannot repeat a grade more than once. Learners are aware of this and therefore do strive to be successful."

Respondent SA 1.3: "Yes."

Respondent SA 1.4: "No, too many changes."

Respondent SA 1.5: "No, I think the system is failing our kids."

Respondent SA 1.6: "No, content based do not prepare learners for the demands of the 21st century."

Respondent SA 1.7: "Nee, te veel teorie word gedoen en leerders doen niks prakties nie."

Respondent SA 1.8: "Nee, te min word gedoen om vaardighede aan te leer."

Respondent SA 1.9: "Yes and No. The technology in our country is not up to the same standards as private primary schools."

Respondent SA 1.10: "Ja ek dink leerders word blootgestel aan die verwagtinge van hedendaagse lewe en dit is ons rol as opvoeders om hulle te help en te lei om aan te pas."

Respondent SA 1.11: "Ja ek dink so."

Respondent SA 1.12: "Te veel vir die leerders. Sal daarvan hou om meer te fokus op wiskunde, lees en skryf."

Respondent SA 1.13: "Not applicable."

Respondent SA 2.1: "Nee."

Respondent SA 2.1: "Nee. Leerders is nie toegerus om toe te pas nie."

Respondent SA 2.3: "Ek hoop so."

Respondent SA 2.4: "No, the learners are more goal orientated than standard meet with the 21st century demands."

Respondent SA 2.5: "Ja en Nee. Daar is verskeie faktore wat 'n rol speel, die onderwyser, die omgewing, die bestuur van die skool en die gemeenskap het 'n invloed op die sukses van die leerders."

Respondent SA 2.6: "Ja en Nee. Die onderwyser moet homself toerus om vir die leerders die geleentheid te gee om verryking ook te kan doen. Die heelskool beplanning is ook belangrik om hierdie kurrikulum aan te pas volgens elke leerder se behoeftes."

Respondent SA 2.7: "Some learners yes – they can think for themselves but this comes from their homes. Parent let them think and don't do everything for them."

Respondent SA 2.8: "No not really. We are not focussed enough on technology. We still cling to old methods."

Respondent SA 2.9: "In a way but the ATP's pressures the learner to work very fast there is no time to go back to work that is not clear [sic]."

Respondent SA 2.10: "No, some subjects standards are too low."