Strategies to develop more efficient novice primary school teachers in the KwaZulu-Natal Province of South Africa

By

Sagree Padayachie

submitted in accordance with the requirements for the degree of

Doctor of Philosophy

in the subject

Education Management

at the

University of South Africa

Supervisor: Prof R. J. Botha

January 2024

DECLARATION

I, Sagree Padayachie, hereby declare that the current work entitled: "Strategies for Developing More Efficient Novice Primary School Teachers in the KwaZulu-Natal Province of South Africa" is my work. I declare that this thesis has not yet been submitted for examination.

SACREE DADAYACHIE

SAGREE PADAYACHIE

January 2024

DEDICATION

I dedicate this study to my beloved husband, Alvin Padayachie, for his unwavering encouragement, support, and patience. You have been an ever-present source of inspiration in my life. I also express my gratitude to my wonderful children, Vashnee, Sashleen, and Kreesan, for being my motivation and providing me with the antidote to overcome the challenges of this ever-changing world.

ACKNOWLEDGEMENTS

I want to express my sincere appreciation and gratitude:

- To Almighty God for giving me the confidence, energy, and knowledge to pursue my studies.
- I am eternally grateful to my dad, Mr Rajgopaul Reddy and mum, Lilly Reddy for instilling in me the value of education. Their mentorship has instilled in me the belief that education is more than just a means to an end; it is also a means to a fulfilling and informed life.
- My loving sisters Pavithra, Kogi, and Vijay, brother Nathan Reddy, my nephew Preshen, brother in laws, nieces and nephews for your love and support during my journey.
- My aunt, Mrs. Baby Naidoo, thank you for your constant love, prayers, and encouragement. You have been a pillar of strength throughout my journey.
- I express my heartfelt gratitude towards Professor R. J Botha for his unwavering professionalism, diligence, encouragement, and support during my academic pursuit. His steady commitment to excellence and education has been a source of great inspiration to me and has motivated me to persevere despite the challenges.
- My Bay family has been a shining example of friendship, guidance, and strength for the past three decades. Their unwavering support and wisdom have been a constant inspiration in my life. Thank you for being a rock that I can always depend on.
- I am grateful to the education department for allowing me to conduct my study in the King Cetshwayo District.
- To the school management teams and teachers at the participating schools for their invaluable collaboration and contributions towards novice teachers. Thank you for making a significant impact on the development of our future teachers.
- Mrs. Terry Shuttleworth for your extremely competent and clinical editing of the dissertation.

ABSTRACT

The researcher chose a qualitative methodology due to its flexibility and basic interpretive design. This approach offered a subjective perspective of human experience. Constructivist principles underpinned this study, which incorporated the works of prominent theorists such as Piaget, Vygotsky, Dewey, and Bruner. The constructivist learning approach assisted novice teachers in building their knowledge and understanding of essential concepts through real-world experiences.

The study's target population consisted of primary school teachers from the King Cetshwayo District in the northeastern part of KwaZulu-Natal Province. The sample was the five primary schools selected using a purposive selection technique. The participants were from a 50-kilometre radius and included fifteen novice teachers, ten experienced teachers, five department heads, and four senior management members. A total of thirty-four participants were engaged in the interview process. The researcher intentionally selected qualitative methods since they offered flexibility between the researcher and the participant. Explored the research question by dividing it into four sub-questions and four objectives. These sub-questions and objectives focused on the challenges faced by novice teachers, the role of mentors and school management team and research-based strategies to assist novice teachers.

The study utilised semi-structured interviews and a literature review to gain valuable insights into the strategies employed by novice teachers to overcome challenges. The findings clearly indicated that new teachers encountered significant challenges in time management, classroom management, discipline, as well as insufficient mentoring and induction. As a result, the recommendations included implementing strategies such as organised mentoring and coaching, knowledge sharing and collaboration among personnel, classroom management practices, and structured ongoing professional development.

KEY TERMS

Novice teachers; induction; orientation; mentoring; research-based strategies

LIST OF ABBREVIATIONS

ANTP Australian Novice Teacher Programme

CAPs Curriculum Assessment Policy Statement

CPD Continuous Professional Development

DoE Department of Education

DSBM Droichead School-Based Model

HOD Department head

ICT Information and Communications Technology

IQMS Integrated Quality Management System

NNTIP Namibian Novice Teacher Induction Programme

NCS National Curriculum Statement

NTC New Teacher Induction

NTCIM New Teacher Centre Induction Model

OBE Outcomes-Based Education

OECD Organisation for Economic Cooperation and Development

PDS Professional Development Specialists

PRIDE Programme for Inducting Developing Educators

QMS Quality Management System

SBSP School-Based Support Programme

SACE South African Council for Educators

SBSPC School-Based Support Programme Partnered with Professional Specialists

TABLE OF CONTENTS

DEC	LARATION	ii
DED	ICATION	iii
ACK	NOWLEDGEMENTS	iv
ABS'	TRACT	v
LIST	T OF ABBREVIATIONS	vii
TAB	LE OF CONTENT	viii
CHA	PTER ONE: ORIENTATION TO THE STUDY	1
1.1	BACKGROUND TO THE STUDY	1
1.2	RATIONALE FOR THE STUDY	4
1.3	THEORETICAL FRAMEWORK FOR THE STUDY	6
1.4	STATEMENT OF THE PROBLEM AND RESEARCH QUESTIONS	6
1.5	AIMS AND OBJECTIVES OF THE STUDY	7
1.6	RESEARCH METHODOLOGY	8
	1.6.1 The research design	8
	1.6.2 The research paradigm	9
	1.6.3 The research approach	10
	1.6.4 Population and sampling	12
	1.6.5 Instrumentation and data collection techniques	13
	1.6.6 Data analysis and interpretation	14
1.7	TRUSTWORTHINESS OF THE STUDY	15
1.8	RESEARCH ETHICS	17
	1.8.1 Anonymity and confidentiality	18
	1.8.2 Informed consent	19
	1.8.3 Permission to conduct research	20
1.9	CONTRIBUTION OF THE STUDY TOWARDS THEORY AND	
	PRACTICE	21
1.10	LIMITATIONS AND DELIMITATIONS OF THE STUDY	22
1.11	DEFINITION OF KEY CONCEPTS	23
1.12	CHAPTER OUTLINE	24
1 13	SUMMMARY	24

CHAPTER TWO: REVIEW OF RELATED LITERATURE

2.1	INTRODUCTION			
2.2	THE (2.2.1	CONCEPT OF THE NOVICE TEACHER Introduction	26 26	
	2.2.2	Expectations of novice teachers	27	
	2.2.3	Novice teachers in an era of change about training	29	
	2.2.4	Summary	30	
2.3	CHA	LLENGES FOR NOVICE TEACHERS WORLDWIDE	31	
	2.3.1	Introduction	31	
	2.3.2	Instructional challenges	31	
	2.3.3	Classroom management challenges	34	
	2.3.4	Stress and workload challenges	35	
	2.3.5	Social challenges	36	
	2.3.6	Adaptation challenges	3'	
	2.3.7	Technological challenges	38	
	2.3.8	Summary	39	
2.4	THE I	NECESSITY OF INDUCTION FOR NOVICE TEACHERS	4 0	
2.5	MODELS FOR THE DEVELOPMENT OF NOVICE TEACHERS			
	IN A	FEW SELECTED COUNTRIES	42	
	2.5.1	Introduction	42	
	2.5.2	The Droichead School- Based Model (DSBM) in Ireland	43	
	2.5.3	The School-Based Support Programme (SBSP) in Qatar	44	
	2.5.4	Programme for Inducting Developing Educators (PRIDE) in		
		South Carolina	44	
	2.5.5	NTCIM Induction Model in United States of America	45	
	2.5.6	Namibia New Teacher Induction Programme (NNTIP)	46	
	2.5.7	Australian New Teacher Induction Programme (ANTP)	47	
	2.5.8	Summary	49	
2.6	NOVI	ICE TEACHER DEVELOPMENT LOCALLY	49	
	2.6.1	Introduction	49	
	2.6.2	Novice teacher induction programme in schools in Johannesburg	5 0	
	2.6.3	Induction of novice teachers in community schools in Tembisa	51	
	2.6.4	Induction of novice teachers in the Limpopo Province	52	

	2.6.5	School support programmes for novice teachers in the Western			
		Cape	53		
2.7	SUMN	MARY	55		
СНА	PTER T	THREE: CONSTRUCTIVIST THEORETICAL FRAMEWORK	56		
3.1	INTR	ODUCTION	56		
3.2	THE	CONCEPT OF CONSTRUCTIVISM	56		
3.3	THE (ORIGIN OF CONSTRUCTIVISM	57		
3.4	PRIN	CIPLES OF CONSTRUCTIVISM	58		
3.5	CONS	STRUCTIVIST THEORISTS	61		
	3.5.1	Introduction	6 1		
	3.5.2	Jean Piaget (1896-1980)	62		
	3.5.3	Levi Vygotsky (1869-1934)	64		
	3.5.4	John Dewey (1950-1952)	65		
	3.5.5	Jerome Bruner (1915-2016)	66		
	3.5.6	Summary	68		
3.6	CONS	STRUCTIVIST PEDAGOGY	69		
3.7	THE	CONSTRUCTIVISM VS CONVENTIONAL APPROACHES TO	•		
	EDUC	CATION	7 1		
3.8	SIGN	IFICANCE OF THE CONSTRUCTIVIST APPROACH FOR			
	EFFE	ECTIVE NOVICE TEACHERS	73		
3.9	THE	ROLE OF A CONSTRUCTIVIST TEACHER	75		
3.10	CHAI	LLENGES RELATED TO THE USE OF CONSTRUCTIVIST			
	APPR	OACH IN ACTUAL CLASSROOM SITUATIONS	77		
3.11	CONSTRUCTIVISM AS PART OF TEACHER TRAINING				
	PROC	GRAMMES	78		
3.12	THE I	RELEVANCE OF THE CONSTRUCTIVIST APPROACH FOR			
	NOVI	CE TEACHER EDUCATION IN SOUTH AFRICA	80		
3.13	SUM	MARY	81		
СНА	PTER I	FOUR: RESEARCH METHODOLOGY	83		
4.1	INTR	ODUCTION	83		
4.2	THE I	RESEARCH QUESTIONS AND OBJECTIVES	83		
43	THE	RESEARCH PROCESS	84		

	4.3.1	Introduction	84	
	4.3.2	Research design	84	
	4.3.3	The research paradigm	86	
		4.3.3.1 Ontology	87	
		4.3.3.2 Epistemology	88	
4.4	POP	ULATION AND SAMPLE OF THE STUDY	89	
4.5	INST	RUMENTATION AND DATA COLLECTION TECHNIQUES	91	
4.6	DAT	ATA ANALYSIS AND DATA PRESENTATION		
4.7	TRUSTWORTHINESS OF THE STUDY			
	4.7.1	Credibility	96	
	4.7.2	Transferability	97	
	4.7.3	Dependability	98	
	4.7.4	Confirmability	98	
4.8	8 ETHICAL ISSUES		99	
	4.8.1	Maintaining relationship with research participants	100	
	4.8.2	Upholding informed consent	100	
	4.8.3	Privacy and confidentiality during research	101	
	4.8.4	Upholding beneficence	102	
	45	Upholding honesty and integrity	103	
4.9				
4.10	10 SUMMARY			
CHA	APTER	FIVE: DATA PRESENTATION AND DISCUSSION	105	
5.1	INTRO	DDUCTION	105	
5.2	RESE	ARCH PARTICIPANTS	105	
5.3	DISCU	SSION OF THE RESEARCH DATA	106	
	5.3.1	Introduction	106	
	5.3.2	Category 1: Challenges faced by novice teachers during early		
		years of teaching	108	
		5.3.2.1 Theme 1: Challenges in the initial days	108	
		5.3.2.2 Theme 2: Challenges with managing time	112	
		5.3.2.3 Theme 3: Challenges in mentoring and induction	116	
	•	5.3.2.4 Theme 4: Challenges with classroom management and		
		discipline	119	

	5.3.3	Categor	y 2: Support from experienced teachers and school	
		manage	ment team	123
		5.3.3.1	Theme 1: Support with curriculum issues	123
		5.3.3.2	Theme 2: Support with professional development	127
		5.3.3.3	Theme 3: Support with parent engagement	129
		5.3.3.4	Theme 4: Support with administration	131
	5.3.4	Category	3: Strategies to support novice teachers	132
		5.3.4.1	Theme 1: Mentoring and coaching	132
		5.3.4.2	Theme 2: Communication, knowledge sharing and	
			collaboration	137
		5.3.4.3	Theme 3: Behaviour management strategies	141
		5.3.4.4	Theme 4: Instructional strategies and classroom	
			management practices	143
		5.3.4.5	Theme 5: Collegial support	147
		5.3.4.6	Theme 6: Ongoing professional development training	150
		5.3.4.7	Theme 7: Motivating teachers	153
5.4	SUM	MARY		156
CH	APTER	SIX: SU	MMARY, FINDINGS, RECOMMENDATIONS AND	
CO	NTRIB	UTION		157
6.1	INTR	ODUCTI	ON	157
6.2	SUM	MARY O	F THE STUDY	157
6.3	FIND	INGS FR	OM THE STUDY	160
	6.3.1.	Finding	s with regard to objective one: To identify the significant	
		challeng	ges and problems facing novice teachers in the initial	
		years of	teaching in primary schools in KwaZulu-Natal	160
	6.3.2.	Finding	s with regard to objective two: To establish the roles and	
		responsi	ibilities of mentors, the school management team	
		and other	er stakeholders in the development of novice teachers	
		in prima	ary school in KwaZulu-Natal	162
	6.3.3.	Findings	s with regard to objective three: To determine which	
		strategi	es, are currently offered to novice teachers to overcome	
		their pro	oblems and be more effective in these schools	164

6.3	.4. Fii	ndings wi	th regard to objective four: To develop strategies in			
		a model	to introduce more effective induction of novice teachers			
		in prima	ary schools in the King Cetshwayo District of			
		KwaZul	lu-Natal.	166		
6.4	REC	OMMEN	DATIONS FROM THE STUDY	167		
	6.4.1	Recomn	Recommendations for objective one: To identify the significant			
		challenges and problems facing novice teachers in the initial				
		years of	teaching in primary schools in KwaZulu-Natal.	168		
	6.4.2	Recomn	nendations for objective two: To establish the roles			
		and responsibilities of mentors, the school management team				
		and other stakeholders in the development of novice teachers in				
		primary	y schools in Kwa Zulu Natal.	169		
	6.4.3	Recomn	nendations for objective three: To determine which			
		strategie	es, are currently offered to novice teachers to overcome			
		their problem and be more effective in these schools.				
	6.4.4	5.4.4 Recommendations for objective four: To develop strategies in a				
	model to introduce more effective induction of novice					
		teachers	s in primary schools in the King Cetshwayo District of			
		KwaZul	lu-Natal.	171		
6.5	CON	FRIBUTI	IONS OF THE STUDY	172		
	6.5.1	Introduction				
	6.5.2 A model for developing professional development among nov					
		teachers	S	173		
		6.5.2.1	Phase 1: Inputs - Pre-service induction - Teacher			
			preparation	175		
		6.5.2.2	Phase 2: Induction Process – Inservice Training	177		
		6.5.2.3	Phase 3: Strategies – Advancing teacher development	179		
		6.5.2.4	Phase 4: Key Outputs – Continuous development and			
			targets	182		
	6.5.3 Summary			183		
6.6	LIMI	TATION	S AND DELIMITATIONS OF THE STUDY	185		
6.7	AVENUES FOR FUTURE RESEARCH 1			186		
6.8	FINAL REMARKS 18			186		

REFERENCES	187
APPENDICES	232
APPENDIX A: REQUEST FOR PERMISSION FROM	
KWAZULU-NATAL DEPARTMENT OF	
EDUCATION TO CONDUCT RESEARCH	
IN THE CETSHWAYO DISTRICT	232
APPENDIX B: REQUEST FOR PERMISSION FROM SCHOOL	
PRINCIPALS IN THE CETSHWAYO DISTRICT	
TO CONDUCT RESEARCH	234
APPENDIX C: INTERVIEW ADULT PARTICIPANT	
INFORMATION SHEET AND CONSENT FORM	236
APPENDIX D: SEMI STRUCTURED INTERVIEW SCHEDULE FOR	
NOVICE TEACHERS	239
APPENDIX E: SEMI-STRUCTURED INTERVIEW SCHEDULE	
FOR MENTORS AND SCHOOL MANAGEMENT	
TEAM	241
APPENDIX F: PERMISSION GRANTED FROM DEPARTMENT	
OF EDUCATION TO CONDUCT RESEARCH IN	
THE CETSHWAYO DISTRICT	243
LIST OF TABLES	
Table 5.1: Research participants with their respective codes in five	
selected Primary Schools in the King Cetshwayo District	·
in KwaZulu-Natal	106
Table 5.2: Categories and identified themes	107
LIST OF FIGURES	
Figure 6.1: Model for Teacher Preparation, Teacher Induction and	
Continuous Professional Development	174

CHAPTER ONE ORIENTATION TO THE STUDY

1.1 BACKGROUND TO THE STUDY

Newly qualified teachers enter their professional careers armed with a teaching qualification and with a designated teaching position. The newly graduated teacher is called a 'novice' teacher, particularly during the first three to five years of teaching. Teachers initially enter the teaching arena with great enthusiasm, and the transition from becoming a theory-orientated preservice teacher to a fully-fledged in-service teacher within the first few years of employment is naturally expected. Unfortunately, this expectation is often short-lived; for the novice teacher, reality shock sets in almost immediately as novice teachers often find themselves in a 'swim or sink' situation. Sözen (2018:526) stated in this regard: "Teachers may need a survival kit between their background knowledge, training and realities of the classroom".

Novice teachers encounter several challenges trying to reconcile the pedagogy they learned in their teacher education program with the realities of teaching. They are directly confronted with the gap between theory and practice. Theoretical knowledge does not always translate to effective classroom teaching. Hence, the novice teacher's difficulty adjusting and adapting to the school situation leads to high stress levels (Botha & Rens, 2018). As a result, novice teachers reach a critical stage in their teaching career, which gives rise to one of the three possible outcomes: to work through the reality shock using the skills and knowledge obtained during training, to try to survive the reality shock, or continue the year with its heavy workload and emotional burden. Moreover, the severity of the reality shock often leads to teachers resigning from the profession (Fantilli & McDougall, 2009).

The transition from preservice to professional practice is generally 'unsettling.' The critical problem experienced by novice teachers is that they are not gradually inducted into the teaching profession (Amin & Rahimi, 2018). According to Rodríguez, Mayo and Gago (2017), novice teachers cannot confront the ideals acquired during their professional training with the realities of work.

From the very first day of employment, supervisors expect novice teachers to do the work of experienced teachers (Alhamad, 2018). Supervisors need to consider that novice teachers are entering the teaching arena for the first time or differentiate between novice teachers and

experienced teachers when distributing subjects and allocating duties. Novice teachers are immediately assigned to a class of learners, allocated teaching subjects and expected to follow the school schedule rigorously from the onset (Worthy, 2005). As a result, the initial year becomes hectic and arduous, and novice teachers spend a disproportionate amount of time and effort to keep their heads above water (Fantilli & McDougall, 2009). Support from school advocates could help inexperienced teachers put their tertiary education into practice and adapt to their professional environment (Alhamad, 2018).

Clark (2012:197) described her first year of teaching as "an emotional roller coaster, filled with nerves, exhilaration and uncertainty." She reported that first-year teachers faced several demanding tasks in the first year, which included setting up the classroom and improving learner achievement. Pursuing these tasks was difficult and nerve-wracking, and support from school personnel was limited. Several novice teachers also shared similar sentiments about the challenges they faced in the classroom. In addition, classroom management, poorly disciplined learners and the diverse culture of schools were reported as leading causes of dissatisfaction and stress among novice teachers, affecting novice teachers and their effectiveness as a teacher (Sözen, 2018).

As a result of these diverse classroom experiences, it is not uncommon for novice teachers to leave the profession. Teacher attrition in South Africa currently stands at 8%. Immigration to other countries, leaving the teaching profession for other jobs, impoverished working conditions, privation of support by authorities, retirement and death are the main reasons (Mukeredzi, Mthiyane & Bertram, 2015). Recent data from numerous countries revealed that between 8 and 50 per cent of novice teachers resigned from the profession within the first five years of teaching (Kelly et al., 2019). Consequently, a survival kit and a myriad of coping mechanisms are imperative to bridge the gap between teachers' knowledge accrued during training and everyday classroom realities. It is critical to provide a supportive environment for novice teachers during their transition from preservice to in-service practice (Alhamad, 2018).

A fair and supportive environment accelerates the performance of novice teachers and assists in teacher retention. A survey (OECD, 2019) was carried out on novice teachers in 2018 across 37 countries which held membership with the Organisation for Economic Cooperation and Development (OECD). The survey revealed that in contrast to experienced teachers, novice teachers were given more demanding environments with far-reaching challenges such as

inadequate facilities, the absence of support services, large class sizes, lack of resources and poor infrastructure. Results demonstrated that 22% of novice teachers wanted to transfer to another school, 78% felt that they could manage disruptive behaviour in their classroom, 38% of teachers participated in an induction activity, and only 22% of teachers with up to five years of teaching experience were assigned a mentor. In addition, lack of innovation and inadequate support affected teacher motivation and retention. The survey results further reported that providing novice teachers with adequate support in their initial years was a pivotal challenge to teaching (OECD, 2019).

Falling education standards are not only a world phenomenon. In this regard, South Africa was identified as having one of the worst education systems in the world, ranked at the bottom of all middle-income countries in mathematics, science and literacy (Spaull, 2013). This dilemma continues; the quality of education needs improvement, and the output rate needs to improve. Classrooms remain overcrowded, with the ratio of teachers to learners at 1:37, with a soaring dropout rate and low literacy and numeracy levels. Among the South African education system's challenges are poor teacher training and support, unskilled teachers, lack of commitment to teaching, and a shortage of resources (Modisaotsile, 2012).

This educational crisis continues in South Africa, failing to equip most youth with the tools to combat society's challenges. This is evident from a range of independently conducted assessments of learner achievement that, except for an affluent minority, most South Africans are not literate or computer literate at grade-appropriate levels; in other words, a significant percentage of learners are functionally illiterate and innumerate (Spaull, 2013). On the contrary, high-quality teachers can play a significant role in shaping learners in a globally competitive world (Modisaotsile, 2012). Within South Africa, improving the quality and functionality of education is desperately needed. One of the ways to improve these issues is by providing more and better support for teacher in-service training and induction of novice teachers.

The challenges and experiences faced by teachers during the initial stage of teaching are the axis on which the researcher will coordinate the development of this research. Developing a model embodied with research-based strategies will assist novice teachers in bridging the gap between preservice training and educational reality in the classroom.

1.2 RATIONALE FOR THE STUDY

The researcher's personal experience spanning over three decades in the teaching profession provided insight into the challenges that novice teachers face. The teaching experience in the interim summoned a concern and aspiration within the researcher to contribute to educational management by unveiling the training needs of novice teachers. Effective teachers are inclined to improve learner outcomes and increase the morale of the institution drastically. This led to critical awareness that novice teachers can move away from isolation and inadequacies and work towards improving the quality of instruction and performance by introducing research-based strategies.

For the past three decades, the researcher has been a teacher and department head in KwaZulu-Natal. The researcher has served as the Department Head (HOD) for 15 years at a school in the King Cetshwayo District. In addition to the stipulated tasks and responsibilities, the researcher played a vital role as a supervisor, monitor and mentor for the institution's novice teachers and student teachers registered with the University of South Africa and the University of Zululand. Novice teachers consistently require ongoing support from administrators and colleagues to overcome the challenges facing them. To add to the challenges, the researcher has not undergone any formal training to assist these novice teachers.

Currently, in South Africa, there is no formalised policy or programme for the induction of novice teachers. Teacher induction in South African schools needs to be more cohesive, coordinated, under-theorised and informal (Maringe & Osman, 2016). Given this, a structured induction programme including mentoring and coaching will proactively assist novice teachers in overcoming problems, anxiety and professional isolation they might experience on their journey to becoming competent and skilled professional teachers. Department heads and expert teachers find it a tedious task to bridge the gap between novice and experienced teachers without a formal induction programme. Bringing the novice teacher on board requires a programme of action, support and encouragement. This study could encourage expert and novice teachers to extend their developmental roles through programmes comprising research-based adaptation strategies.

Another reason for this study is to explore the adaptation strategies adopted by novice teachers in their initial years of teaching and make them available to novice teachers in the King Cetshwayo District since formal induction is non-existent and left entirely to the school. The

research outcomes are that the support strategies could assist novice teachers in overcoming problems such as discipline, classroom management, planning and implementation, colleagues and parents. The entrance of novice teachers into the teaching arena, specifically during the COVID-19 crisis, was not the right time. Studies show that teachers need to prepare to integrate technology in the classroom. The researcher, while networking with other schools in the locality, established that there are gaps in teachers' digital skills and experience (Johnson et al., 2016).

As a result, teachers in the Cetshwayo District had to make swift and unforeseen changes in their practices: presenting lessons on the Zoom online platform, motivating learners, and creating new learning materials was a huge challenge. Consequently, novice teachers had to move from their primary role as dispensers of information to orchestrators of learning (Dvir & Schatz-Oppenheimer, 2020; Huber & Helm, 2020).

Another argument for advocating improvements in teacher support and development in the initial years of teaching is that the world is facing a significant increase in readily available information and modern technologies. There is a constant change in dynamics amid novice teachers' challenges. Novice teachers must integrate modern technology to cope with 21st-century classroom practices. Moreover, novice teachers needed to be adequately prepared to teach learners how to use digital tools so that they can become media literate. Hence, learners needed assistance in schools to function adequately in online collaborative, research-based environments involving researching, analysing, synthesising, critiquing, evaluating and creating knowledge (Okogbaa, 2017).

Training programmes are often imposed upon novice teachers without considering the actual demands of teaching. The inadequacy of these training programmes and the glaring gaps existing in literature, especially noticeable in the King Cetshwayo District, motivated the researcher to focus on developing novice teachers entering the profession. The researcher anticipated that this study would enable an in-depth exploration into the challenges experienced by novice teachers and thus significantly contribute to the existing body of knowledge. It would benefit the education system and concurrently stimulate debate among education advocates concerning the need for an intensive and supportive training structure for novice teachers as they move from preservice to in-service training. Recommendations from school teams, training institutions, and school governing bodies for introducing special training programmes

for developing novice teachers also encouraged the researcher to interrogate the subject under study. From this perspective, the impact of providing professional training for novice teachers and school heads is tremendous on learner achievement (Olubunmi, 2023).

Ultimately, this study aims to add the voice of novice teachers to existing research and establish the support needs of newly qualified teachers so that school administrators, faculty of the education department, governing bodies and other role players can effectively support the implementation of educational programmes so that high calibre professional teachers can be brought into the system.

1.3 THEORETICAL FRAMEWORK FOR THE STUDY

This study on novice teachers is supported by the constructivist view of learning as propounded by Levi Vygotsky. The two main types of constructivists learning perspectives are cognitive constructivism and social constructivism, developed by Piaget (1973) and Lev Vygotsky (1978), respectively. Vygotsky (1978) expressed that knowledge is constructed through social intersection, namely interactions that involve sharing, comparing and debating among learners and mentors (Dagar & Yadav, 2016). The novice teacher is the central figure of the learning experience within a social constructivist paradigm. Knowledge is constructed as the novice teacher interacts and makes sense of his or her experiences within a particular social context, i.e., the school system. To reiterate, in social constructivism, learning is a collaborative process, an individual's interaction with a particular culture and society (Vygotsky, 1978; Thomas et al., 2014).

Unlike traditional education, where knowledge is passively transmitted from experienced teachers to novice teachers, the constructivist learning theory, on the other hand, supports various strategies and techniques (Teppo, Soobard & Rannikmäe, 2021). Apart from the mentor or experienced teacher acting as a facilitator of learning, the prime responsibility of the mentor is to establish a collaborative classroom atmosphere. In this arena, novice teachers actively participate in their meaningful learning (Olusegun, 2015). The chosen theoretical framework for this study will be discussed comprehensively in Chapter Three.

1.4 STATEMENT OF THE PROBLEM AND RESEARCH QUESTIONS

In her supervisory capacity, the researcher identified that novice teachers demonstrated deficiencies in several areas, resulting in substandard learner outcomes. The profession

witnessed a high influx of teachers with common problems, necessitating structured support and induction programs. The initial stages of teaching were characterised by considerable difficulties, low morale, and dissatisfaction among novice teachers. The inadequacy of tertiary education and training programs in fully equipping novice teachers for the rigours of teaching was evident. The sections discussed above deal with the problem of a lack of training for novice teachers in KwaZulu-Natal primary schools and can consequently be phrased as a research question for this study: What strategies can be developed and implemented to support and develop novice teachers to become effective teachers in primary schools in the King Cetshwayo District of KwaZulu-Natal?

This primary research question can now be divided into the following sub-questions that guide the study:

- What are the significant challenges and problems facing novice teachers in the initial years of teaching in primary schools in KwaZulu-Natal?
- What are the roles and responsibilities of mentors, the School Management Team and other stakeholders in developing novice teachers in primary schools in KwaZulu-Natal?
- Which strategies, if any, are currently offered to novice teachers to overcome their problems and be more effective in these schools?
- Which strategies, in the form of the model, can be introduced for the more effective induction of novice teachers in primary schools in the King District of KwaZulu-Natal?

1.5 AIMS AND OBJECTIVES OF THE STUDY

This study explored research-based strategies in the form of a model that could support and develop novice teachers in primary schools in the King Cetshwayo District of KwaZulu-Natal. To conduct effective interpretive studies, the researcher established clear research questions, aims, and objectives. These elements provided essential direction and steps to answer the research questions. The objectives of the study were to:

• identify the significant challenges and problems facing novice teachers in the initial years of teaching in primary schools in KwaZulu-Natal.

- establish the roles and responsibilities of mentors, the school management team and other stakeholders in the development of novice teachers in primary schools in KwaZulu-Natal.
- determine which strategies, if any, are currently offered to novice teachers to overcome their problems and be more effective in these schools.
- and develop strategies in the form of a model to introduce more effective induction of novice teachers in primary schools in the King Cetshwayo District of KwaZulu-Natal.

1.6 RESEARCH METHODOLOGY

1.6.1 The research design

In this study, the researcher adopted the qualitative research design to explore the challenges and experiences of novice teachers. The researcher is interested in discovering and interpreting this phenomenon rather than testing the hypothesis. A basic interpretive study design is the best approach because it allows researchers to understand human actions based on the meanings that humans assign to them (Merriam, 2002).

Research designs are plans and procedures that commence from broad presumptions to specific methods of data collection, analysis, and interpretation. The selection of a research design is based on the nature of the research problem, the researcher's subjective experiences and the audience for the study. The research problem an organisation faces determines the research design and not vice versa (Creswell & Creswell, 2017).

The researcher refers to the research design as a strategy that integrates the different components of the study coherently and logically, ensuring that the research problem is addressed. It decides the blueprint for the collection and analysis of data (de Vaus, 2001). The research design allows the researcher to identify research methods suitable for the research problem (Creswell, 2009).

Research design ensures that the evidence obtained will assist the researcher in effectively addressing the research problem. Often, researchers begin their investigation before critically analysing the depth of information needed to address the research problem. These design concerns are addressed, or the research problem will not be adequately resolved. The conclusions drawn will not be credible if the study's validity is undermined (de Vaus, 2001).

The research design is a framework for planning research and ultimately finding solutions to the research questions. The following needs to be considered while determining the research design:

- The type of data you need.
- The location and timescale of the research
- The participants and sources
- The variables and hypotheses (if relevant)
- Methods for collecting and analysing data (McCombes, 2019).

The research design sets the parameters of the study, determining what's included. It also defines the criteria by which the researcher will evaluate the results and draw conclusions. The reliability and credibility of the study depends on how the researcher collects, analyses, and interprets the data. In retrospect, a robust research design is crucial to successful research (McCombes, 2019).

1.6.2 The research paradigm

A paradigm is a set of popular beliefs and agreements shared between researchers on how problems should be understood and addressed (Kuhn, 1970). According to Joubert, Hartell and Lombard (2015), a paradigm represents an individual's belief or view about the world and determines how a person reacts towards such events. The four main philosophical assumptions that support the researcher's beliefs are ontology (nature of reality), epistemology (nature and forms of knowledge), methodology (research process) and axiology (ethical issues). The research paradigms are positivism/post positivism, interpretivism /constructivism, pragmatism and critical theory (Guba & Lincoln, 1994).

The interpretivist paradigm guided this study on novice teachers. The researcher chose this research paradigm because the primary endeavour of this was to consider subjective perspectives of human experience (Guba & Lincoln, 1989). Every effort was made to understand the viewpoint of the subject being observed and not that of the observer. Emphasis was placed on understanding the individual and their interpretation of the world around them. The interpretivist paradigm asserts that reality is socially constructed (Bogdan & Biklen, 1998).

According to the interpretivist paradigm, research precedes theory and is the foundation on which theory is built. This paradigm is based on a subjectivist approach to knowledge, a relativist view of reality, a naturalistic methodology, and a balanced ethical perspective (Kivunja & Kuyini, 2017).

The researcher makes meaning of data through his or her thinking, cognitive processing and interaction with participants (epistemological assumptions). Knowledge is constructed socially because of his or her personal experiences within the natural setting. A relativist ontology assumes that the situation studied has multiple realities. These realities are either explored and meaning given to the situation, or the situation is reconstructed through interactions between the researcher and participants. In assuming a naturalist methodology, the researcher utilised the data generated through interviews, discussions, text messages, and reflective sessions. The researcher functioned as a participant observer. Balanced axiology assumes that research outcomes reflect the researcher's values and generate a balanced report (Kivunja & Kuyini, 2017).

The researcher selected the interpretivism paradigm because it usually exhibits the following characteristics:

- The social world cannot be fully understood solely from an individual's perspective.
- The idea is that there are multiple realities and that they are shaped by society.
- The researcher must acknowledge the inevitable interaction with participants.
- The acceptance that context is crucial for knowledge and understanding.
- The belief that knowledge is created through the findings can be value-filled and made explicit.
- The importance of understanding individuals over universal laws.
- Interdependence of causes and effects.
- There is a need to consider contextual factors in systematic understanding (Lincoln & Guba, 1985; Morgan, 2007).

1.6.3 The research approach

Research in sciences permits us to find the truth through reasoning and experiences (Daniel, 2016). There are three types of scientific research, namely qualitative, quantitative research

and mixed methods. This research utilised the qualitative approach to find solutions to challenges and provide adaptation tools to strengthen and develop efficacy in novice teachers.

The qualitative approach was used to gain insight into the experiences of novice teachers from the selected primary schools. In addition, the primary goal of this qualitative research was to produce descriptive data from individuals' written and spoken words and observable behaviour. It provided a way of approaching or getting in touch with the empirical world (Taylor et al., 2015).

According to Astalin (2013), qualitative research is a systematic scientific inquiry. It seeks to build a holistic and mainly narrative description. This enlightens the researcher's understanding of a social or cultural phenomenon. McMillan and Schumacher (1993) define qualitative research as an inductive process of organising data into categories and identifying patterns among categories.

The strength of qualitative research is its ability to provide a thick description of people's experience of a given research problem. This research approach efficiently obtains specific information about the values, opinions, behaviors, and social perspectives of specific populations. The approach is inductive and flexible. It allows people to be themselves during the research process; they can reflect and communicate their experiences uninhibitedly. Instead of providing questions with specific answers, they can provide an in-depth account of their experiences. This helps to interpret and understand the complex reality of a given situation. The nature of the qualitative approach allows for interaction, thought and reasoning; a participant's expression and experiences can be easily understood even when there is little or no information about them (Mack, et al., 2005; Leedy & Ormrod, 2014).

According to Kabir (2016), qualitative methods are characterised by the following features:

- They tend to be open-ended and have less structured methods (i.e., researchers may change data collection strategies, techniques or participants).
- Also dependent on interactive interviews, several interviews were carried out to pursue a particular issue, to clarify concepts or to inspect the reliability of data.

1.6.4 Population and sampling

Qualitative researchers aim to select the sample comprising participants most compatible with the intended research purpose. Subjects, respondents, participants, or collaborators are selected from a sampling frame or population for a particular qualitative study (Leavy, 2017; Omona, 2013). The selection of individuals for a study is determined by the study population's objectives and characteristics.

The study was exclusively conducted on novice teachers from the King Cetshwayo District, situated in the northeastern area of the KwaZulu-Natal Province. The King Cetshwayo District boasts of approximately 656 schools, out of which 452 are primary schools. The sample of novice teachers was selected using purposive sampling, as it was the most suitable approach for the study. The King Cetshwayo District was the ideal location for the study as it was the least time-consuming, least expensive, and most convenient option for the researcher. The study included novice teachers with five years or less of teaching experience, in addition to experienced teachers and management members.

The purposeful sampling technique permits the researcher to select the participants to be included in the research. Purposive sampling involves selecting participants purposefully to provide crucial data that cannot be acquired from other choices (Taherdoost, 2016). Identifying and selecting information-rich participants for the most effective use of limited resources motivated the researcher to select purposeful sampling (Patton, 2002). The researcher chose these participants according to pre-selected criteria pertinent to a particular research question and who were especially knowledgeable and experienced with the phenomenon being studied. The researcher also targeted participants who were not only available and willing to participate but also had the ability to reflect on and communicate their experiences.

A purposeful sampling technique was also employed to identify novice and experienced teachers who could provide insights into the research questions. The sample of teachers consisted of novice teachers teaching for less than five years and experienced teachers from different phases and with varying levels of teaching experience. Senior management and department heads were also selected from the experienced sample through purposeful sampling.

The sample of teachers was selected from the target population. The sample for this study comprised participants drawn from a total of five primary schools. Primary schools were selected, based on the researcher's 15 years' experience, supervising novice teachers in a primary school. From the Imfolozi Circuit in the King Cetshwayo District, five schools were selected within a 50 km radius. When choosing the five schools, time and distance were crucial considerations. For phenomenological study the sample size may range from 3-25 participants. The researcher took great care in determining appropriate sample sizes for each group to gather valuable insights. The focus was on novice teachers, which consisted of 15 participants, and mentors or experienced teachers, which comprised 10 participants. Additionally, 5 heads of departments who supervised the novice teachers were selected, and senior management was involved in shaping development programs at the schools. In total, 34 participants (n=35) out of the 35 selected participants were interviewed. The department heads and senior management personnel were chosen based on their information-rich standing and convenience.

Once the target population, sampling frame, sampling technique and sample size were established, the next step was to generate data (Taherdoost, 2016).

1.6.5 Instrumentation and data collection techniques

The goal for all data collection is to gather evidence, translate it into rich data analysis and eventually construct a convincing and credible answer to the research problem. Data collection is an essential step in providing the relevant information needed to answer the research question (Shanks & Bekmamedova, 2018). The researcher chose qualitative methods as they are naturally more flexible, and greater spontaneity and adaptation of the interaction are often seen between the researcher and the participant. The interview schedule and literature review were used as data-collecting tools to elicit the participants' perspectives on the strategies used by novice teachers. A literature review is a method of gathering data that involves recognizing, obtaining, analysing, and transferring information from various sources such as words, numbers, photographs, audio, and video. It is a formal strategy that generates large amounts of data to ensure the review is relevant to the study topic. The literature review is a thorough data-collecting instrument used by the researcher to study novice teachers. (Onwuegbuzie & Frels, 2016).

The researcher selected in-depth interviews as they are suitable for generating information on individuals' personal histories, perceptions, and experiences. Furthermore, it is envisaged that

more data is obtained through interviews than other research methods. In a face-to-face interview, a researcher can encourage the participants to disclose more information by probing into the problem. The researcher interviewed school management teams and novice teachers from five schools to elicit responses on the strategies used to induct novice teachers into the school system. Open-ended questions allowed the participants to articulate their thoughts in their own words rather than from fixed responses. These open-ended questions allow responses that are significant and culturally relevant to the participant and are often unanticipated by the researcher. Responses were elaborated and provided detailed information. Qualitative researchers can respond instantly to the information imparted by further probing subsequent questions (Mack et al., 2005).

Data from a large population also served to make the findings more generalizable. The researcher ensured anonymity and confidentiality to the participants, which also served as a means of obtaining cooperation from the participants (McMillan & Schumacher, 2001).

1.6.6 Data analysis and interpretation

Through data analysis and interpretation, researchers can answer research questions. Trent and Cho (2014: 652) define analysis as "summarising and organizing data" and interpretation as "finding or making meaning." Phases of analysis and interpretation include data preparation and organisation, initial immersion, coding, categorising and theming, and interpretation (Leavy, 2017).

Data analysis in qualitative research is the process of systematically organising the interview transcripts, observation notes, or non-textual materials that the researcher accumulates to understand the phenomenon that is being researched (Wong, 2008). The study employed thematic data analysis; the data was analysed, and patterns were identified. Ultimately, it was categorised according to the recurring pattern, and themes were developed from the data through coding. Terre Blanche, Durrheim and Kelly (2006) expressed that the purpose of data analysis is to present a comprehensive description of the characteristics, processes, transactions, and contexts that constitute the phenomenon being studied. Data was presented as quotes from participants.

1.7 TRUSTWORTHINESS OF THE STUDY

Qualitative researchers propose trustworthiness as the qualitative equivalent of reliability and validity (Williams, 2021). When qualitative researchers refer to trustworthiness, they are simply posing the question, 'Can the findings be trusted?' To establish trustworthiness, the four components of qualitative research: credibility, transferability, dependability, and confirmability must be strengthened (Korstjensa & Moser, 2018).

Dependability in a study refers to the consistency and reliability of the research findings. It involves documenting the procedures precisely so the research process can be followed, audited, and critiqued (Moon et al., 2016). Results would be virtually identical if the research had to be replicated using the same methods and context. However, Shenton (2004) argued that the changing nature of the phenomena scrutinised by qualitative researchers rendered such provisions problematic in their work (Shenton, 2004). Instead of aiming for the benchmark of replicability, as an alternative, qualitative researchers decided to emphasise transparency to demonstrate that the research processes carried out were dependable. Dependability is evoked when evaluation of the research findings reveals that the accumulated data, interpretation and recommendations are supported by the data received from participants of the study; data was not prefabricated or adjusted. In this study, data was accumulated from primary sources, namely interviews and the literature review (Korstjensa & Moser, 2018).

Credibility refers to the extent to which a researcher accurately represents the truth value, actual meanings and essence of the data provided by the research participants (Lincoln & Guba, 1985). Building confidence in the validity of the findings of a specific investigation is crucial for making the research credible. The extent to which the policymakers believe the research recommendations are credible will be a deciding factor regarding the success and implementation of any policy. Researchers and practitioners need to think critically and contextually when evaluating the choice of a research method used by the researcher, as well as consider that credibility in research decisions is those that are consistent with the purpose of the researcher (Guba, 1981; Moon et al., 2016).

For there to be trustworthiness and transferability, multiple strategies needed to be utilised to make sure that the data generated were accurate and insightful (Cresswell, 2007). Qualitative researchers demonstrated the credibility of a research process and findings through the use of the following strategies: i) multiple sources of data and methods; ii) peer debriefing for an additional perspective on the analysis and interpretation of the research process and findings;

iii) member checking, findings are returned to participants to determine if the findings replicate their experiences iv) persistent observation and negative case analysis (Moon et al., 2016; Williams, 2021). Hence, in this research on novice teachers, multiple sources of data and methods were used to establish the credibility of the research.

In addition to multiple sources of data and methods being used, the following principles of data collection assist researchers in coping with the challenges of establishing trustworthiness, namely: i) a systematic way of organising and documenting the accumulated data, and ii) maintaining a chain of evidence (Yin, 2003). In this study, multiple sources of data were generated; novice teachers, mentors and senior management were interviewed to establish the credibility of the study. The aim was for the research results to represent credible information drawn from the participants' original data and correct interpretation of the original view of the participants (Korstjensa & Moser, 2018).

Data and interpretations were drawn from the findings of the data on novice teachers and not the figments of the researcher's imagination for confirmability (Williams, 2021). Shenton (2004) added that steps must be taken to help ensure that the data captured emerge from the experiences of the participants rather than the characteristics and preferences of the researcher.

To attain confirmability, researchers must demonstrate that the results are coherently linked to the conclusions; in other words, they produce the same results if the research process is replicated. Consequently, by providing a comprehensive description of the methods, the reader can determine confirmability by seeing how data, constructs and theories merge to be accepted (Moon et al., 2016).

Transferability refers to how far research findings and recommendations can be applied to different contexts or populations, and how well they align with theory and future research. This strategy plays a significant role in applying research results, especially since research advocates rely heavily on data, conclusions and recommendations. Ultimately, the researcher places emphasis on transferability and focuses on the results of a particular study and explains to what extent can the results of a particular study be inferred, with confidence, to a population at large (Marshall et al., 2013).

Furthermore, the transferability of the research data on novice teachers was strengthened by providing a clear and comprehensive description of the following components of a study project: the research design, context, culture, selection, characteristics of participants, data collection and analysis (Lincoln & Guba, 1986; Moon et al., 2016).

A qualitative approach was employed to explore novice teachers' challenges and their adaptation strategies in the initial years of teaching. This approach allowed the researcher to capture many aspects of the study, namely the credibility of the findings and the context that helped to validate the findings. Finally, to identify and analyse the adaptation strategies that novice teachers used. It also enabled a deeper understanding of the complexities of teaching faced by novice teachers in the initial years of teaching.

The participants in this study were drawn from schools in the semi-urban areas of the King Cetshwayo District. Novice teachers, senior management, (i.e., principals, deputy principals, department heads, and senior teachers, including master teachers) were invited to participate in the research project. This provided credibility to the research, in conjunction with scoping a broader range of experiences of novice teachers. Including senior management and mentors was an essential aspect of the research design. This approach allowed for a comprehensive understanding of the challenges and opportunities faced by novice teachers. By examining the experiences of these groups, the study provided a nuanced and broad comprehension of the teaching profession.

To make sure that findings are trustworthy and transferable between the researchers, Creswell (2007) suggests that a rich description should be provided.

1.8 RESEARCH ETHICS

Principles of ethics are applied to all research procedures. Qualitative research ethics concerns moral behaviour and a code of conduct (Wiles, 2013). Studies advocate that moral rules and professional codes of conduct are applied to the research process, which involves data collection, analysis, reporting, and publication of information about the research subject. Emphasis was also placed on acceptance of participants' right to privacy, confidentiality, and informed consent.

According to Resnik (2015), research ethics are essential for the following reasons:

- To promote research aims, namely knowledge, truth, and error avoidance.
- Support values such as mutual respect and fairness are needed for collaborative work.
 Researchers are dependent on collaboration between researchers and groups.
- To hold researchers accountable for their actions. Regulations for conflict of interest, misconduct, and research involving humans or animals are necessary since researchers receive public funding.
- To ensure that the public can trust the research. Research can only be supported and funded if the public and the participants have confidence in the purpose of the research.
- Supports crucial social and moral values, such as the principle of not harming others.

Ethical issues arise in qualitative studies in an educational context since it involves participants below age. Studies often gather sensitive information from vulnerable individuals who may not fully comprehend the implications of their involvement. It is also sometimes problematic for young researchers to know when ethical issues might emerge while designing research projects (Dooly, Moore & Vallejo et al., 2017).

1.8.1 Anonymity and confidentiality

In any study, participants must be safe and protected from any harm. Anonymity and confidentiality are crucial steps in ensuring the participants are protected from potential harm. Participant anonymity and participant confidentiality are different, although these two terms are used synonymously. Participant anonymity is when the participant's identity is not revealed to the person reading the research. Thus, participants are given pseudonyms. Confidentiality means that only the investigator(s) can identify the responses of individual participants. In this study, the data generated were de-identified, and the participants' identities were kept confidential. Only confidentiality procedures were warranted for the participants in this study. Thus, in any study, it is essential for the identity of participants to be kept confidential and requires the researcher to extend assurances beyond protecting the participant's names. Self-identifying statements and information were avoided during the research process (Fleming & Zegwaard, 2018).

The confidentiality of the participants was maintained in this research; the names and identities of participants were not revealed during the data collection, analysis of findings and when

reporting the research findings. During the research processes, namely telephone conversations, interview sessions, data analysis and distribution of the results, the confidentiality of individuals was vigilantly maintained (Arifin, 2018).

Personal data generated from participants were utilised for the sake of the study and not for any other purpose. Only personal data which was relevant and needed immediately was obtained from the participants. The personal data were organised and managed cautiously, making sure that there was no unauthorised use made of them (Dooly et al., 2017). Before compiling the data, the method of processing the data was fully disclosed to the participants. The names of individuals and institutions were anonymised and information that led to the recognition of participants, such as locations, names of cities, and so forth were deleted.

The consent forms also informed participants that processed data, namely publications, conferences, teaching materials and policy documents, will be used only for academic purposes. Assurance was also given to participants regarding the safety and protection of personal data. Data generated was available only to individuals directly involved in the study. The identities of the participants and institutions were also protected, and information was made public only by a shield of anonymity. The researcher-maintained anonymity throughout the study. Names of novice teachers, the department heads and the educational institutions were given pseudonyms to protect their identity (Dooly et al., 2017).

1.8.2 Informed consent

The cornerstone of any ethical research is marked by 'informed consent' (Denzin & Lincoln, 2011). Consent from the participants is obtained before the commencement of any research. For the study involving novice teachers, obtaining consent included ensuring that it was voluntary, and that participants were adequately informed about the research (refer to Appendix C). Participants' consent to participate in this study was obtained only after a thorough explanation of the study and the process.

Before agreeing to participate, a detailed description of the research process was given to potential participants. They were informed in advance of what was required of them, how the data would be used, and if there were any consequences. The consent forms were signed before the interview allowing participants to be part of the study. Participants had the right to access

their information and to withdraw from the study at any time even after consent was given (Arifin, 2018).

Informed consent is a legal procedure between the researcher and the participants. The aspects of 'informed' should include clear explanations of the following:

- Who the researcher is.
- The aim of the research.
- The type of data that will be generated from participants.
- How the different data will be generated from participants.
- The commitment level required from participants.
- How the data will be utilised and reported.
- The potential risks the participants may encounter while participating in the research (Fleming & Zegwaard, 2018).

The researchers' responsibility is to provide a clear and well-written consent form, or it will result in a weak consent agreement. This may compromise the quality of data that was generated due to mistrust. Ultimately, the participant or the researcher will not receive adequate protection.

Ethical guidelines on informed consent require researchers to cautiously negotiate with participants if there is a need to reveal identities or images. Also, in the case of minors, parental consent should be obtained (Arifin, 2018).

1.8.3 Permission to conduct research

Researchers must apply for ethical clearance before commencing any research project. Permission was received from the Department of Education in the King Cetshwayo District of KwaZulu-Natal and the principals of the five research sites for the stipulated study (see Appendix F). A compliance document between the researcher and individuals responsible for each institution was signed (Dooly et al., 2017).

The researcher obtained informed consent from participants before the commencement of the research project and the interviews (see Appendix C). The participants' request for privacy was

considered, and their refusal to participate in any research stage was to be respected. Aligning with the suggestions by Cresswell (2007) and Saunders, Kitzinger and Kitzinger (2015), the anonymity of the participants was protected at all given stages. The researcher made his or her contact details available to all participants for any grievances or ethical issues that may have arisen during the research (Dooly et al., 2017).

1.9 CONTRIBUTION OF THE STUDY TOWARDS THEORY AND PRACTICE

Novice teachers join the teaching profession with high expectations of becoming efficient teachers. Unfortunately, they face various challenges in the initial stages of their teaching career. Novice teachers cannot provide quality teaching in the classroom; knowledge and competencies need to be improved. This results in novice teachers' unsatisfactory performance, teacher attrition and stress, which has a direct impact on learners' results.

Novice teachers' lack of experience and inadequacies subject learners to a continuous cycle of ineffective instruction. This study focused on the challenges that hinder novice teachers' growth. Furthermore, the research outcomes aided the researcher in developing a model to assist novice teachers in overcoming these challenges.

Theoretically, this study adds to the existing scholarly knowledge and literature in the respective field and plays a significant role in strengthening novice teachers. The theoretical framework of this research will assist in further research being undertaken. This study adds more knowledge since limited research on novice teachers' challenges has been conducted in the Cetshwayo District. The challenges faced frequently by novice teachers, as revealed in this research, can guide educators and policymakers in reorganising and developing preservice teacher education and induction programs for novice teachers.

Schools will be able to manage the entry of novice teachers confidently; strategies can be adopted to induct novice teachers into the school system gradually. The improvements resulting from this outcome positively contribute towards developing policies that proactively prepare novice teachers to cope with the challenges they may face during their initial years of teaching. Considering the common challenges or problems novice teachers encounter, a model has been designed to assist novice teachers in overcoming their problems in the initial years of teaching. Research-based strategies and clear guidelines are embedded in this model. The model will provide novice teachers with tried and tested strategies and support to transition gradually into

the school system. Thus far, limited studies have been undertaken to analyse novice teachers' experiences and provide the necessary support in the King Cetshwayo District.

The study is also expected to contribute to the existing body of knowledge relating to novice teachers' transition from preservice to in-service teaching. It will also serve as a guiding tool for future researchers who wish to research novice teachers. The aim is to improve learner outcomes and teacher efficiency. The introduction of research-based strategies will assist in bridging the gap between novice teachers and experienced teachers, which is desperately needed in KwaZulu-Natal, particularly the King Cetshwayo District.

The findings of this study will furthermore assist school managers and relevant stakeholders to proactively take measures to prevent deliberate adaptation problems experienced by previous novice teachers during their early careers. In the process, teacher efficacy will also improve instructional, social, managerial and teacher-mentor relationship outcomes. Ultimately, this research addresses the challenges facing novice teachers, a critical period of entry into the profession.

1.10 LIMITATIONS AND DELIMITATIONS OF THE STUDY

The study exploring novice teachers' challenges and the implementation of research-based strategies is confined to the King Cetshwayo District in KwaZulu-Natal. The sample population is limited to five primary schools. From these five schools, a small number of teachers were selected to participate in the study: ten (10) experienced teachers, fifteen (15) novice teachers, five (5) department heads and five (5) senior management (principal or deputy principal). Thirty-four of the thirty-five (35) selected participants took part in the study on novice teachers. The study comprised schools located in the King Cetshwayo District and not from other areas in KwaZulu-Natal for generalisation to take place. The other drawback was cost constraints due to logistical purposes such as travelling to schools for interviews, typing, printing, editing and binding the dissertation incurred by the researcher.

1.11 DEFINITION OF KEY CONCEPTS

In this study, the following concepts have been defined below:

1.11.1 Novice teacher:

Novice teachers are defined as having little or no mastery experience (Gatbonton, 2008). Veenam (1984) stated that a novice teacher is someone who has completed a pre-service training programme and is in the first year of in-service teaching. Teachers in the second and third year of teaching are also considered novice teachers since research revealed that it takes a minimum of five years for a novice teacher to become proficient. Experienced teachers differ from novice teachers regarding knowledge acquired, skills, and beliefs.

1.11.2 Coping strategies:

Teachers' cognitive and behavioural efforts to minimise and overcome challenges are commonly termed coping strategies (Pietarinen et al., 2013). Coping strategies are referred to as direct-action strategies that are applied to eliminate the source of stress. Direct-action strategies include seeking assistance, obtaining information, accessing professional development opportunities, connecting with others, reflecting, reframing and establishing boundaries (Sharplin, O'Neill & Chapman, 2011). These direct-action strategies help novice teachers alleviate job distress and reduce teacher burnout and teacher attrition.

1.11.3 Professional development of teachers:

Defined as activities which help develop an individual's skills, knowledge, expertise and other characteristics (OECD, 2009). Providing novice teachers with adequate assistance and guidance in the initial years is critical to developing individual teachers (OECD, 2019). The first year of teaching is critical for developing a teacher's identity, and the knowledge and experience gained during this time significantly impact their professional development (Poom-Valickis, 2014). In addition, it provides opportunities for teachers to search for new roles, develop new instructional techniques, and improve themselves both as teachers and as individuals. Thus, professional development for teachers is a continuous and lifelong learning process that improves the teacher professionally, academically and technically. Maintaining a high standard of teaching and trying to retain high-quality teachers is possible through continuous teacher development (Mahmoudi & Özkan, 2015).

1.11.4 Efficiency of teachers:

Efficiency describes how effectively a person can perform a task, duty or event. This means accomplishing a result in the best possible way while saving time and effort and achieving the same goals using fewer resources. An efficient teacher manages the learners in class for the maximum learning period and possesses relatable information and skills (Wanjala, 2017). Aspects of teacher input influence teacher efficiency in the learning process, which includes teachers' academic qualifications, lesson preparation, classroom management strategies, teaching-learning time utilisation and teaching-learning strategies (UNESCO, 2010). An efficient teacher performs all assigned responsibilities and tasks diligently and promptly. Teachers' efficiency level in work performance is reflected by learners' academic performance, attitudes and behaviour.

1.12 CHAPTER OUTLINE

Chapter One provided an orientation to the study; the background, problem statement, aims, research design, and methodology with a discussion of significant concepts.

Chapter Two comprised a literature review, which formed the foundation of this study. The challenges facing novice teachers and the adaptational strategies of novice teachers were explored in this chapter.

Chapter Three provided the theoretical framework for the study. The chapter explored the implications of the constructivist approach to teacher education, particularly for novice teachers. Existing literature on constructivism was reviewed: the development and principles of the theory and its contribution towards the professional development of novice teachers.

Chapter Five contains a presentation, analysis and discussion of the research data obtained from the qualitative investigation.

Chapter Six provided a summary, findings, recommendations and conclusion to the study as well as the unique contribution of the study towards the discipline.

1.13 SUMMARY

This chapter provided an orientation to the proposed study. It presented the background to the study, the purpose of the study, the problem statement, a preliminary literature study and the

choice of research methodology and design. Key concepts, ethical issues, and delimitation of the study were explained in context with the study. This chapter did not only enlighten all stakeholders on the projected content of the study but also focused on the following chapter. This literature review is significant to this research.

The preliminary literature study in this chapter revealed challenges faced by novice teachers and uncovered strategies which assisted novice teachers' adaptation to the school system. From the literature, it was discovered that novice teachers globally experienced similar problems during the initial years of teaching, although distinct problems were experienced, contingent on the country's educational context (Du Plessis & Mestry, 2019). Studies revealed insufficient support and training accessible to teachers in the initial years of their professional careers (Admiraal et al., 2023). Hence, the lack of quality teachers related to issues of equity and equality, is intensified in impoverished areas locally and globally (Du Plessis & Mestry, 2019; Goldhaber, Quince & Theobald, 2019).

Educational training programmes have become a crucial part of teacher development. This research could help novice teachers deal with challenges that surface by implementing constructivist approaches to in-service training. The next chapter presents a detailed literature review and offers strategies to help novice teachers bridge the gap between theory and practice.

CHAPTER 2

REVIEW OF RELATED LITERATURE

2.1 INTRODUCTION

Novice teachers struggled with many challenges during their transition from pre-service to inservice. Therefore, by identifying their challenges and needs, educational experts were able to support and develop novice teachers (Yee & Hassan, 2019). Support systems such as induction and mentoring programmes were developed and made available to address the concerns of novice teachers (Dishena & Mokoena, 2016). Developmental strategies embedded within these support systems assisted with the smooth transition of novice teachers into the profession and increased and supported teacher retention (Greiner, Hofman & Katskaller, 2017).

This chapter consists of a literature review on the challenges facing novice teachers and further explores the development strategies of novice teachers. The literature review was separated into three categories, namely a) teacher expectations and the reality of teaching, b) challenges faced by novice teachers, and c) strategies to support the induction of novice teachers.

2.2 THE CONCEPT OF THE NOVICE TEACHER

2.2.1 Introduction

Novice teachers expect to navigate smoothly through instructional tasks such as planning, teaching, assessing learners, administration duties, learner welfare and consultation with parents (Michel, 2013). The reality of teaching in the school is vastly different. As a result, this study explored the challenges of novice teachers during their transition into the school situation. Furthermore, to counteract the challenges faced by novice teachers, the researcher's focus is on identifying strategies that enhance and support teacher induction.

The term "novice teachers" has been defined purposefully by various researchers. The Organisation for Economic Co-operation and Development (2019) defined novice teachers as having five years or less teaching experience while Glennie, Mason and Edmunds (2016) referred to novice teachers as teachers with less than four years of experience. For research conducted in a Namibian study, Dishena and Mokoena (2016) defined novice teachers as newly qualified teachers with at least five years of teaching experience. Furthermore, Karataş and Karaman (2013) and Bin-Hady (2018) referred to a novice teacher as having less than two

years of teaching experience. In turn, Mahmoudi and Özkan (2015) defined novice teachers as having little or no mastery skills and less than two years of teaching experience.

From these various views, there is no commonly accepted notion of what the exact experience level of a novice teacher is. For this study, a novice teacher can be regarded as a beginner teacher with five or fewer years of experience teaching at either the primary or secondary level.

The following section will focus on the high expectations of novice teachers when entering the profession.

2.2.2 Expectations of novice teachers

On completion of teacher training and graduation, teachers are expected to plunge into the profession without being prepared (Dias-Lacy & Guirguis, 2017). They are expected to become efficient teachers instantly, manage the classroom and facilitate learning just as experienced teachers do (Sowell, 2017). According to Sözen (2018: 526), there is "no gentle adaptation" into the teaching profession. New or beginning teachers are expected to take on roles like their experienced colleagues and facilitate like experienced teachers. They are expected to meet high standards in the classroom with the tertiary training they received. This expectation has a ripple effect on the acceleration of learners' educational development, which depends on the quality of the classroom (Sasson, Kalir & Malkinson, 2020). In other words, the efficient delivery of the curriculum will have a positive impact on learner outcomes.

The critical role of teachers is to transmit knowledge and skills to learners. To accomplish this, the latest skills and techniques need to be mastered. School policymakers and leaders expect novice teachers to be trained and equipped with tailor-made skills and knowledge to strive in an increasingly complex school environment. Communication, critical thinking, problem-solving, teamwork, learning and information management, entrepreneurial, ethical, moral, professional, and leadership skills are all essential components of a teacher's skill set. These skills are expected to improve novice teachers' classroom experiences and to a greater extent, make them more manageable (Ariff, Mansor & Yusaf, 2016).

Novice teachers are also expected to acclimatize to both emotional and physical aspects of the school. The organizational life of schools, the new work environment, the challenges of the learners and the development of tools to deal with problems and difficulties are some of the

issues novice teachers are expected to manage skilfully (Sasson et al., 2020). Furthermore, instead of experienced teachers, novice teachers are assigned teaching positions in challenging and unsupportive work environments (Sali & Keçik, 2018; OECD, 2019).

Most schools expect novice teachers to gain effectiveness with minimal support from the school community (Alhamad, 2018; Kaplan & Owings, 2021). Teacher effectiveness is signified as having a deep focus on learner outcomes, teacher behaviour and classroom processes. According to authors such as Ko, Sammons and Bakkum (2016), novice teachers lack efficiency and focus in the following areas:

- Structure of activities.
- Delivery of the curriculum.
- Classroom management and discipline.
- Maintaining a high level of interaction in the classroom.
- Lack of focus on the goals and objectives involved in the learning process.
- Maintaining high levels of pupil involvement in tasks.
- Promoting learner responsibilities and independence of work during lessons.
- Providing emotive and cognitive feedback for learners.
- Maintaining a positive atmosphere in the classroom.

Effective teaching in a school situation is sustained when novice teachers gain expertise, skills and knowledge. The researcher concurred with the practical teaching processes outlined above by Ko et al., (2016) and further stated that cognisance must be taken of the growing demands of society, including the rising standards, global changes, pandemics and catastrophes.

Sözen (2018) indicated that communities, parents and school governance expect novice teachers to be productive almost immediately. They are required to take control of their classroom and to teach at the same level as experienced and expert teachers. This also affects confronting issues such as time constraints, a loaded curriculum, testing and marking, classroom management, the institution's culture, administrative duties and challenges in the classroom. Sowell (2017) concurred with this and further contributed by stating that society expects novice teachers to be efficient and to accelerate in school aspects such as instruction, assessments, learner engagement, classroom management and more aspects of the teachers' job description.

The expectations of teachers, coupled with the complexity of classroom teaching, are said to stifle novice teachers. They had to assume the complete duties of veteran teachers, and their inadequacy and lack of preparation are overwhelming. Novice teachers had to also apply themselves in all aspects of the school. The researcher also stated that because of the high expectations from school heads and other stakeholders, several teachers continue to carry out their tasks even though they lack the adequate skills and knowledge. It is of great concern that teachers must meet high standards with minimal training and support (Dias-Lacy & Guirguis, 2017).

To meet the expectations of schools, multiple attempts must be made to help novice teachers gain efficacy in the mastery of content delivery, classroom management, discipline and staff socialization. Hence, this study hopes to present strategies to assist novice teachers in meeting the school's expectations instead of succumbing to teacher attrition.

Currently, we are in an era of change and expectations for novice teachers are increasing. The introduction of technological mechanisms and operations necessitates advancement in teacher training to align with the fourth industrial revolution.

2.2.3 Novice teachers in an era of change about training

Teaching in the 21st Century is vastly different, more demanding and more vibrant than three decades ago (Jan, 2017; Muhamad & Seng, 2019). Novice teachers discover that the classrooms they are assigned to have high levels of linguistic, religious, natural and racial diversity, learners with disabilities and numerous other psychological and social factors. This is certainly different from the traditional classes in which homogenous groups of learners dominate. As a result, novices are faced with tasks that are far more complex and extend further than the academic needs of the learner (Becirović & Akbarov, 2015; Tirri & Toom, 2019).

Unpredictable phenomena such as the COVID-19 pandemic-imposed new responsibilities on novice teachers (Mecham et al., 2021). The role of novice teachers is not limited to developing cognitive skills in learners. Several learners had undergone psychological and emotional distress at home and were unable to engage productively in the learning process (Petrie, 2020). Novice teachers had to critically support the emotional, physical and social development of the learner (OECD, 2020). As a result, policymakers endorsed the need for a curriculum to assist and develop learners' socio-emotional proficiencies. Novice teachers had to familiarise

themselves with various methods, such as mindfulness, stress management techniques, case studies, teamwork, digital support platforms and research (Flores & Swennen, 2020).

Many novice teachers had to cope with their limited knowledge and training in specific fields (Stols et al., 2015). This made it difficult for teachers to optimize learning and teaching. They do not always have the skills and knowledge to effectively convey the subject content. Novice teachers are also expected to modify their technological skills and utilize modern equipment to present the learning content more enjoyably and effectively (Becirović & Akbarov, 2015; Sasson et al., 2020). Tirri and Toom (2019) beseeched novice teachers to become familiar with digital technology and effectively incorporate these developments into the teaching and learning process.

The researcher supports the notion that novice teachers do not always have the experience or training to cope with changes in classroom teaching. Several factors impede novice teachers from successfully gaining confidence and professional practices. The researcher affirms that research-based strategies embedded in support structures will help novice teachers constructively cope with changes such as, among other things, racial issues, learner disabilities and learners' social and psychological complexities, as well as Covid 19 distresses.

2.2.4 Summary

Novice teachers are newly qualified teachers with less than five years of teaching experience. Their initial years are challenging as navigating through instructional tasks requires strategic planning and skills for the high expectations of novice teachers to deliver the curriculum efficiently, which requires multitasking and support systems. Acclimatising the work environment and dealing with multiple problems in a new workplace is also very distressing for novice teachers. Furthermore, novice teachers work towards accumulating skills to sustain effective teaching.

Novice teachers experience several problems, particularly learner diversity and the unexpected phenomena of Covid 19, intensifying the workload of novice teachers. As a result, teachers have to take on several role functions to support the needs of learners. Furthermore, Covid 19 brought in a new dynamic with a move towards digital learning systems, which requires a more advanced development of skills (Lockee, 2021). Tertiary training does not suffice for novice

teachers to demonstrate teacher efficiency in the classroom or assist with the changes in the new era.

2.3 CHALLENGES FOR NOVICE TEACHERS WORLDWIDE

2.3.1 Introduction

The issue of teachers leaving the profession within the first five years of teaching is alarming. Research has shown that in other countries, such as Australia, 30-50% of teachers leave the profession within their first five years (Weldon, 2018). In a country such as Canada, it is estimated that almost 50% of newly appointed teachers resign within the first five years (Whalen, Majocha & Van Nuland, 2019). In the United Kingdom, many qualified teachers have also left the profession within the first five years (Allen, Burgess & Mayo, 2017; Sims & Allen, 2018). In the United States, up to half of newly qualified teachers leave within five years of starting (Sutcher, Darling-Hammond & Carver-Thomas, 2016).

Novice teachers experience personal, academic, and social challenges within and beyond the school. Some of these challenges are not addressed during tertiary training, and, as a result, novice teachers face a myriad of challenges they need to navigate during their initial years (Ergunay & Adiguzel, 2019; Al-Naimi, Romanowski & Du, 2020).

Novice teachers meet several challenges that hamper their development in-service. They face instructional, social, adaptational and technological challenges as well as classroom management issues, stress and huge workloads. These challenges experienced by novice teachers will consequently be dealt with.

2.3.2 Instructional challenges

Novice teachers face numerous instructional challenges during the initial years of classroom teaching. They find it challenging to design differentiated lesson plans as well as to cater to the different ability levels of learners. The content is often not challenging for learners with above-average scores nor suitable for learners who are below average. Hence, the lessons lack the support or scaffolding to bridge the gap or assist learners with learning difficulties (Gholam, 2018).

Another major issue that novice teachers find distressful about instructional challenges is related to curriculum development. Curry, Webb and Latham (2016) referred to this

challenging period as the survival phase, lasting approximately two months. During this period, teachers were overwhelmed, given that their content knowledge, planning and presentation of the curricular content were limited. Problems experienced concerning curriculum related to a level of mastery of the content, the content of different curricula, pacing of lessons within a time frame, an inability to complete on time, and unfamiliar curricula and learning materials (Lee, 2017; Al-Naimi et al., 2020). In addition, it was difficult for novice teachers to predict the outcomes of lessons or decide on the content to teach (Gaikhorst et al., 2017).

A study conducted in Qatari government schools on the challenges of novice teachers revealed that they experience problems in their instructional duties and the standardised lesson plans were not stimulating. Novice teachers preferred to design their lessons according to the prescribed lesson plans, which restricted teachers' creativity. Teachers failed to achieve the lesson objectives because of large class numbers (Al-Naimi et al., 2020).

Although teachers spent a disproportionate amount of time familiarising themselves with the curriculum, they still felt incompetent, especially when struggling with core subjects that required specialised skills. Besides, novice teachers were unwilling to teach subjects they did not register for at university or college (Senom, Zakaria & Shah, 2013). It is also not easy for novice teachers to create a balance between the learning gaps in learners and the instructional material where the content may be beyond the ability of learners (Gholam, 2018). In addition, this study by Senom et al. (2013) presented concerns such as evaluating learners, learner performance, and motivating learners.

Furthermore, instructional challenges experienced by novice teachers in a country such as Turkey are:

- curriculum conundrum,
- lack of support in the planning and implementation of the lesson,
- difficulty formulating objectives for the content taught,
- inability to choose appropriate teaching methods and content.

Drawing learners' attention to activities, limited knowledge of teaching strategies, insufficient testing and evaluation strategies and a lack of training to use instructional tools distressed novice teachers in a study that was conducted in Turkey (Öztürk & Yıldırım, 2013).

Novice teachers' difficulties were explored by Hadhramout University in Al-Mahra in Yemen. It was established that they lacked organisational and time management skills and faced difficulty developing lesson plans. Thus, the lesson's objectives were not met due to insufficient activities. Furthermore, novice teachers administered minimum assessments. The reasons were teaching objectives, limited activities, and, most importantly, the lack of time management skills when planning activities (Bin-Hady, 2018).

Furthermore, the 2019 academic year brought new challenges to education systems worldwide. The COVID-19 pandemic became one of the challenges, making it difficult and stressful for novice teachers to perform (ETDP-SETA, 2021). Teachers lacked the instructional skills to deal with challenges during their unexpected transition to school-supported home learning (Mecham et al., 2021). In most countries, novice teachers' instructional functions were transferred over to the Zoom platform during the COVID-19 pandemic (Dvir & Schatz-Oppenheimer, 2020).

Novice teachers had to change their teaching methods and move from spatial and temporal walls to a synchronic teaching method. There was also a shift from individual and group teaching to virtual teaching. In Israel, novice teachers took part in a one-semester online Zoom induction. It was established that deep concentration was needed in areas such as lesson objectives, teaching methods, selection of learning content and adapting to the new learning platform for virtual teaching to be heightened (Dvir & Schatz-Oppenheimer, 2020). Novice teachers made decisions and solved problems relating to online pedagogy without any pedagogical support from experienced teachers. Furthermore, novice teachers lack the efficiency and support to successfully manage virtual teaching (Dvir & Schatz-Oppenheimer, 2020).

A study conducted in Latvia revealed that instructional difficulties were centred around learners' differences, managing resources, and adapting curriculum and instructional supplies. The major setback that novice teachers experienced was that the instructional material at the tertiary level differed from those used within the school (Lee, 2017; Zhukova, 2018).

2.3.3 Classroom management challenges

Studies reveal that it is a prerequisite for teachers to be competent in classroom management. Failing to be productive in this area unfortunately leads to teachers exiting the profession.

Subsequently, novice teachers teaching in a government school in Abu Dhabi in the United Arab Emirates reported at the end of their first year that they often requested assistance from departmental social workers to deal with the challenging behaviours of learners. At other times, they needed more confidence to implement their management strategies autonomously. They also reported that it was discouraging to encounter physically abusive learners (Dickison et al., 2014).

In another study, Norwegian and Turkish novice teachers with a maximum of five years of experience, reflected on their challenging moments. They confronted several difficulties relating to classroom management, especially over calmness within the classroom (Senom et al., 2013; Çakmak et al., 2019). In similar situations, classroom distractions such as loud conversations, muttering, noise, and peer arguments cause emotional stress and distract the novice teacher (Gholam, 2018).

Teachers in Ghana faced various discipline problems. Learners were often not punctual to school. Noise levels were excessive in the classrooms. It was highly that learners posed a challenge to novice teachers and needed motivation (Boakye & Ampiah, 2017).

Ngang, Kanokorn and Prachak (2014) also had similar results in Malaysia. Novice teachers experienced serious classroom management and discipline problems; they could not manage their classrooms or control learners. Conversely, other studies further revealed that classroom management was the key challenge in Qatari government schools. The lack of skills to manage a class resulted in consequences where learners refused to follow instructions and they often argued with each other during the instruction period. Novice teachers should have been treated more fairly at times. School administrators were not informed whenever learners misbehaved, and novice teachers were challenged with learner misconduct. Al-Naimi et al. (2020) reported that large classroom size was an issue, ranging from 33 to 40 learners per class.

Data from the study carried out in Turkey by Öztürk & Yıldırım (2013) illustrated that nearly 47% of novice teachers found classroom management the most challenging aspect of the teaching profession, 40% of the teachers were unable to manage discipline problems with disruptive classes while 50% of novice teachers were not ready to take on leadership or coaching roles. In addition, 57% of novice teachers could not use effective classroom management strategies. Dickson et al. (2014) stated that the main problem was learner

behaviour. Novice teachers became distracted, and time was lost trying to deal with the misbehaviour. Often, teachers spend more time managing learners instead of carrying out instructional duties. It was a struggle trying to keep the classroom consistent. Often, novice teachers lost focus when learners shouted over their teaching.

Yee and Hassan (2019) explored the problems and challenges met by novice teachers in Johar, Malaysia. Novice teachers stated that they had no experience in managing large classrooms, especially with learner numbers ranging from 40 to 80 learners per classroom. These novice teachers often had to interact with disrespectful learners who displayed superior attitudes. Yee and Hassan recalled three common challenges related to learners. They were interaction with learners, challenges dealing with learners, and classroom management. The significant challenges for most novice teachers were learner misconduct, their disinterest in learning, homework, noise levels and time limits. Classroom challenges stressed novice teachers, making it more difficult for them to become effective teachers. The researcher posits that teacher efficiency was dependent on the attitude and behaviour of learners. Fundamentally, the learner's behaviour connects to the teacher's effectiveness in managing the classroom.

2.3.4 Stress and workload challenges

Stress occurs when changes occur in an individual (Selye, 1978). In the case of novice teachers, the workload, school administration, and relationships cause them distress. Harmsen et al. (2019) stated that high levels of stress experienced by novice teachers are detrimental to their well-being and classroom performance. Stress affects teaching quality, and learner outcomes are strongly affected. The latest studies in the United States indicated that a quarter of novice teachers risk experiencing stress in their first year (McCarthy et al., 2016). The results of a study on the development experiences of a first-year teacher were reported. The findings indicated that a first-year teacher had increased supportive needs. It was observed that there was not enough support to assist with time management, curriculum adjustments or discipline issues (Dias-Lacy & Guirguis, 2017). According to Ko, Chan, Lai, and Boey (2000), an inadequate amount of support from teachers and administrators led to a higher level of stress.

A study conducted in Finland revealed that mental health issues, fatigue and managing learner behaviour was the cause of stress among novice teachers (Uusiautti et al., 2014). Delivery of the curriculum and assessment of learners were not the only tasks given to novice teachers. Their job function increased tenfold and placed further stress on teachers. Family

complications, consultation with parents, learners with special needs and countless meetings are all stressors for novice teachers (Uusiautti et al., 2014).

A study on novice teachers in Dutch urban primary schools revealed that excessive workloads were a great challenge. Novice teachers worked after hours to strategise and prepare lessons to meet the standards of education inspectors and to deal with highly educated, critical and demanding parents (Gaikhorst et al., 2017). Öztürk and Yıldırım (2013) documented the results of a survey carried out in Turkey on the challenges faced by 465 novice teachers. Among the job-related challenges experienced, novice teachers complained that it was stressful to deal with big workloads. According to Kozikoğlu (2017), novice teachers also experienced stress meeting parents to discuss sensitive issues such as learners' progress, their behaviour and attendance.

Demands and submissions to the department, extra workloads, time from primary teaching responsibilities and school administration decreased teachers' self-confidence and increased the stress levels of novice teachers. Novice teachers in a school in Qatari complained of the sudden changes in curriculum and educational policies by external experts who lacked the understanding of the history, culture and society they were researching. Additional personal stress was also brought about by the extra workloads assigned to novice teachers (Al-Naimi et al., 2020).

2.3.5 Social challenges

Relationships within the school situation have a strong influence on job satisfaction, learner achievement and job retention. Personal and professional support from colleagues and stakeholders influence novice teachers' adaptation processes (Dickson et al., 2014).

According to Koca (2016), novice teachers require continuous feedback on their performance from their experienced colleagues. A survey explored the degree of support and feedback received in the first years. It was clear that novice teachers were not emotionally and practically ready to face the challenges of teaching. Based on the research, novice teachers did not receive adequate support or feedback from their experienced colleagues in their first year.

Gaikhorst et al. (2017) revealed that most novice teachers lacked genuine guidance and support from colleagues. They reported that schools did not possess strong support structures. Being

new and inexperienced, novice teachers had no guaranteed cooperation from stakeholders or collaboration with experienced teachers and administrators (Kozikoğlu, 2017). Dickson et al. (2014) also confirmed that novice teachers possessed relationship challenges with school stakeholders. Realistically, novice teachers had not set boundaries and limits for themselves and lacked the confidence and skills to resolve these challenges.

Senom et al. (2013) reported that novice teachers in Malaysia faced many socialization problems. The problems were related to learners, the school community, parents and the teaching profession. Colleges did not prepare novice teachers with the skills to cope with parents. Novice teachers were not skilled enough to be confronted by demanding parents. Problems emerged because of the discrepancy between learners' abilities and the learners' actual level of performance. While some parents demanded reasons for poor performance, other parents were nonchalant.

The study conducted by Öztürk and Yıldırım (2013) revealed that another challenge was dealing with supervision. Thirty per cent of novices stated that there was a lack of support and sympathy from school heads. Novice teachers could not communicate with school principals and supervisors about professional development issues.

A study in the United Arab Emirates revealed that intercultural relationships affected novice teachers' quick adaptation to the school system. It was a completely different power dynamic when encountering Westerners. Being colleagues at the school changed the relationship, compared to having a relationship as college students. The lack of understanding caused problems for novice teachers (Dickson et al., 2014).

2.3.6 Adaptation challenges

Novice teachers find it emotionally and mentally challenging to adapt to the school environment and the profession (Kozikoğlu, 2017). Teachers reported being stressed, tired, frustrated, vulnerable, and professionally isolated (Zhukova, 2018). Working in an unfamiliar environment involved new difficulties and adaptational challenges towards the profession.

Adapting to a school environment in an urban area was more critical than tertiary education (Zhukova, 2018). Several novice teachers exited the profession because of the complexity of teaching in urban schools. They were not adequately prepared to cope with the diverse nature

of urban schools where learners were from lower socio-economic and culturally diverse backgrounds. The study by Gaikhorst (2017) revealed that novice teachers did not possess the appropriate skills to deal with culturally sensitive issues. In addition, a language barrier made it difficult for them to communicate with parents.

Several novice teachers who began their careers in rural or low socio-economic areas experienced adaption difficulties relating to geographic settings, physical conditions, and social and cultural differences. Research in Turkey revealed that adaptation problems increased when novice teachers commenced their profession in small schools, deprived areas and poor working conditions (Kozikoğlu, 2017). They faced numerous challenges due to the physical infrastructure and lack of facilities of the school environment. Research carried out by TALIS in 2018 revealed that 22% of the novice teacher population secured employment in mediocre schools, populated with mostly socio-economically disadvantaged learners. It was not an ideal working environment for teachers who lack confidence and have been teaching for less than five years (OECD, 2019).

Novice teachers faced obstacles due to inadequate teaching materials, social facilities, working conditions, resources, and facilities (Kozikoğlu, 2017). They had to adapt to changes in the instructional practices and platforms. Their role changed to being more of a support for parents and learners. They had to monitor learner interaction with material and consistently assist and provide feedback to parents (Mecham et al., 2021). Furthermore, being away from family and friends in a new environment also caused further adaptational challenges (Kozikoğlu, 2017).

2.3.7 Technological challenges

Novice teachers faced numerous technological challenges during the COVID-19 pandemic. Education experts opted for long-distance learning and teaching of the curriculum through television broadcasts. Novice teachers had to cope with many difficulties and sensitive situations. It concerned technological knowledge and skills, the participation of long-distance learning and blurred boundaries between home and work. A study conducted in Israel reported that online teaching was difficult as they were unfamiliar with teaching platforms such as Zoom (Dvir & Schatz-Oppenheimer, 2020). For several participants, the transition of working from home confused novice teachers as they could not differentiate boundaries between work and home. The working environment had changed quite suddenly. These blurred boundaries

between home and school caused stress and tension and undermined novice teachers' safe space in the teaching environment (Dvir & Schatz-Oppenheimer, 2020).

Another challenge encountered was limited computers per household. It was a great challenge as teachers had to work with very little support from colleagues or technical support (Dvir & Schatz-Oppenheimer, 2020). A study by Mecham et al. (2021) reported on the instructional challenges experienced by novice teachers during the pandemic in America. Teachers were confused, experienced problems delivering the curriculum and received limited guidelines. Novice teachers also encountered logistical problems relating to acquiring and distributing resources to learners.

The novice teacher felt disadvantaged to deal with these additional challenges. It was already a difficult time to transition into the profession and was challenged to use specific technology for the first time. Novice teachers felt apprehensive about transitioning from a comfortable classroom to virtual teaching (Mecham et al., 2021).

2.3.8 Summary

Novice teachers faced challenges in classroom management, discipline, workload, instructional, social, adaptational and technological issues during the early years of their career. At this juncture, they found it difficult to sustain the school's academic outcomes significantly when they were adversely affected by problems and challenges. The researcher identified significant challenges that hindered novice teachers' development in managing learners, curriculum delivery, administrative tasks, and dealing with parents and colleagues. The inability to secure the necessary support to overcome these challenges often led to teacher attrition within the first five years.

In summary, the in-service training received by novice teachers in areas such as lesson planning, assessment strategies, instructional technology, learner-centred activities and monitoring learners was not adequate. This warranted the researcher to identify the support systems that can effectively address these problems. Ultimately, a range of research-based strategies were incorporated into a development model to assist novice teachers with bridging the gap between pre-service training and in-service teaching.

2.4 THE NECESSITY OF INDUCTION FOR NOVICE TEACHER

Novice teachers initially enter the teaching profession with an overwhelming sense of commitment and enthusiasm. This feeling usually disappears when classroom teaching becomes demanding and often more challenging (Ahmed, Faizi & Akbar, 2020). The harsh school environment and lack of support from school personnel created dissatisfaction among novice teachers and are undeniably the reason behind novice teachers' distress (Botha & Rens, 2018; OECD, 2019). It culminates in teacher attrition within the first five years of teaching (den Brok, Wubbels & van Tartwijk, 2017). Inadvertently, it is difficult for novice teachers to mitigate a smooth transition from preservice training into the teaching profession (OECD, 2019).

These early negative experiences of novice teachers reflect a dire need for more effective support and scaffolding strategies in mentoring and induction programmes to be included in tertiary training as well as during the first few years of teaching (Schwarzer & Grinberg, 2017). Novice teachers think that high-quality support structures such as induction, mentoring, and collaborating with school leaders and personnel are needed (Ross et al., 2011). Induction programmes and mentoring programmes implemented by education departments motivate and support teachers in their initial years (OECD, 2019).

Strong (2009:6) defines induction as "the initial stage or phase of one's career, or the system of support that may be provided during that initial phase." Panizzon (2018), on the other hand, describes induction programmes as structured schedules that provide comprehensive support systems for novice teachers. Such an induction programme includes workshops, professional networks, mentoring, facilitative coaches, classroom observation of lessons, administrative support, learning communication, portfolio videos, and monitoring (McBride, 2017). Thus, induction programmes positively respond to managing, nurturing, and supporting novice teachers (Dishena et al., 2016; Panizzon, 2018).

In South Africa, permanent teachers are not required to undergo induction training. Therefore, inducting teachers has not been fully realized, and its purpose is uncertain in most schools in South Africa (Hudson, 2012). A study on novice teachers in Mbombela in the Mpumalanga province revealed that school personnel did not know the importance of induction. Welcoming and being assigned teaching resources was what novice teachers received. School leaders failed to realize that induction was ongoing support until the novice teacher could cope with all aspects of the school situation. The school management was responsible for inducting novice

teachers; however, there was no prescribed procedure or duration to implement an induction programme. Induction was done unsatisfactorily, differed from school to school, lacked monitoring, and possessed no structured programme. Lack of responsibility and accountability from management led to the unsuccessful induction of novice teachers (Mbamba, 2020).

A study undertaken by Ngwira and Potokri (2019) revealed that the induction programmes implemented in secondary schools in South Africa were very ineffective in supporting novice teachers. Firstly, the participants knew very little about the induction programmes. However, the programmes did include an orientation workshop, mentoring, and peer support. The poor implementation of the induction programmes pointed to the school principals' lack of involvement, monitoring, encouragement, and commitment towards novice teachers. Conclusively, this study calls for the induction of teachers to be a continuous practice.

According to recent studies by De Beer, Petersen, and Van Vuuren (2020), it was evident that there was no formal induction of novice teachers, and whatever the schools implemented was not at a sufficient standard in South Africa. There was no formalized implementation of an induction programme and as a result, novice teachers developed a negative attitude towards the profession and failed to meet expectations.

South African schools are still struggling to implement induction programmes that will be beneficial towards novice teachers in the initial stage of their transition phase. School management teams must have the skills and knowledge to implement and monitor the induction process. The researcher agreed with Ngwira and Potokri (2019) that school management teams must take responsibility for novice teachers entering the profession with the implementation of an effective induction programme. The programmes will help boost the morale of novice teachers and work with school heads, personnel, and parents within a collaborative learning community.

It is crucial to explore interventions that can support novice teachers and add value to the teaching profession. The nature of the support and how best to implement the induction programmes is still a deciding factor in South Africa. There is a link between a novice teacher participating in an induction programme and a decrease in novice teachers leaving the profession or requesting to be transferred to another school (Gamborg et al., 2018). Teacher

Education and Development Summit 2021 focused on improving the induction and orientation of novice teachers (ETDP-SETA, 2021).

Research studies stress implementing an induction year. An effective induction programme offers mentoring to support the needs of novice teachers (Gholam, 2018). Novice teachers in KwaZulu-Natal experienced inadequate training during induction. Poorly designed, unstructured and disorganised induction programmes did little to help teachers bridge the gap between pre-service and in-service training. Empowering school management teams to tailor, implement, and manage induction programmes will accelerate novice teachers' professional growth.

2.5 MODELS FOR THE DEVELOPMENT OF NOVICE TEACHERS IN A FEW SELECTED COUNTRIES

2.5.1 Introduction

Induction models and programmes form an integral part of developing novice teachers as the priority is to bring novice teachers on board, which requires a comprehensive induction process. A systematic process is most effective at preparing the novice teacher to handle the different aspects of the school situation. The literature study conducted by the researcher recognises the need for a structured and well-managed developmental programme. The focus is on improving instructional practices where teachers will receive the necessary practical help to enhance learner achievement. Thus, the key is for experienced practitioners to engage novice teachers in an effective induction programme at the beginning of their first year of teaching.

In the following few paragraphs, various models or programmes from various countries will be discussed to provide guidelines for the development of more efficient novice primary school teachers in the KZN province of South Africa.

2.5.2 The Droichead School-Based Model (DSBM) in Ireland

The Droichead School-Based Model (DSBM), was introduced by the Irish Teaching Council in 2013 to develop novice teachers. The aim was to support the induction of novice teachers at the school level. The support system consisted of the school head, mentor, and other personnel (Leavy et al., 2015; Harford & O'Doherty, 2016). The DSBM advocated mentoring, emotional

support, assistance acquiring teaching strategies, instilling reflective practices in teachers, and promoting peer observation and professional development.

The main aim of the DSBM was to assist novice teachers in minimizing the reality of teaching full-time. According to Nally and Ladden (2020), the Model has a transformational impact on the professional development of novice teachers. The novice teachers who trained under this Model appreciated and relied on the positive and supportive role of mentors (Harford & O'Doherty, 2016). They were able to integrate socially and professionally into the ethos of the school. Experienced teachers, on the other hand, are recognized by the community and school stakeholders as a reliable component of the leadership team in the school. They were able to rekindle their enthusiasm and were inspired to reflect on their instructional practice.

According to Nally and Ladden (2020), the transformative nature of the DSBM helped novice teachers with socializing, mentors reviewing, and reflecting on their practice. Several induction workshops supported novice teachers professionally and personally in developing life-long skills (MacPhail, Tannehill & Avsar, 2019). Apart from the induction programme supporting and guiding novice teachers, it also benefitted mentors and the school. Furthermore, novice teachers were able to integrate their teaching into the fabric of the school. They contributed to transmitting the school culture, thus bringing about academic and social success (Harford & O'Doherty, 2016).

The researcher aims to determine strategies that would assist teachers in overcoming their challenges and become effective in the classroom. Several features of the DSBM may be considered when designing an induction model locally for novice teachers. The main feature is the professional support services provided by a team consisting of the school head and experienced mentors, working collaboratively with other school stakeholders in developing teachers who can meet the requirements of the school and the education department. The DSBM also assisted the researcher by demonstrating that school heads and mentors benefit widely through their interaction, involvement, and continuous training.

2.5.3 The School-Based Support Programme (SBSP) in Qatar

The school-Based Support Programme (SBSP) was launched in 2011 by the National Centre for Educator Development at Qatar University. The Schools in Qatar adopted the SBSP to aid novice teachers in smoothly transitioning into the teaching profession. A team of Professional

Development Specialists (PDS) were appointed to facilitate novice teachers. The SBSP provided activities to improve the instructional practices of novice teachers, thus fostering professional growth (Chaaban & Abu-Tineh, 2017). These activities aimed to equip teachers with research-based practises and conduct action research to improve skills, techniques, and strategies (Abu-Tineh and Sadiq, 2018).

The PDS provided specialized support in curriculum standards, lesson preparation, implementation of a wide range of instructional strategies, classroom management, assessment strategies, and use of Information and Communications Technology (ICT). The support structures incorporated into the SBSP offered cognitive coaching, mentoring, peer observation, study groups, a series of workshops for topics of interest, lesson modelling, and other various models of instruction and collaboration (Chaaban & Abu-Tineh, 2017, Abu-Tineh & Sadiq, 2018). The SBSP encouraged collective participation, as a result activities were designed to accommodate groups of teachers. It focused on subject content and was sustained over time, and the development of teachers took place during a regular school day (Abu-Tineh, 2015).

The SBSP features are designed to support novice teachers in the KwaZulu-Natal region. One of the most outstanding features in the model for novice teachers in KwaZulu-Natal is the external mentors or team of professional development specialists (retired professionals, veteran teachers). The SBSP assisted by establishing the role of mentors and stakeholders in developing novice teachers. The practical nature of the SBSP appealed to the researcher. This is reflected in the support deliveries, such as team-teaching lesson modelling, which are practical and are built into a regular day programme. The researcher will be able to target small schools with strategies adopted from this professional induction model.

2.5.4 Programme for Inducting Developing Educators (PRIDE) in South Carolina

The Programme for Inducting Developing Educators (PRIDE) was launched in 2018-2019 in South Carolina to create a bridge of support structures for novice teachers (Mijon, 2019; Raven, 2022). The University of South Carolina and the school district collaborated to design a programme to make the transition from training to classroom teaching successful (University of South Carolina, 2020). The PRIDE consisted of strategies, activities, and constructive feedback to support the professional growth of teachers. The goals of the induction programme included the following: to support the first-year teacher in achieving success, to increase the retention of first-year teachers, to enhance the personal and professional well-being of novice

teachers in their first year of teaching, and to integrate the first-year teacher into the district and school community (Baker, 2020; Raven, 2022).

The PRIDE assisted novice teachers with orientation for novice teachers, learning objectives for learners, assessment of classroom teaching, learner achievement, professional development, school-level mentors, and certified teachers. The Programme also incorporated monitoring and supervisory activities such as pre-observation conferences conducted by school management teams and mentors, and formative and summative assessments of novice teachers' performance (Baker, 2020).

The researcher recognised that components of the PRIDE model incorporated into the induction model could support novice teachers in overcoming their challenges during the initial years. The researcher established that the focus and priority is the development of novices in their first year. Constructive feedback incorporated into the PRIDE model for developing novice teachers could help increase teacher effectiveness locally. Conclusively, incorporating tried and tested strategies will assist in the overall development of novices.

2.5.5 The NTCIM Induction Model in the United States of America

The New Teacher Centre (NTC) introduced a comprehensive and systematic induction programme in 2012 to support novice teachers to become effective instructionally in the classroom (Poiner, 2017; Schmidt et al., 2017). The NTC Induction Model (NTCIM) provided professional development, research-based resources, online formative assessment tools and one-to-one mentoring in an encouraging and stimulating school environment (Poiner, 2017).

The NTCIM consists of four components. The first component is a professional development curriculum for mentors. It also includes experienced teachers for the position of full-time mentors. They were carefully selected and received approximately 100 hours of intensive training (Pioner, 2017). The second component consists of capacity building; administrators attend professional development workshops. The third component of the Model is the leadership and development of induction systems. It involves ongoing consultation, professional development, and the evaluation of induction programmes. The fourth component consists mainly of novice teacher development, continuous assessment, and communities of practice (New Teacher Centre, 2015).

There are four collaborative processes between mentors and novice teachers: firstly, gaining knowledge about the learners, exploring the school, family, and community resources, and becoming familiar with teachers and secondly, setting and reflecting on professional goals using collaborative assessment logs and co-assessing teaching practices for professional growth and thirdly, advancing teaching and learning through inquiry. Analysing learners' work, designing effective instruction, conducting classroom observations, and engaging in an inquiry cycle were undertaken. Lastly, communicating with family, supporting classroom learning, and interacting with school personnel (New Teacher Centre, 2015).

The NTCIM in schools and districts experienced varying levels of success (Schmidt et al., 2017; Betlewski, 2019). Activities and strategies were included in the induction process to provide professional support to novice teachers during their intervention year. Mentors received intensive training, curricular content, peer coaching, support and feedback (Schmidt et al., 2017).

The NTCIM could benefit the study on novice teachers as it features the roles and responsibilities of school heads, mentors and stakeholders. The researcher supports the intensive training of mentors and the engagement of school heads for a more effective induction of novice teachers in the Cetshwayo District. Mentor-principal relationships address the challenges and problems novice teachers face in their initial years. Another strategy drawn from the NTCIM is holding mentors accountable for the onsite support of novice teachers. Including online formative assessment tools, online mentors assist novice teachers in gaining instructional efficiency.

2.5.6 The Namibian New Teacher Induction Programme (NNTIP)

Namibia introduced its induction programme for novice teachers, called the NNTIP in Namibia in 2011. This Induction Programme aimed to support novice teachers in achieving confidence and a professional qualification in two years (Nantanga, 2014; Dishena & Mokoena, 2016).

The NNTIP has two levels, namely, the school level and the cluster level. Mentors, teachers, specialists and principals coordinate the NNTIP at the school level, while principals coordinate training for novice teachers out of school while facilitators coordinate subject-related workshops (Nantanga, 2014). Formal evaluation of novice teachers is completed twice a year. Several mentors manage the NNTIP and plan events and activities. Novice teachers were

allocated sufficient time during school hours to participate in the NNTIP (Dishena & Mokoena, 2016).

The structure of the NNTIP includes high-intensity activities such as an introduction and orientation, mentoring and individual meetings, discussions after lessons, training, classroom observations, networking with other schools and constructive feedback (Nantanga, 2014). Mentoring involved class visits, recording and discussion of taught lessons. Novice teachers are assigned two mentors: a general mentor and a subject mentor. Meetings are held at least eight times yearly with tailored training and the opportunity to share experiences. The NNTIP included novice teachers visiting schools to experience different teaching strategies. Collaboration and networking are essential to address isolation and socialization issues experienced by novice teachers (Dishena & Mokoena, 2016).

The study on novice teachers may add specific features from the NNTIP. The outstanding components of this Programme are the involvement of school leaders in organising training for novice teachers, the subject workshops, allocation of time for onsite training of novice teachers, constructive feedback and networking with novice teachers from other schools. The NNTIP encompassed research-based strategies to assist novice teachers in overcoming their day-to-day challenges.

2.5.7 The Australian New Teacher Programme (ANTP)

Australia launched the teacher induction model or ANTP in 2002. This comprehensive ANTP assisted novice teachers in harnessing knowledge and skills. The programme consisted of a good combination of education theories and practices to improve the quality of teaching in Australia and increase teacher retention (Hudson, Beutal & Hudson, 2009; Li & Zhang, 2015).

For novice teachers, online induction is a component with high-intensity educational resources. The online induction also included a Teachers' Induction Festival. Novice teachers decide on the activities to schedule on this day (Li & Zhang, 2015). They receive the appropriate online support from individuals or groups, school districts, curricular and student service teams (Hudson et al., 2009). In addition, each state in Australia established relevant educational websites for novice teachers. They are also offered an induction office with internet services representing a platform for discussion. Furthermore, experienced teachers provided individual training for novices (Li & Zhang, 2015).

The ANTP focused on practice, training, guidance and action research and integrated various professional and counselling resources outside the school. The programme provided induction material to help teachers solve problems caused by working in a new environment. There was induction material for the beginning and end of school, guidance on matters that they needed to be cautious about and problems that needed to be solved. Novice teachers also received training on classroom organisation and management before school opened. In addition, opportunities were created to learn the procedures of assessments and school policies. Novice teachers could familiarise themselves with the school and teaching environment to smoothly adjust to the working environment (Li & Zhang, 2015).

Support groups comprised of principals, university lecturers, local teachers, supervisors and tutors. The principals played an important role in formulating and implementing the induction system. This included selecting tutors, attending novice teachers' open courses and dealing with feedback (Hudson et al., 2009). The induction courses encompassed orientation and training (Paronjodi, Jusoh & Abdullah, 2017). Novice teachers also received information on school facilities, school policies, teaching goals, and teaching practises (Li & Zhang, 2015).

Specialised activities for novice teachers were programmed. Regular meetings included discussions on institutional policies and procedures for novice teachers. The seminar discussed classroom and stress management, teaching strategies and learners' diverse learning needs. Tutors and related personnel monitored the situation of novice teachers and revised the development activities for learners (Hudson et al., 2009). In addition, assistance was provided to novice teachers who failed to reach their training standards (Li & Zhang, 2015).

The ANTP has several features or measures that assisted in improving the quality of education in Australia. The researcher explored the ANTP to assist novice teachers in KwaZulu-Natal. The different aspects were considered for the complete preparation of novice teachers. Induction material for the beginning of school, policies and features such as an induction office, an induction festival, a support group, websites for each state, and online tutors could accelerate novice teachers' procedures. Orientation, training courses and regular meetings were areas to consider when constructing the model for novice teachers.

2.5.8 Summary

The researcher studied several induction models implemented in several countries. The researcher identified features of the various induction programmes for the efficient development of novice teachers. Amongst the many features, the organisation of professional support and collaborative efforts for teacher success in Ireland was recognisable from the Droichead Model.

The Qatar Induction Programme also included an external team of professional specialists to assist novice teachers during the pre-induction, induction and post-induction phases. The PRIDE induction model, on the other hand, used constructive feedback to develop effective novice teachers. Furthermore, the NTCIM supported a mentor-principal relationship, working collaboratively to address the challenges and problems of novice teachers and included online mentors to assist novice teachers in gaining instructional efficiency.

Subject workshops, allocating time for onsite training of novice teachers, and networking with surrounding schools are strategies encompassed in the Namibia Induction Programme. Impressionable features are the online pre-induction training, induction office, training courses to assist with instruction efficiency and the formation of support groups.

The correct implementation of induction programmes will assist novice teachers to apply themselves effectively in schools in KwaZulu-Natal. A comprehensive and effective induction programme could help novice teachers as they transition confidently into in-service teaching.

2.6 NOVICE TEACHER DEVELOPMENT LOCALLY

2.6.1 Introduction

Immersion into the school environment has been problematic for South African novice teachers. They enter the profession and are inadequately prepared to administer their duties. The implementation of a well-structured induction programme accelerates novice teacher development. The drive is towards novice teachers gaining the skills and knowledge and taking full responsibility as experienced teachers. Hence, the researcher explored the induction efforts in South Africa. The attempt is to identify support systems for novice teachers, establish the role of school personnel and make a significant difference in novice teachers' performance.

In the following few paragraphs, various models or programmes from the different provinces will be discussed to provide guidelines for the development of more efficient novice primary school teachers in the KwaZulu-Natal province of South Africa.

2.6.2 Novice teacher induction programme in schools in Johannesburg

The main idea of the study was to examine the approach to teacher induction in Johannesburg and develop and strengthen the practical skills of novice teachers in South Africa. Teacher induction is necessary to enhance teacher effectiveness, strengthen teaching skills, assist professional socialization and lower teacher attrition (Robinson, 2015). Research analysis revealed that emphasis was placed more on teacher performance concerning learner achievement than on supporting novice teachers in the initial stage of their careers (Smit & Du Toit, 2016; Kadenge, 2021).

First-year teachers leave the profession because of a lack of administrative support, the inability to manage personal and professional expectations, limited teaching resources, lack of professional development, and discipline problems in the classroom (Dias-Lacy & Guirguis, 2017). Poor comprehension of subject matter limited pedagogical content knowledge and ineffective instructional practices are problems that affect novice teachers. Teacher inexperience and lack of knowledge are detrimental to the chain of teaching and learning (Kadenge, 2021). There is a need for teacher induction to improve the quality of teaching.

The study conducted on the South African induction programme in the various districts revealed that workshops are the central vehicle for novice teacher induction. Workshops are held out of school with district officials as facilitators and experts. These off-site activities only create opportunities to develop communities for sharing practice outside school and thus fail to develop the skills for effective practical teaching in the classroom. The district had a limited understanding of teachers' needs, for the induction programme focused more on the complaints of novice teachers. This approach prioritised governance and ensured novice teacher compliance. The emphasis was on the behaviours of teachers on the given tasks, then on influencing teaching and learning (Kadenge, 2021).

The dual responsibility to support and monitor novice teachers created serious contestation within the district. Novice teachers needed a supportive programme that included continuous monitoring to develop their skills effectively. The district provided limited support to novice

teachers since there was a lack of understanding regarding the needs of novice teachers. In addition, the induction sessions were reduced and served more as information-sharing sessions. Conclusively, novice teachers faced problems developing skills because induction programmes were ineffective by mainly focusing on monitoring, supervisory and pressure-exerting imperatives (Kadenge, 2021).

2.6.3 Induction of novice teachers in community schools in Tembisa

Research conducted by Ramango (2014) in secondary schools in Thembisa revealed the lack of teacher knowledge and skills is the major problem concerning learner achievement. The time allocated to workshops empowering teachers with novice teaching methods was inadequate. As a result, effective teaching practices were sadly lacking among novice teachers (Ramango, 2014).

The community schools in Thembisa in South Africa implemented induction programmes which included orientation workshops, mentoring and peer support. The orientation workshop included a briefing on the school environment, academics, teaching materials and stationery, classroom management strategies, and an introduction to personnel and learners. The participants reported that the orientation was quick and passed a limited mandate as novice teachers had to teach immediately. Moreover, novice teachers had very little time to familiarise themselves with the lessons (Ngwira & Potokri, 2019).

There was no structured mentoring programme, which resulted in a haphazard mentoring process. Ngwira and Potokri (2019) confirmed that there was no policy for induction or mentoring and there was a lack of clear aims and time frames. The department head concentrated on visiting the classrooms only during Integrated Quality Management System (IQMS). Moreover, the discussions were related to areas that teachers performed well in and areas where they required improvement. Principals were not fully involved in the induction process of the novice teacher. In addition, department heads did not undergo training, were not released from regular duties, and were unqualified to support participants or be exempted from mandatory tasks (Ngwira & Potokri, 2019).

Peer support is a common form of support among novice teachers. Since there was no induction programme, novice teachers rallied together to navigate through their problems where they

planned, discussed and shared their experiences. However, one of the schools designated an office specifically for novice teachers to engage (Ngwira & Potokri, 2019).

The Department of Education implements development programmes to assist teachers in South Africa. The study conducted on the thirty primary schools in Thembisa revealed that the development programmes from the Department of Education (DoE) did not benefit teachers. The subject facilitators were not well equipped to extend the knowledge and skills of novice teachers. In addition, the facilitators were not well-trained to support the needs of novice teachers (Kubeka, 2021).

Novice teachers in Thembisa received little support and guidance to overcome their initial problems. The induction process also lacked support from the school head, department heads and experienced teachers. As a result, novice teachers had to learn to adapt independently. Hence, for novice teachers, trial and error and networking with peers assisted them with their instructional practices.

2.6.4 Induction of novice teachers in the Limpopo Province.

South African policies emphasise pre-service training and the continuous professional development of teachers. Unfortunately, these components lack an induction programme yet are an integral part of education. This is a serious concern for education researchers (Mashau, Mutshaeni & Kone, 2016).

Maake (2013) conducted a study on the induction process of principals who induct newly appointed teachers in the Limpopo Province. The induction processes focused mainly on orientation of each school environment. Mentoring is a strategy incorporated chiefly for the induction of novice teachers and principals played the role of an advisor, mentor and a coach in ensuring the implementation of each induction programme (Matsebane, 2015). Some schools delegated the role of mentors to department heads, whereas, in other schools, the responsibility to induct novice teachers was given to experienced staff.

The findings from the data revealed that principals and novice teachers faced a myriad of problems during the induction process. Each induction was short, inadequate, and not standardised or continuous (Matsebane, 2015). The induction period was not long enough to learn about proper planning, the teaching of subject content, each specialisation and

assessments. The programme also lacked a structured mentorship programme. There was very little time for principals to monitor the mentorship process. As a result, novice teachers could not access the relevant resources (Maake, 2013) and the quality of the teaching and learning was impacted within the classroom. Matsebane (2015) indicated that poor learner performance was caused by inadequate support measures, such as induction programmes to assist novice teachers.

Furthermore, some schools in the Limpopo province did not implement a formal induction programme. According to Maake (2013), novice teachers received very little professional development. The induction process was unsuccessful due to a lack of a constructive, standardised induction programme (Maake, 2013). Principals from the Bochum East Circuit in the Limpopo Province reported no formal induction but a general working policy on doing things. Induction programmes for novice teachers in these areas were minimal (Matsebane, 2015). Mashau et al., (2016) maintained that once teachers are employed, they need a system to assist them in transitioning from theory to practice. A comprehensive induction programme will sustain training and support for novice teachers.

Induction programmes lacked structure and neglected to include research-based strategies to assist novice teachers in overcoming their challenges. Novice teachers' support needs were not fulfilled because school leaders and school management teams did not take the responsibility to produce an induction programme that is manageable and sustainable. Novice teachers needed support and guidance from all school stakeholders. The mentoring aspect was sadly neglected, with no proper processes in place. The induction process was also inadequate; there was little planning or consideration of the needs of novice teachers.

2.6.5 School support programmes for novice teachers in the Western Cape

For novice teachers to develop their potential like experienced teachers, they require structured support in the various aspects of classroom and school situations (Sözen, 2018). Through adequate support, novice teachers take on specialist roles in a particular subject or phase, as an administrator, in planning assessments, as curriculum developers and in professional roles in the community (Esau & Maarman, 2019).

A study was conducted on novice teachers in the Overberg District, the Metro-North District and the Metro-East District in the Western Cape (Esau, 2017). The study focused on improving the capabilities of novice teachers and was undertaken. This was done by examining the induction programmes offered to novice teachers. The study revealed that mentoring was the main component of the induction programme (McGeehan, 2019). Further support was provided in the form of subject-specific workshops. These workshops provided novice teachers with the relevant knowledge and skills needed to teach the respective subjects in the classroom (Esau & Maarman, 2019).

The study results indicated that most participants were not inducted nor provided with any form of support. Most importantly, novice teachers did not receive information on school culture, assessment procedures, disciplinary rules and regulations, management structures, and administrative requirements. Mostly, they were inundated with marking, administrative work and extramural activities, making it tedious to participate in development activities. The program included workshops conducted after school, which focused on teaching the subject. Unfortunately, workshops to develop novice teachers' skills and knowledge were lacking. The research findings also revealed that often novice teachers did not meet the school's governing body members requirements even after a full year of teaching (Esau & Maarman, 2019).

It can be seen from the literature, that several South African schools failed to implement a well-structured induction programme. As a result, this affected teaching and learning in the classroom and teacher performance in other school matters. The components such as mentoring, orientation, skills development, and collaboration were lacking in the initial development of novice teachers. Hence, schools did not provide adequate support to assist novice teachers in overcoming their challenges.

2.7 SUMMARY

This chapter examined the novice teacher's role in a changing era, the challenges of novice teachers, and the induction models used locally and internationally. The change brought about diverse classrooms, the COVID-19 pandemic, digital learning, technology and social and psychological complexities. In addition, the study examined the expectations of novice teachers and their transition to becoming fully-fledged teachers.

Novice teachers experienced an array of challenges in their first year. The literature review unfolded several problems that hamper novice teachers' smooth navigation into the school system. It pertained to instructional, classroom management, stress and workload, social, adaptational and technological challenges. The induction models gave the researcher a clear perspective on the global strategies to support novice teachers.

In Chapter 3, the study's theoretical framework is presented and discussed.

CHAPTER 3

CONSTRUCTIVIST THEORETICAL FRAMEWORK

3.1 INTRODUCTION

Chapter Two comprised a literature review based on novice teachers' challenges. The current chapter explored the constructivist approach as a theoretical framework for studying novice teachers' experiences and development. The constructivist learning theory suggests that learners construct new knowledge by building on their existing understanding. The researcher chose the constructivist theory to explain how novice teachers learn and apply themselves in school and classroom situations.

This chapter discusses the origin of constructivism, the principles of constructivism, constructivist theorists, and the role of constructivist teachers. Next, the researcher gathers information from theorists and researchers on the challenges faced with implementing constructivism in schools. Finally, it explored relevant literature on constructivism as a strategy in KwaZulu-Natal schools and its contribution to the development of novice teachers.

3.2 THE CONCEPT OF CONSTRUCTIVISM

The concept 'constructivist' is an adjective derived from the noun `constructivism' (Gogus, 2012). The theory of constructivism synthesizes multiple theories into one form (Theys, 2017). In other words, it presents an umbrella term covering theorizations centred primarily on the cognitive subject, the situated subject, or the locus of knowledge (Larochelle et al., 1998). The focus of constructivism includes the theory about the nature of reality and the theory of knowledge. This is referred to as the epistemology (Gogus, 2012). Hence, learners construct knowledge through active mental development (Gray, 1997).

Gogus (2012) explained that humans generate knowledge and meaning from their experiences, mental structures, and beliefs. Spacey (2020) stated that the constructivist approach seeks to construct knowledge through experience. According to this view, (Spacey, 2020), only experience can facilitate learners to construct the knowledge they receive. Driscoll (1994 cited in Shah, 2019) elaborated on humans attaining knowledge. Teaching facilitates the construction of knowledge through experiential learning.

Gogus (2012) affirmed that learners learn by understanding prior knowledge and novice information. Individuals accept new ideas or fit them into their established worldviews. In other words, learners construct meaning by interpreting information from their own experiences. Thus, teaching aims for teachers to design these experiences so that opportunities are provided for learners to interact with sensory data and construct their own experiences (Mogashoa, 2014).

Learners see themselves as active organisms seeking meaning from their world. In this regard, Aljohani (2017) reported that individuals acquire understanding and meaning through constructive learning. Mvududu and Thiel-Burgess (2012) expanded on this by stating that constructivism is an approach that probes learners' understanding and shows that understanding can increase and change to higher-level thinking. In this regard, the classroom plays a crucial role; teachers and learners effectively construct and negotiate knowledge. (Morrison & Collins, 1995).

The above views make the constructivist theory most suitable for this study on novice teachers' challenges and experiences. Furthermore, it outlines the prerequisites for establishing active constructive learning during teacher induction or classroom teaching. Therefore, the study is based on constructivism as the preferred theoretical framework to prepare novice teachers for sustainable teaching in educational situations. Novice teachers share and accumulate knowledge through interacting with experienced teachers in school situations. Consequently, the constructivist approach is the development strategy for empowering novice teachers.

3.3 THE ORIGIN OF CONSTRUCTIVISM

A theorist such as Hilav stated that constructivism dates to the time of Socrates (Hilav in Erdem, 2001). Constructivism is rooted in the cognitive theories of Piaget and Vygotsky and encompasses aspects of other approaches (Aljohani, 2017). In addition, it is possible to trace constructivism back to educational psychology and cognitive development (Steffe & Gale, 1995; Bishaw & Egiziabher, 2013).

Scientists, philosophers, and psychologists such as John Dewey, Jean Piaget, and Lev Vygotsky shared different viewpoints on constructivist learning, especially constructivism's epistemology and ontological features (Gul, 2016). In other words, they interpreted

constructivism according to their own experience. Hence, their teaching and learning process is related to the practical reality (Suhendi, 2018).

The constructivist approach positively impacted learners in the mid-90s. During this period, information and communication technologies as a constructivist perspective to learning, were introduced to support learning in the classroom. Meaningful relationships and learners' inquiries were supported and guided through the learning approach. Subsequently, constructivist learning was still in its experimental stage (Brau, 2018). Theorists saw meaningful learning as constructed in a social setting, where individuals interacted with the environment (Kim, 2001; Zhou & Brown, 2015).

This study aims to improve novice teacher training by promoting social interaction and collaboration with experienced teachers, senior management, and the community, resulting in effective and efficient classroom outcomes. Novice teachers need to understand the principles of constructivism before entering the practical side of the teaching profession. The following section will discuss the principles of constructivism.

3.4 PRINCIPLES OF CONSTRUCTIVISM

Teacher training programmes aim to train teachers to become partners and facilitators of learning rather than mere transmitters of knowledge. Education policies such as the Outcomes-Based Education (OBE), the National Curriculum Statement (NCS), and the Curriculum Assessment Policy Statement (CAPS) were introduced in South Africa to promote a learning culture that embraces the democratic values of equality, liberty and human rights (DoE, 1996; Marishane, 2014). Educational specialists identified a need for learners to acquire new skills, knowledge, attitudes, and values. To facilitate this, they introduced various teaching strategies such as cooperative learning, discussions, small group work, problem-solving, learner research, role play, and case studies. These strategies enable learners to construct their learning effectively (Killen, 2010). Thus, teacher development underwent a complete metamorphosis within a constructivist framework from a behaviouristic to a constructivist approach (Rout & Behera, 2014).

Darling-Hammond and McLaughlin (1995) asserted that the constructivist approach advocates teacher development programmes, from pre-service education to in-service training, to deepen teachers' understanding of teaching and learning processes. In the early nineties, Hein (1991)

outlined the following principles of learning that teachers need to keep in mind in the construction of meaning:

- The necessary action involving constructing meaning is mental as it happens in the mind. Therefore, activities that engage the mind and body must provide cognitive learning.
- Learning involves language: language influences learning. According to Vygotsky, language and learning are supposedly inextricably intertwined, evident in North America, where exhibits developed are from materials and programs native to the land.
- Learning is a social activity intimately associated and connected with other human beings. Therefore, conversation, interaction with others, and the application of knowledge are integral aspects of constructive learning.
- Learning is contextual. Facts and theories are often not learnt in isolation from one's
 experiences or lives. Learning occurs related to what a person knows, believes, or their
 prejudices and fears, resulting from the idea that learning is active and social. Learning
 cannot take place independently from life.
- One needs the knowledge to learn—assimilation of new knowledge structured on previous knowledge. Therefore, teaching connects to a subject that considers learners' previous knowledge.
- It takes time to learn, as learning is not instantaneous. Hence, one needs to revisit ideas, ponder them, and use them for significant learning.
- Motivation is a critical component of learning. Apart from motivation helping learning,
 it is also essential for learning. Humans use the knowledge they have instilled if they
 only know why, even by the most autocratic and direct teaching.

The researcher identified Hein's principles as beneficial in guiding novice teachers to enhance their quality teaching and learning. The teacher's role in the individual's learning process is pivotal and requires a sound understanding of the principles. Hein's principles provided novice teachers with clear guidelines encouraging them to construct learning socially for learners to become active participants and move away from rote learning, repetition and recall. Principles included engaging in activities involving the mind, social interaction, learning in context, assimilation of new knowledge on previous knowledge, taking time to learn, and motivating. Thus, the principles advocated by Hein directed learners to learn meaningfully through interaction and discovery.

Hein (1991) posit that novice teachers are actively engaged in acquiring knowledge, thus challenging one's intelligence for constructive, meaningful learning. Therefore, the principles of constructivism are increasingly strategic and influence knowledge acquisition. Another belief and principle discussed by Hein is that language and interaction with people worldwide are intertwined; learners create meaning through activities and engagement with the world.

Twenty years later, McLeod (2019) presented the main principles of the constructivist approach using an innovative, progressive approach that ties in with recent worldly development, new theoretical perspectives and methodology. McLeod focused on constructing knowledge and mentions that learners actively engage with the world. The theorist referred to learning as a social and personal event, and that learning exists in the mind.

Hein (1991) stated that learning is an active process, especially using sensory input, and that people learn as they learn; learning is a mental process. McLeod (2019) posit that past and current experiences construct human learning, while Hein (1991) saw learning as a social activity where interaction with humans is through conversation, interaction, and application of knowledge. McLeod (2019) argued that all learning involves socially constructed knowledge sharing, such as guided learning within the zone of proximal development where knowledge is co-constructed between learners and their partners.

McLeod (2019) theorised that learning exists in the mind; through an individual's perception, a picture is developed mentally of the world, and this mental picture is updated each time with new information. In this manner, the individual can construct his or her interpretation of reality. Hein stated that besides being a hands-on experience, it engages the mind and maintains that individuals learn as they learn. In other words, the construction of meaning and systems of meanings are simultaneous. McLeod (2019) claimed that the construction of meaning took place using innovative methods such as experiments and real-world problem-solving.

The researcher indicated that the principles outlined by Hein and McLeod are crucial for effective teaching and learning in the classroom. The principles that emerged from the research conducted by these renowned theorists contributed to a change in focus from teacher-centred to learner-centred (Mtitu, 2021). This paradigm shift resulted in teachers moving from traditional teaching, authoritarian or teacher-centred, to facilitators. The entire learning process, including the scope of work and methodology, is structured and driven by strategies

that aim to teach with understanding. According to the constructivist approach, novice teachers start the learning process from the point of departure or focus and continuously learn as they learn (Gunatilaka & Withanage, 2022).

The constructivist approach sets the platform for novice teachers to acquire skills to assist learners in effectively constructing meaning from their learning material, with the scaffolding support of experienced teachers (Alrajeh, 2021). Thus, this study links the role of experienced teachers and learners in developing novice teachers. Consequently, the study is to determine novice teachers' challenges and identify strategies to assist them in effectively applying themselves in the classroom.

Ertmer and Newby (1993) stated that constructivist classrooms are based on the fundamental principle that knowledge is constructed. New knowledge is built on learners' previous knowledge, experiences, beliefs, and insights. Learners are motivated to present their points of view, relate to the content or explore new concepts during the process of learning (Gross, 2012). Furthermore, teachers scaffold learners while engaging them with the environment. Since learners' face challenges during the learning process, a platform for deeper thinking with constructivist principles primarily teaches learners how to learn with understanding and not just absorb information (Martin et al., 2019). Moreover, the role of novice teachers is to urge learners to be actively involved in the learning content and assist learners in assessing their understanding. Ultimately proposing that teachers and learners reflect and internalize the learning process.

3.5 CONSTRUCTIVIST THEORISTS

3.5.1 Introduction

Understanding the contribution made by the various theorists toward constructivism is crucial for meaningful learning to take place. Learning meaningfully or with understanding is the key to increased learner outcomes, teacher efficacy, and innovative thinking. Therefore, novice teachers use constructivist teaching strategies (Harikrishnan & Firdose, 2018) and create a constructive environment to assist learners in meaningfully acquiring knowledge (Gray, 1997). Although numerous constructivist theorists have made valuable contributions over the years, the contributions made by Piaget, Vygotsky, Dewey and Brunner are consequently discussed as they are invaluable to the field of education.

Jean Piaget contributed to the cognitive constructivism camp, which involves knowledge construction depending on individuals' interaction between ideas and experiences (Cherry, 2022). Lev Vygotsky's theory proposes that human development and learning occur through social and cultural interactions (Allman, 2018). Finally, John Dewey straddles the line between the two perspectives. The common area that united these psychologists under the umbrella of constructivism is that they all believe learning theories such as behaviourism and humanism inadequately represent the actual learning process. Their ideas are rooted in classroom experiences instead of experiments in a laboratory (Brau, 2018).

Dewey and Vygotsky emphasised that the role of cultural forms and meanings is attained through an individual's higher levels of thinking and understanding, whereas Piaget focused on logical reasoning (Mayer, 2008; Brau, 2018). The implication is that the novice teacher considers the information taught and constructs an interpretation based on past experiences, personal views, and cultural background.

3.5.2 Jean Piaget (1896-1980)

Constructivism is traceable to the work of Switzerland's famous psychologist, Jean Piaget, who had a tremendous influence on the emergence of educational psychology. He is acknowledged and given credit as the forerunner of modern constructivism. Piaget focused on how humans made meaning and the interaction between human experiences and ideas (Piaget, 1971; Jia, 2010). Likewise, Cherry (2022) stated that humans actively construct their world knowledge based on the interaction between their ideas and experiences.

Piaget was interested in epistemology, a branch of philosophy concerned with the origin of human knowledge, its nature, extent, and limits. In addition, Piaget was interested in thought, how it develops, and how genetics impact this process (Piaget & Duckworth, 1970). Finally, Piaget emerged with fundamental constructivist concepts. He theorised that learners become knowledgeable by thinking about their new experiences and comparing them to their old experiences (Drew, 2022).

Educationalists consistently recognize Piaget for his insight into incrementing the construction of children's knowledge. He emphasised active learner engagement and centred education around the learner rather than relying on direct teaching methods that render them passive. (Pardjono, 2016; Essays, 2018). Piaget's observation led him to conclude that children's

cognitive development followed a familiar pattern that was linear and cumulative. In other words, steps taken towards thinking and solving followed consecutively. This pattern culminated in four stages: sensorimotor, preoperational, concrete operational and formal operational (Piaget, 1964).

Piaget rejected traditional methods of learning. He posits that it is unrealistic to expect mutual communication between a teacher and learner in the traditional method where the teacher teaches, and the learner listens. Piaget was interested in the mental activity involving learning. In particular, he was interested in individual interaction with the world (Pardjono. 2016). According to Piaget, knowledge is not absorbed passively from the environment nor constructed by the learner through interaction between his mental structures and his environment (Labinovicz, 1980). Hence, building (through accommodation) and restructuring knowledge is intellectual development or learning (Pardjono, 2016). Pardjono (2016) cited that learning is constructing knowledge; teaching provides a stimulating environment with concrete materials and hands-on activities.

According to Piaget, four active learning principles can make a difference in the classroom (Pardjono, 2016). These principles are crucial, and the current study looks at acquiring strategies to assist novice teachers in the classroom. The novice teacher should take the following principles into cognizance when planning and preparing for smoothly executing classroom lessons:

- learners construct meaningful knowledge.
- learners learn best when they are active and interact with concrete material.
- learning should be learner-centred and individualized, and
- social interaction and cooperative work should play a significant role in the classroom (Pardjono, 2016).

This current study explored novice teachers' challenges in a school situation, and these challenges connect to learners. Incorporating the theories of Piaget into their teaching, especially the development process of learners, will increase learner achievement. By understanding the different stages of an individual's development, teachers can use strategies effectively to improve teaching and learning. Learners receive support at different levels of development, from the concrete to the intuitive stage. Teachers understand what learners are

thinking and align their strategies to promote the construction of knowledge. Therefore, the work of Jean Piaget is relevant to the study because it brings to the surface the principles of learning that contribute to making learning meaningful for both novice teachers and learners.

3.5.3 Levi Vygotsky (1869-1934)

The contribution made by Lev Vygotsky to the development of constructivism is immeasurable, especially with the impact his work made on education. Vygotsky believed that social interaction, culture and the environment play significant roles in constructing knowledge meaningful to the individual. Shah (2019) also agreed that social and cultural exchange shapes knowledge. Furthermore, Vygotsky argued that learning is not an internal process, nor does it passively shape an individual's behaviour. Instead, constructivism actively involves individuals in group work, discussions, presentations, and debates, contributing enormously to cognitive development and understanding of the learning material (Aljohani, 2017).

Vygotsky was also concerned with the mental and physical activities of learners. He viewed learners as active organizers of their experiences and emphasized their development in the social and cultural dimensions (Pardjono, 2016). The socio-cultural account of development contrasts Dewey's and Piaget's because they reject the focus attached to individual development (Blanck, 1990; Pardjono, 2016).

Vygotsky's most important contribution was acknowledging children as active agents in the educational process (Blanck, 1990). The key concepts from Vygotsky's theory are the zone of proximal development and scaffolding (Pardjono. 2016). The zone of proximal development refers to what a learner can do on his or her own and what they can achieve with guidance and support from a teacher or skilled peers. It represents the space where learners can stretch themselves beyond their current abilities with guidance, support, and feedback. It highlights the difference between a learner's current developmental level and their potential developmental level (Vygotsky & Cole, 1978). The concept of scaffolding comes from Vygotsky's theory and refers to the tutor's guidance and interaction support in the proximal development zone. Consequently, instructional methods based on Vygotsky's theories offer an alternative to the traditional way; they emphasize the need for social interaction and expert guidance within the zone of proximal development (Pardjono, 2016).

The role of the teacher in Vygotsky's framework is considered relevant because of concepts such as the zone of proximal development and scaffolding. Vygotsky showed that working with assimilation in their zone of proximal development, learners could perform more skilfully with others (teachers, adults) than by themselves. Teachers have a highly interactive role in a Vygotskian framework. The learner's development remains static unless they work in their zone of proximal development (Pardjono, 2016).

This study aims to identify strategies to help novice teachers cope in the first few years of their teaching career. These strategies emerged through constructive interaction with novice teachers and the environment. The framework of Vygotsky is relevant to the teaching of learners as well as the development of teachers. The current literature review also explored novice teachers' experiences and how community, culture and society, as theorized by Vygotsky, play significant roles in shaping them. Novice teachers face countless challenges because of their inexperience and lack of interaction with experienced or skilled teachers. Critical concepts such as the zone of proximal development and scaffolding could play an important role in the development of novice teachers. Experienced teachers and schools providing guidance and support to novice teachers until they can independently cope with all school issues can be advantageous.

3.5.4 John Dewey (1850-1952)

John Dewey was a popular figure in progressive education and an advocate of social learning (Slaughter, 2009). He believed that learning occurs socially and therefore identified the school as a social institution where social and moral development is promoted (Flinders & Thornton, 2013). In addition, Dewey looked at constructivism in a positive light as he saw it in building personal and social knowledge and, as a result, positively influenced education (Suhendi, 2018).

Dewey adopted the constructivist approach to teaching and learning. He strongly opposed the idea that education should focus on repetition and rote learning. Instead, he proposed that learners, in this case, novice teachers, become actively engaged in actual-world activities such as practical workshops and role-play. Dewey also supported the role played by an individual's prior knowledge, experiences, creativity and collaboration efforts in the learning process (Behling & Hart. 2008). He further maintained that teaching should evoke problem-solving and original thinking (Nozari & Siamian, 2014).

Besides Dewey having similar views to Piaget and Vygotsky's surrounding the negativity of rote memorization and repetitive lecturing, he also contributed further by stating that learners who engage in real-world activities could illustrate advanced knowledge levels through creativity and collaboration (Behling & Hart, 2008; Brau, 2018). This theory of Dewey's also applies to novice teachers' development in the school and classroom. Novice teachers in a practical situation experience the challenges, collaborate with experienced teachers and ponder solutions. One of Dewey's most famous quotes suggests that "If you have doubts about how learning happens, engage in sustained inquiry: study, ponder, consider alternative possibilities and arrive at your belief grounded in evidence" (Reece, 2013: 320).

Dewey, too, rejected the notion of traditional education. He criticized traditional education by exclaiming that learning was passive and receptive. Instead, he proposed active learning principles for progressive education, allowing learners to be dynamic in their learning. Dewey viewed the classroom as a miniature democratic society where the teacher exemplifies democratic principles, and the learners learn through experience (Pardjono, 2016).

This study used a constructivist approach to the strategic development of novice teachers. The researcher incorporated the philosophies of Dewey to harness novice teachers with strategies that will assist them in the early years of their careers. This study rebuts traditional methods to advance novice teachers' knowledge level; instead, novice teachers are influenced by constructively engaging themselves through reflection, problem-solving, collaboration, creativity and modelling in a school community. The idea is to provide novice teachers with instruments to help develop learners for a larger democratic society.

3.5.5 Jerome Bruner (1915-2016)

Jerome Bruner is one of the most outstanding psychology thinkers and a cognitive revolution leader. In the 1950s, he set out to replace behaviourism with his theory of cognitive development (the working of the mind). Bruner believed that the emphasis had shifted from constructing meaning to information processing. He felt that this metaphor of a computer had limitations and did not allow for the role of culture to shape human thoughts and use words to express them (Bruner, 1990).

Bruner based his theory on Vygotsky's constructivist principles because of the social nature of learning. He was mainly concerned with how knowledge is presented, organised and stored in

the memory. Hence, three modes of representation proposed by Bruner were enactive presentation (action-based), iconic presentation (image-based) and symbolic representation (language-based). Novice teachers faced challenges which centre around learners' understanding of novice material. The study unlocked learning processes or strategies for novice teachers to utilise or adapt in the classroom. Learning became effective when new material was presented and organised to learners progressively in these modes: enactive, iconic and symbolic (McLeod, 2019). Furthermore, Bruner propounded that language could make a difference in the quick understanding of learning material and assists individuals in dealing with abstract concepts (Aljohani, 2017).

Expanding upon Vygotsky's theory, Bruner and other educational psychologists led to the development of instructional scaffolding. The term instructional scaffolding is a critical component that facilitates learning (i.e., it is the guidance or support received from teachers, instructors or other knowledgeable persons that facilitate learners to achieve their goals) (Jumaat & Tasir, 2014). In a social environment, for example, schools offer support (or scaffolds) for learning that gradually withdraws as they become innate. The current study recognises novice teachers as receiving support (scaffold) from experienced school personnel. However, withdrawal of support once novice teachers can function independently is apparent (Seifert & Sutton, 2017).

Bruner (1966) stated that constructivists or theories of instruction should address four significant aspects:

- a predisposition towards learning,
- organizing information in a way that is easy for the learner to understand and absorb.
- the most compelling sequences in which to present material,
- and the provision of rewards and punishments.

According to Bruner, learning requires learners to be actively involved. Learners can construct new ideas or concepts based on their current or previous knowledge. The learner utilizes their cognitive structure to select information, construct hypotheses, and make decisions. Cognitive structures, such as schemas and mental models, organise experiences and allows for further understanding beyond given information (Aljohani, 2017; Wang, 2017).

As far as instruction is concerned, the instructor encourages learners to discover principles by themselves. First, the instructor and learner engage in an active dialogue. After that, the instructor adapts the information to the learner's level of comprehension. The curriculum, organised in a spiral manner, assists learners to build upon what they have already learned. Suitable methods for structuring knowledge include simplifying, generating new propositions, and manipulating information (Aljohani. 2017). In recent work, Bruner (1986; 1990; 1996) revised his theoretical framework to encompass learning and law practices in social and cultural aspects.

The study also mirrors Bruner's thoughts that learning is elevated and meaningful in a cultural context and looks at novice teachers' challenges and development, and communities and societies and not as a technological process. Bruner advocated that novice teachers are scaffolded and supported within a school community.

3.5.6 Summary

In conclusion, novice teachers training in constructivist learning will maximise their knowledge through action, reflection, and construction. They receive encouragement and are urged to consider the invaluable contributions made by theorists toward meaningful and critical learning (Brau, 2018). For example, Piaget and Vygotsky developed cognitive constructivism and social constructivism. Piaget propounded that knowledge acquisition occurs through continuous self-construction: actions and stages of assimilation, accommodation and equilibrium, while Vygotsky noted that social intersection such as sharing, comparing and debating, helps construct knowledge (Dagar & Yadav, 2016).

Piaget also focused on the interaction of experiences and ideas in creating knowledge in humans. At the same time, Vygotsky explored the importance of peer learning and the effect of culture on the accommodation and assimilation of knowledge. Dewey, in turn, emphasised inquiry and integrating real-world and classroom activities. Furthermore, the constructivist framework relies on learners to control their knowledge acquisition and encourages the instructor to be a facilitator (Brau, 2018). Finally, Bruner proposed that learners construct knowledge by organising and categorising information using a coding system.

The researcher seeks to incorporate the principles of Piaget, Vygotsky, Dewey and Bruner into the teaching strategies of novice teachers to increase learner performance. Novice teachers need

to consider Piaget's stages of development when designing lesson plans or building concepts. Therefore, becoming familiar with the theories of Piaget is crucial. Teachers ascertain learners' understanding of concepts at different stages and align their teaching strategies accordingly.

Vygotsky's theories are relevant to the study as it focuses on social interaction and active learning. At this juncture, the principles of Vygotsky are a prerequisite to planning activities to motivate learners as they explore the subject matter. John Dewey's theory is crucial as it improves learner experience in the classroom. The researcher found that learning emerges from learners' content, experiences, and practical life. The theories also support novice teachers in developing activities related to learners' prior experiences, their understanding of the content and focusing on individual learners.

Through Bruner's theory, novice teachers view learning as an active process. The focus is on the cognitive development of the learner. Novice teachers receive insight into the learner's cognitive development and the building of new concepts.

3.6 CONSTRUCTIVIST PEDAGOGY

According to Richardson (2003), constructivist pedagogy involves creating classroom environments, activities, and teaching methods that are based on the constructivist theory of learning. The primary objective is to facilitate learners in developing a profound comprehension of the subject matter while fostering beneficial thinking habits for future learning.

In this constructivist arena, the learners focus on understanding the content by connecting the learning material to previous information. Subsequently, the teacher's role is to provide learners with a conducive learning environment.

Whilst constructivism informs novice teachers on teaching and learning and how new information is acquired, constructivist pedagogy holds individuals responsible for the understanding subject content. Individuals construct their understanding after pondering, analysing and reflecting on the material. The teacher designs learning environments that facilitate and guide learners. Since the emphasis is on the active construction of knowledge, constructive pedagogy necessitates hands-on or experiential learning such as experiments, projects or solving real-world problems (Hobbiss, 2018). Constructive pedagogy directs novice

teachers to provide learners with the tools to acquire knowledge meaningfully. The novice teacher's role thus changes to a facilitator, co-learner, democratic leader, and diagnostician (Karpagam & Ananthasayanam, 2011).

The development of pedagogy has undergone significant changes since the birth of constructivism. Therefore, the focus is also on developing novice teachers and acquiring innovative activities and knowledge for increased performance of novice teachers (Shah, 2019). Apart from the mentor or experienced teacher acting as a facilitator of learning, they are involved in establishing a collaborative classroom atmosphere. In this arena, novice teachers become active participants in their meaningful learning. Moreover, the novice teacher effectively utilises scaffolding in a constructivist learning environment. Therefore, the mentor continuously adjusts the level of assistance according to novice teachers' level of performance and adaptation (Olusegun, 2015).

Constructivist pedagogy enables learners to structure, construct, interpret and develop their knowledge (ÖNen et al., 2018). They develop new knowledge by drawing on their experiences, discussing solutions, and finding possible answers from the environment. To enhance knowledge, different questioning techniques aid individuals in understanding new knowledge instead of merely transmitting the information (Vermette & Foote, 2001).

Learners connect their learning material to their environment and the world and contribute positively to understanding the learning material. Pedagogy supports strategies and techniques to make learning meaningful to the individual (Teppo et al., 2021). The primary method is discovery learning in this arena, where learners are encouraged to solve problems independently. Thus, learners can acquire knowledge, attitudes, and behavioural attributes to face society in transition (Karpagam & Ananthasayanam, 2011).

The main characteristics a learner needs to have to construct learning are as follows:

- Construction: Learners are equipped with skills to construct meanings. Assimilating previous and new knowledge for learning by understanding to take place (Siegel, 2004; Bishaw & Egiziabher, 2013; Shah, 2019).
- Active engagement: Learners are active in learning (Siegel, 2004; Mugambi, 2018).

- Reflective: Learners reflect and reassess what they have experienced (Siegel, 2004).
- Collaboration: Through discussion with peers, individuals can construct the meaning of new information (Siegel, 2004; Mugambi, 2018).

Piaget and Vygotsky have greatly influenced the approach to learning and teaching methods, encouraging teachers and learners to play a pivotal role in facilitating and generating knowledge (Aljohani, 2017; Erbil, 2020). Teachers and learners work together, becoming a team, in disseminating the learning material. Since knowledge is subjective, concepts are constructed by the learner through his or her own experiences, while constructivist teachers use constructivist approaches to develop critical thinking and promote learners' creativity and problem-solving abilities (Singh & Yaduvanshi, 2015; Misra, 2019).

In this study, the novice teacher plays a pivotal role in the learning experience. In other words, the research assists in constructing knowledge and provides novice teachers with the platform to interact, contribute and make sense of their experiences in the school situation. Moreover, learning becomes a collaborative process for the novice teacher, who progresses as he or she interacts with cultures and society. As a result, an effective teacher impacts learners positively; their understanding of the learning material increases, creating new ideas for themselves. The following section compares the constructivist approach and conventional approaches to teaching.

3.7 CONSTRUCTIVISM VS CONVENTIONAL APPROACHES TO EDUCATION

The influence of the constructivist approach is enormous; it amplifies teaching and learning to increase learner performance, teacher efficacy, and whole-school performance. This approach directs teachers and learners to prepare themselves adequately to meet the challenges of increased global standards. The primary focus is on the learner in the classroom. Moreover, the novice teacher's task is to manage the teaching situation and the learning material effectively.

In the constructivist approach, learning is an internal process to the individual where the individual is the active creator and assimilator of his or her knowledge. The focus is on understanding and connecting the learning material with the knowledge (ÖNen et al., 2018). In traditional teaching, individuals process learning as they view it (Glasersfeld, 1995). This

study explored novice teacher challenges and benefits of constructivist principles to help create essential tools for learners so that they may adapt to global changes.

A constructivist classroom is learner-centred; learners are actively involved and not just recipients of the information. Learners accumulate information best when actively engaged in learning experiences (Khalid & Azeem, 2012). The teacher facilitates these processes and acts as a guide for learning to be direct and learner-centred in the constructivist classroom. In the traditional classroom, learners are passive learners, and the teacher manages and controls the learning material (Russell, 2021).

The teacher's role in a constructivist classroom is interactive and rooted in negotiation. The teacher is in constant dialogue with learners while they utilise active techniques such as experiments and real-world problem-solving to construct knowledge. In contrast, in the traditional classroom, the teacher is seen as a dictator and, in a directive position as the primary source of information (Bishaw & Egiziabher, 2013). In this arena, the emphasis is on content, textbooks, tests and examinations and not on innovative resources and strategies (Skosana & Monyai, 2013).

The teacher facilitates the learning material in the constructivist classroom, assisting learners in acquiring knowledge, while teachers undertake disseminating knowledge in the traditional classroom (Thomas & Brown, 2011). The constructivist teacher enriches the learning process through problem-solving and inquiry-based activities. In addition, learners pool and share their knowledge in a collaborative learning environment, bringing different background knowledge, experience and interests to the learning situation (Aljohani, 2017; Shah, 2019).

The role of learners in the traditional classroom and constructivist classroom differs. In a conventional classroom, learners are passive recipients of the information, work alone and are isolated from all social interaction. In contrast, the constructivist classroom actively engages learners, exchanging ideas and information and using sensory input to construct meaning (Bishaw & Egiziabher, 2013).

Constructivist learning specifies a learner-centred curriculum, works with primary concepts and focuses on the entire topic or content. It also includes pursuing learners' questions and answers, using the primary source of material, and manipulating material (Thomas & Brown,

2011). Assessments include learners' work, observations and points of view, tests, oral discussions, mind mapping, hands-on activities and pre-testing (Mugambi, 2018). Moreover, knowledge is dynamic; it changes with learners' experiences (Thomas & Brown, 2011). In other words, the experience through interaction with peers, family members, acquaintances, and people in other contexts continuously adds to the knowledge gained (Bishaw & Egiziabher, 2013). Thus, the projection of learning as a social activity is embedded within a social context, teaming learners and teachers to make learning meaningful (Vygotsky, 1978). Another advantage of constructivism is practical teaching methods for learners who learn better in a hands-on environment (Robert, 2013).

However, the disadvantage is that training for constructivism is extensive and often requires long-term professional development—the lack of training results in weakened learner outcomes and ineffective learning. Aljobani (2017) posit that the constructivist approach is not a panacea for instructional problems. On the contrary, it has its limitations and problems for learning situations that may mitigate against applying constructivist principles. However, there are benefits to the approach. Novice teachers can benefit by becoming innovative and motivated teachers. In addition, the constructivist approach prepares novices to work with diverse learners in a technological era. The following section discusses the relevance of a constructivist approach to novice teacher education in South Africa.

3.8 SIGNIFICANCE OF THE CONSTRUCTIVIST APPROACH FOR EFFECTIVE NOVICE TEACHERS

The post-apartheid era requires high expectations from novice teachers. Novice teachers, though unprepared, must equip learners for a new technological era and society. Novice teachers have to familiarise themselves with the different approaches to prepare learners to meet the demands of society (Vaishali & Misra, 2020).

According to Misra (2019) and Vaishali and Misra (2020), the constructivist approach is most suitable for engaging learners in the teaching and the learning demands of the 21st century. The approach is significant because, if correctly implemented, it will encourage learners to become active participants in the learning process. Furthermore, this engagement induces learners to foster critical thinking, creativity and problem-solving skills.

A study by Dagar and Yadav (2016) revealed exciting data on knowledge acquisition through continuous self-construction stages of assimilation, accommodation and equilibrium. Constructive understanding of the world via assimilation (adapting new information to existing knowledge) and accommodation (altering existing ideas) significantly impacted the learners.

Hussain (2012) conducted a study exploring the significance of the constructivist approach at the secondary school level. Data from the study revealed that the constructivist approach played a significant role in the construction of knowledge. Learners could contribute to discussions and complete tasks through collaboration and cooperative work and independently take on initiatives when conducting research projects. They also learnt ethics, social skills and etiquette in a group. Furthermore, the comprehensive group activities empowered the learners by loosening their dependency on teachers and making decisions.

Another study (Adak, 2017) conducted in the West Bengal province of India revealed that learners exposed to the constructivist model achieved significantly better results than those exposed to the traditional method. In addition, the constructivist approach improved learners' mastery of content at an elevated level. Moreover, through engagement, learners positively built their knowledge and allowed for active participation and social interaction with peers and teachers in the classroom domain.

The constructivist approach provided better opportunities for learners with learning barriers to acquire knowledge and comprehend what they are learning. They developed the ability to analyse, think divergently, interpret, think critically, and develop a scientific attitude toward science education. According to Adak (2017), the constructivist approach to learning contributed significantly to learners' academic achievement. Moreover, it was an effective learning tool crucial in developing learners.

The study explored the significance of the constructivist approach for developing novice teachers. The new approach directly influences learners to engage actively in mastering new information. Learners and novice teachers are offered several opportunities in the school situation. The following section explains the role of a constructivist teacher.

3.9 THE ROLE OF A CONSTRUCTIVIST TEACHER

Teachers are considered one of the main pillars of a changing society and transmit knowledge, behaviours, attitudes and values. The teacher's task is to socialise learners into becoming active, self-reliant, resourceful, and peace-oriented in society (Karpagam & Ananthasayanam, 2011).

Traditionally, learning was a mimic activity where learners repeated or mimed newly presented information (Jackson, 1986). However, the emerging constructivist teaching practices require learners to internalise and transform new knowledge. Therefore, teachers adopt a catalytic role, plan learning opportunities more meaningfully and imaginatively, present content differently, and coordinate individual and group learning. In addition, teachers create an environment where learners' construction of knowledge is maximised through multiple communication channels, such as giving their points of view and debates (Karpagam & Ananthasayanam, 2011).

The underlying principle of constructivist learning is that novice teachers construct meaning and understanding through experiences. They gain experiences by exploring the relationships between content knowledge and instruction. Therefore, teachers can provide instant support, scaffolding learners' comprehension abilities and insights into the content. In addition, teachers can engage learners in instructional conversation by providing them with opportunities to explore the relationships between content knowledge and pedagogy (Kinnucan-Welsch, 2007).

Teachers need skills and qualifications to assist learners in structuring, interpreting and developing topics and ideas. Therefore, teachers must take on different identities daily in the classroom (ÖNen et al., 2018). To produce receptive and constantly learning teachers is one of the objectives. They should respond to learners' needs and learning, and understand them socially, culturally, and politically. Constructivists view learning as constructed in the shared context of teaching, learning and personal experience. The role of teachers is to instil the values of equality, justice, freedom, secularism, respect for human dignity and rights, and concern for others' well-being based on reasoning and understanding (Karpagam & Ananthasayanam, 2011).

It is essential to understand how teachers can apply constructivism inside their classrooms- the need to create a unique learning environment for learners. The teacher has a role in creating a collaborative environment where learners are actively involved in learning with understanding.

Teachers are more the facilitators of learning than actual instructors (Alzahrani & Woollard, 2013; Bansal, 2018). Therefore, teachers must work hard to understand learners' pre-existing conceptions and understanding (Kurt, 2021). Then, adjust teaching levels to match the learner's level of understanding (OECD, 2008; Bogdanovich, 2014).

The constructivist framework operates on the premise that teachers engage the learner more and spend more time preparing activities. The teacher also allows time for reflection. Effectively using time can prove a problem of constructivism, fortunately, solved through thoughtful implementation (Brau, 2018). Kurt (2021) added that teachers who understand the constructivist learning theory also understand their learner's critical areas. Therefore, for the constructivist classroom to be successful, there must be equal authority and responsibility between the learners and the instructor; learning takes place in a small group, which is more learner-centred and there is sharing of knowledge through dialogue and negotiation between learners and teacher.

Moreover, when creating suitable learning environments, teachers use suitable equipment and materials, apply effective learning and teaching methods, and implement suitable measurement and evaluation tools. In addition, every stage of learning is embedded in constructivism to achieve the targeted outcomes. Finally, for the practical application of resources, there is a need to provide technological infrastructure and appropriate equipment and materials for learning to be successful (Altun & Yücel-Toy, 2015).

Van Laar et al. (2017) posit that 21st-century digital skills are the key to successful constructivist learning. The skills that contribute to the teacher and learning process are:

- technical skills to utilise devices and applications to perform practical tasks.
- management skills to efficiently search, select, and organise information to make informed decisions.
- communication skills to transmit information.
- collaboration skills to develop a social network and work towards a common goal.
- creativity skills to generate new ideas or re-examine critical thinking skills and.
- problem-solving skills to cognitively process and understand a problem.

Conclusively, learners become self-motivated and grasp the curriculum with understanding. In addition, the constructivist approach enables novice teachers to take responsibility and grow into effective facilitators (Booyse & Chetty, 2016). Thus, the study explored the function of constructivist teachers and the training towards producing effective novice teachers to engage learners in meaningful learning. Strategies are expounded in this study to assist novice teachers with the mammoth task of organising conducive learning environments and presenting content-related tasks in the different stages of learner development for meaningful learning. The following section outlines the challenges of using constructivist approaches in classroom situations.

3.10 CHALLENGES RELATED TO THE USE OF CONSTRUCTIVIST APPROACH IN ACTUAL CLASSROOM SITUATIONS

Globally, several challenges were faced while implementing social constructivist approaches in schools. Some of the identified challenges were the environment, a shortage of public infrastructure, a lack of care and resources, insufficient well-designed teaching guidelines, a lack of clear instructions, the inadequacy of classroom teachers' autonomy, and a lack of freedom to teach (Muhammad, 2021).

A recent study in Iraq by Muhammad (2021), a researcher from the University of Salahaddin, explored social science teachers' challenges. The study explored the experiences and practices of eight teachers in intermediate secondary schools. Specific challenges prevented the successful implementation of the constructivist approach. One of the challenges was the lack of cooperation and collaboration between the school personnel. In addition, the Ministry of Education was inconsistent and lacked specific goals and directorship to incorporate the constructivist approach. Consequently, teachers found understanding the constructivist goals and the integration approach challenging.

In another study undertaken in Kenya by Mwanda and Midigo (2019) among biology learners and teachers, the effectiveness of the constructivist method of instruction and its challenges facing implementation were explored. The study established that the constructivist method of instruction was more effective in learning biology than conventional methods. The participants in the constructivist group collaboratively engaged in the tasks. Thus, what was observed was that critique activities such as discussions, presentations, elaborations, activities enhanced the understanding and memory of participants in the constructivist group.

Moreover, the findings of the study revealed that the constructivist instructional approach brought about a positive influence on learners' achievement in biology. In certain schools, the application of constructivism was unsuccessful because of inadequate facilities and negative teacher attitudes. The study recommended introducing deliberate programs to implement the constructivist learning approach in secondary schools in Kenya (Mwanda & Midigo, 2019).

Dagnovice's (2017) research in Dangila District Second Cycle Primary Schools in Ethiopia revealed that significant challenges hindered the effective implementation of constructivist teaching. These schools faced a lack of dedication from teachers, large class sizes, limited allocated time to carry out active learning in greater depth, teachers' lack of skills and knowledge to utilise constructivist teaching strategies and a scarcity of learning materials. Another significant challenge of constructivist learning is its lack of structure, as some learners need highly structured and organised learning environments to thrive. Furthermore, with many learners in a classroom, teachers were anxious to customise the curriculum for each learner, as their prior knowledge varied. Also, the study revealed that constructivist learning in these schools focused on a more laid-back method to help learners engage in their learning. The lack of grading and importance regarding learner progress in constructivist classrooms decreased learner outcomes. As a result, learners were not able to meet standardised grading requirements. In addition, school programs were devoid of grade-centred goals, rewards, and learners' competitiveness at a national level (Robert, 2013).

In seeking to explore the challenges while implementing the constructivist approach, addressing novice teachers' challenges is also crucial. Hence, this study will identify strategies to help novice teachers in constructivist classrooms and school situations. Equipping novice teachers with the relevant tools or instruments during pre-service training or teacher training will assist them when faced with issues. Although the advantage of shifting from traditional teaching to a constructivist approach is exorbitant, this research delves into strategies to increase learner achievement.

3.11 CONSTRUCTIVISM AS PART OF TEACHER TRAINING PROGRAMMES

Applying constructivist principles to instructional teaching is integral to teacher training programmes locally (Dlamini, 2017). These constructivist principles intend to transform teachers from passively accepting information to actively engaging in problem-solving and

inquiry-based activities (Shah, 2019). In this way, novice teachers build their skills to handle changing times.

A study by Mercer (2020), conducted in the United States of America on schools situated along the Mississippi Gulf Coast, explored the training received by teachers in constructivist principles. Data revealed that 81% of the teachers received training on Socratic questioning, 75% on reflection, 77% on project-based learning practices that provide learners with hands-on instruction and 78% of the teachers on formative assessment. This hands-on instruction and reflection allowed learners to develop critical skills, take ownership of their learning, and draw conclusions.

A study by ÖNen et al. (2018), conducted in Turkey, explored the attitude of teachers towards the constructivist approach. It became clear that the approach made a remarkable difference in secondary education in Turkey since 2004. Although teachers did not receive training to use the new teaching approach or adapt themselves, the study concluded that teachers generally had developed positive attitudes towards the constructivist approach about aspects such as observation, hypothesis development, testing, data collection, and data interpretation. Furthermore, learners developed critical thinking skills when teachers adopted the constructivist approach to the learning processes.

Altun and Yücel-Toy (2015) reported that the constructivist approach contributes to novice teachers' cognitive, academic and affective development. Their study explored the implementation of the constructivist principles in the courses offered by the teacher training at a state university in Turkey. The study involved secondary school science teachers from the biology, physics and chemistry departments. The study's outcome indicated that factors such as lack of equipment in classrooms, large classes, academic inabilities of learners and the centralised examination system hampered the implementation of the constructive approach in schools. Novice teachers experience several challenges with implementing constructivist principles. However, novice teachers benefit significantly from constructivist strategies.

In conjunction with strategies identified in this research, pre-service training and teacher induction are mandatory for developing novice teachers. The intensive activity in the constructivism approach and application of the principles counteract the challenges of novice

teachers. The study analyses novice teachers' training to provide the relevant tools to enhance the cognitive development of the learner.

3.12 THE RELEVANCE OF THE CONSTRUCTIVIST APPROACH FOR NOVICE TEACHER EDUCATION IN SOUTH AFRICA

During the Apartheid era in South Africa, teaching in schools focused more on rote learning and operated within an authoritarian educational structure (Booyse & Chetty, 2016). However, the post-apartheid period underwent a severe transformation for this domineering form of the education system to be eradicated (Skosana & Monyai, 2013). As a result, the education sector abandoned traditional approaches to teaching and learning and embraced recently researched approaches to accomplish new goals (Letseka, 2014).

Also, the education system underwent several changes to find the best possible system to suit a rainbow nation. Teacher training, teacher orientation, teacher induction and implementing the new curriculum were some aspects under severe scrutiny. Dilek and Nilufer (2013) stated that teacher training institutions face several challenges when preparing novice teachers to cope with diverse classrooms, design programmes, and produce quality teaching (Skosana & Monyai, 2013).

Skosana and Monyai (2013) indicated that the Constitution of South Africa (RSA, 1996a), the South African Schools Act (SASA) of 1996 (RSA, 1996b) and the National Education Policy Act (NEPA) 27 of 1996 (RSA, 1996c) all enclosed constructivist principles. Accordingly, they proposed transforming the curriculum and other sectors of the education system so that South Africans could participate competitively with the world (Skosana & Monyai, 2013). The implementation of Outcomes-based Education (DoE, 2002), the National Curriculum Statement, the Curriculum Assessment Policy Statement (DoE, 2011) and the Revised Curriculum Statements (DoE, 1997) followed as a result—all these initiatives aimed to counteract poor learner achievement, inadequate teaching practices and systems.

The transformation process in South Africa included the implementation of constructivist principles in all education training documents and policies. The theory of constructivism focuses on the teaching and learning environment. Apart from the environment, teaching, learning and assessments within a constructivist approach helped learners to construct new

information (Booyse & Chetty, 2016). On this platform, learners are encouraged to participate and be responsible for their learning (Skosana & Monyai, 2013).

Teacher education accommodated political, social, economic and political changes (Venter & Swanepoel, 2008). As a result, schools adopted the constructivist approach to counteract outdated teacher-centred approaches and make learning more meaningful (Schweinfurt, 2013). Th study reflects on novice teachers in the post-apartheid period, elaborating on the impact of education systems and programs on novice teachers' performance in the classroom. Implementing the constructivist approach as a direct approach to enhance teacher delivery for a change in learner outcome is the focus. The following section discusses the relevance of a constructivist approach to effective novice teacher education in South Africa.

3.13 SUMMARY

According to the theoretical framework expanded in this chapter, constructivism is an approach that could make a difference for novice teachers regarding teacher efficacy and learner outcomes. Furthermore, implementing the constructivist principles extricates activities that support teaching and learning outcomes.

In this chapter, the researcher focused on implementing the constructivist approach in a country that faces challenges and changes. The focus is on the novice teacher and the strategies for effective teaching in South Africa. The researcher discusses the post-apartheid era and the shift toward a constructivist approach for a more effective teaching fraternity. The problem identified in the process is that linking theory to practical classroom teaching is challenging.

Against this backdrop, the researcher implements the constructivist approach as a solution to the hurdles in the education sector. First, the researcher examined and clarified the concept, discussed the origins and outlined the principles of constructivism. Secondly, the researcher compared Hein's (1991) and McLeod's (2019) theories.

In continuation, this chapter then explored the work of famous theorists such as Jean Piaget, Levi Vygotsky, John Dewey and John Bruner. The researcher explained how the principles fit into the development of learners and teachers—moreover, the advantages of constructivist pedagogy for increasing learner performance and teacher efficacy.

The constructivist approach's ability to enable novice teachers to transform society is significant. Hence, the role of the novice teacher in a constructivist society is emphasised. In addition, the chapter also referred to the implementation of the constructivist approach and its impact on schools. Finally, challenges that affect novice teachers' performance emerged in this chapter.

Chapter 4 will focus on the research design and methodology for the study.

CHAPTER 4

RESEARCH METHODOLOGY

4.1 INTRODUCTION

The previous two chapters discussed the study's literature and theoretical components for the study. The chapter examined and brought to light previous findings about novice teachers' difficulties. The researcher explored strategies for assisting novice teachers in becoming effective primary school teachers. At the same time, the study supported constructivism as a theoretical framework for developing prospective teachers. The primary focus was on prospective teachers' transition from pre-service to in-service education and their experiences and strategies.

In this chapter, the research methodology used for this study will be presented and discussed. It addresses issues such as the selected paradigm, the research approach and design, participant selection, research methods, data collection techniques and data presentation. Furthermore, data analysis, ethical considerations, and trustworthiness are explained, focusing on validity, reliability, and study limitations.

4.2 THE RESEARCH QUESTIONS AND OBJECTIVES

The purpose of this research is to explore the phenomenon of novice teachers. Furthermore, this study addresses the issue of insufficient teacher training in KwaZulu-Natal primary schools. The following was addressed as the main research question: What strategies can be developed and implemented to assist and develop novice teachers to become effective teachers in primary schools in KwaZulu-Natal's King Cetshwayo District? This primary research question can now be subdivided into the following sub-questions that will guide the study:

- What are the significant challenges and problems facing novice teachers in the initial years of teaching in primary schools in KwaZulu-Natal?
- What are the roles and responsibilities of mentors, the School Management Team and other stakeholders in developing novice teachers in primary schools in KwaZulu-Natal?

- Which strategies, if any, are currently offered to novice teachers to overcome their problems and be more effective in these schools?
- Which strategies, in the model, can be introduced for the more effective induction of novice teachers in primary schools in the King Cetshwayo District of KwaZulu-Natal?

The research problem and objectives are the foundation for the research questions. The objectives derived from the research question are to:

- identify the significant challenges and problems facing novice teachers in the initial years of teaching in primary schools in KwaZulu-Natal.
- establish the roles and responsibilities of mentors, the School Management Team and other stakeholders in the development of novice teachers in primary schools in KwaZulu-Natal, and
- determine which strategies, if any, are currently offered to novice teachers to overcome their problems and be more effective in these schools.
- develop strategies as a model to introduce more effective induction of novice teachers in primary schools in the King Cetshwayo District of KwaZulu-Natal.

4.3 THE RESEARCH PROCESS

4.3.1 Introduction

The framework for the study is the research process, which comprises a series of steps or phases. Through the research process, the researcher explored the research problem that novice teachers are facing systematically. The phases are planning, empirical or data collection, interpreting, and presenting results. The steps are as follows: define the research problem by formulating research questions and objectives, determine the research design, choose a research method, choose a sampling procedure, generate data, analyse and interpret the data, and prepare the research report. These steps assist the researcher in comprehending the research problem and seeking solutions to the research problem.

4.3.2 Research design

The researcher selected qualitative research for the study as it enables a more exploratory approach to gain deeper insights into real-world problems (Korstjens & Moser, 2018). Qualitative research is a formal inquiry that focuses on people, their circumstances, and the

relationships that shape their thinking and behaviour (Williams, 2019). Therefore, the phenomenological research design was the most suitable for qualitative interpretive research. This design allowed the study to determine whether the research problem was exploratory, descriptive, or explanatory (Grover, 2015). The phenomenological approach explored the phenomenon from the participant's perspective, allowing them to express themselves without altering any aspect of their experience. This allowed the researcher to understand the participants' lived experiences and the meaning they attach to the phenomenon (Alase, 2017). The researcher adopted a descriptive approach to investigate the challenges faced by inexperienced teachers and to identify evidence-based solutions to these challenges. The participants shared their experiences, and the researcher collected data using appropriate research techniques. The collected information was considered soft as it contained rich descriptions of people, locations, and conversations (Bogdan & Biklen, 1998). Selecting the right research strategy and relevant methods had a positive impact on data collection (Grover, 2015).

The phenomenological research design is an appropriate framework for studying novice teachers (Sileyew, 2019). The researcher's blueprint includes participant selection, data collection, and research sites. (Akhtar, 2016). The well-planned design enabled the researcher to gather in-depth information on strategies to overcome novice teachers' challenges—the process aimed to gather information from selected participants. As a result, the study's research design was a planned set of conditions for data collection and analysis (Kidder & Selltiz, 1981). The processes of data collection, data analysis, the research purpose and recommendations, which are critical components of the research design, all influenced the quality of the study.

The research design provided content for this study, thus encompassing a wide range of subjective yet topical information. Interviews, observations and questionnaires are data collection methods used in qualitative designs (Asenahabi, 2019). Individual interviews are the primary data collection method for the study of novice teachers. The data collection method was appropriately selected to capture and interpret human actions. Information on the phenomena, novice teachers' experiences, attitudes and behaviour were captured. Participants could explain how, why or what they were thinking, feeling and experiencing at a particular time or during an event of interest; in this case, novice teachers in the initial years of their career (Tenny et al., 2017).

The research design allowed for collecting rich data from individuals rather than measurable, quantifiable or generalisable data. Thus, the main reason for using a qualitative research design is that the components work together to answer specific research questions comprehensively. The researcher explored the nature of the phenomenon, and the data generated was interpreted, bringing to light the challenges and support for prospective teachers in different situations (Karakose, Yirci & Kocabas, 2014). In addition, the researcher played an essential role in developing a research design that provided insight, clarity and guidance into the research processes. In summary, a research design is a plan, structure and strategy for answering the research question.

The research design developed into a method of interpretation and analysis (Alase, 2017). The participants shared their experiences, and the researcher collected data using appropriate research techniques. The collected information was considered soft as it contained rich descriptions of people, locations, and conversations (Bogdan & Biklen, 1998). Selecting the right research strategy and relevant methods had a positive impact on data collection (Grover, 2015).

4.3.3 The research paradigm

Most research studies consist of theory and practice. This chapter's main components are the research paradigm, approach, and design. They explored the researcher's understanding of reality (ontology), the relationship that exists between the researcher and the subject (epistemology), and the methods for obtaining knowledge (methodology) (Rehman & Alharthi, 2016). Before answering the study's questions and gaining new knowledge, the researcher used these components to understand the situation of prospective teachers. According to Kivunje and Kuvini (2017), a research paradigm is the lens through which a researcher views the world and determines the challenges faced by novice teachers. The chosen paradigm guided the investigation to solve problems and answer the research questions. The researcher chose the interpretive approach as the best belief system to support this study on novice teachers.

The interpretivism paradigm encourages exploration by providing numerous opportunities for the researcher to explore a specific phenomenon or problem (Kaushik & Walsh, 2019; Ugwu, 2021). Furthermore, the direct application of philosophical assumptions and theories within an interpretive paradigm influences the research on novice teachers. Thus, the researcher explored the phenomenon using the interpretive paradigm.

Using the interpretive research paradigm, the researcher conducted a systematic study of the social phenomenon of novice teachers. An interpretive research paradigm was used to frame the meanings and interpretations of novice teachers in their natural environment (Teherani et al., 2015; Aspers & Corte, 2019). The researcher sought to derive meaning from novice teachers' experiences and thus developed an understanding of their challenges during their initial teaching years. It included language, symbols, and text to interpret and transform this social phenomenon into actions and interactions (Putnam & Banghart, 2017).

According to the interpreter, there are no precise, systematic, or theoretical solutions to complex human problems. It is impossible to generalise findings from one study to the next because human behaviour changes due to situational and environmental factors. The interpretivism research paradigm establishes how people perceive a problem, promoting a better understanding of individuals in a social situation (Nel et al., 2018). This study focused on novice teachers' social interactions and developmental stages during their first years of teaching.

The interpretive research paradigm is notable due to the philosophical assumptions of epistemologies, ontologies, and research methodologies (Dash, 2019).

4.3.3.1 Ontology

Ontology explores the nature of reality and the study of being (Crotty, 2003; Creswell & Poth, 2018). Our investigation concerns the world, existence, and reality itself. To lay a solid foundation for shared meaning and conceptual validity, the researcher states and binds the ontology of the research problem (Berman & Smyth, 2015). Ontology is more concerned with beliefs about reality than with sources of knowledge. The goal of ontology in research is to develop various theories and better understand the world (Guragain, 2020). The researcher sought answers through research questions and thus situated knowledge in its philosophical domain (Alharahsheh & Pius, 2020). Ontological beliefs, including topic selection, question formulation, method selection, sampling, and research design, influence all aspects of the research process (Hesse-Biber & Leavy, 2010).

The interpretive and constructivist ontologies underpin qualitative research. For example, in the study of novice teachers' lived experiences, constructivist ontology considers multiple dashes of realism to exist, which are socially constructed, holistic, valid, and shaped by context (Yilmaz, 2013; Creswell & Poth, 2018). The researcher is interested in observing and conducting scientific studies on how novice teachers learn and construct knowledge to make sense of their experiences. As a result, participants' focus is on knowledge construction rather than knowledge transfer; reality is context-bound (Slevitch, 2011; Guragain, 2020).

Understanding how researchers make sense of the data they generate requires understanding ontology. The researcher employs an ontology, fundamentally a social world of meanings (Ahmed, 2008). The researcher explored novice teachers with their ideas, interpretations, and meanings. The use of interpretive design research methods and techniques manifests in the researchers' investigation into novice teachers. The study's primary methodology includes interviews focusing on novice teachers' opinions, feelings, experiences, and inner thoughts (Ahmed, 2008). This technique is appropriate because the study aims to shed light on the difficulties that novice teachers face in this situation. (Andrew, 2016).

Reality is perceived differently by different individuals, and there is no single objective reality that exists. This perspective, known as relative ontology, suggests that reality is constructed within the human mind and is based on one's personal experiences and perceptions of the world (Moon & Blackman, 2014).

4.3.3.2 Epistemology

Epistemology is a philosophical branch that studies the nature of knowledge and the processes involved in acquiring and validating knowledge (Dash, 2019). This component concerned the characteristics, description, and nature of knowledge, methods of discerning truth and reality, and acquiring knowledge and experience (Kivunja & Kuyini, 2017). Giacomini (2010) defined epistemology as a theory of knowledge that addresses how phenomena are known and how constructed knowledge emerges. Therefore, considering how the researcher acquires knowledge about the phenomena of interest and whether the knowledge acquired is authentic is critical (Žukauskas, Vveinhardt & Andriukaitienė, 2018). Hence, the interpretive approach promotes group interaction for the continuous construction of the social world. Furthermore, it facilitates an understanding of social reality through the perspectives of critical participants using an inductive approach in this study (Rehman & Alharthi, 2016).

According to Hesse-Biber and Leavy (2010), the third component is the methodology, which focuses on how knowledge construction evolves. The methodology of this study employed an

interpretive approach to explore the experiences of novice teachers. The research did not rely on numbers or statistics for data. Instead, the interpretive paradigm explored novice teachers' experiences, understandings, and perceptions (Thanh & Thanh, 2015). The research methodology included the research strategy, methods, sampling, sample size, data collection, analysis techniques, and reported findings (Taherdoost, 2016; Alharahsheh & Pius, 2020; Allan, 2020). The methodology is the philosophical framework that guided the research and served as the study's foundation (Brown, 2006).

The researcher describes the research approach adopted for this study.

4.4 POPULATION AND SAMPLE OF THE STUDY

According to Hassan (2018), a population is a sizable group of individuals or objects that are the subject of any inquiry. Therefore, identifying the target population is crucial in any study (Mhlaba, 2019). In other words, the people who will benefit from the study and who can provide relevant information to answer the research question. This study's target population or sampling frame is novice teachers from 452 primary schools in the Cetshwayo District in Kwa Zulu. The King Cetshwayo District was the ideal location for the study as it was the least time-consuming, least expensive, and most convenient option for the researcher.

When all population members cannot participate in a study, the researcher selects samples to represent the target population (Stratton, 2021). Selecting samples from a large group of individuals or populations for a specific research purpose is called sampling (Bhardwaj, 2019). Through sampling, the researcher generated the data for this study (Sheppard, 2020). The act, process, or technique of selecting a representative portion of a population to determine a parameter or characteristic of the population is called sampling, according to the Merriam-Webster dictionary. (Merriam-Webster, n. d). Thus, sampling is an essential tool in research, especially when the large population is the most critical factor in a study (Bhardwaj, 2019). However, sampling is dependent on funding and resources, and therefore, it is only possible to sufficiently identify and sample some population members (Sheppard, 2020). Therefore, the research purpose, time frame, and resources determine the sample size (Palys & Atchison, 2014). For this reason, the researcher conducted strategic sampling.

A sampling technique was required to assist in the selection of participants. There are two types of sampling methods: probability and non-probability sampling. In probability sampling, the

members have an equal chance of being selected, making the population homogeneous (Bhardwaj, 2019). Probability sampling includes simple random sampling, stratified random sampling, cluster sampling, systematic sampling and multistage sampling (Stratton, 2021). Qualitative research often uses non-probability sampling methods, such as quota, snowball, purposive/judgmental, and convenience sampling. The intention is not to create a statistically representative sample or to draw statistical inferences but to obtain relevant detailed data (Taherdoost, 2016; Stratton, 2021). Research on novice teachers relied on the technique of non-probability sampling. Specifically, purposive sampling is the most appropriate technique to obtain comprehensive data. Qualitative samples provided rich and detailed information contributing to the phenomenon under study.

The researcher opted for purposive sampling for the study on novice teachers. According to Maxwell (1996), a purposive sampling technique is a strategy in which certain attitudes, people or events are intentionally selected to obtain in-depth and rich information. The researcher included specific individuals in the sample because they warranted inclusion; they provided the most information. In addition, purposive sampling was cost-effective, convenient, less time-consuming and ideal for a phenomenological research design (Taherdoost, 2016). The sample group for this study emerged from five primary schools. These five schools were purposefully chosen based on their environmental location, which included semi-urban, and urban settings.

The participants are novice teachers from schools in the King Cetshwayo district in the northeastern part of the KwaZulu-Natal province. The primary schools were purposefully selected due to their location and are all located within a 50-kilometre radius from each other. The study involved novice teachers who had been teaching for five years or less. A group of 35 participants (n=35) were deliberately selected. The sample consisted of 15 novice teachers, 10 experienced teachers from various phases and teaching experience and 10 participants from the School Management Team (SMT) of the schools. Senior management, experienced teachers, and novice teachers provided invaluable information. The researcher chose these participants according to pre-selected criteria pertinent to a particular research question and who were especially knowledgeable and experienced with the phenomenon being studied.

Samples are drawn from the population that will most benefit from the phenomenon under study. Samples consist of a small number of participants who are chosen on purpose using sampling techniques. It was critical to define a sample, identify the population, and use a sampling technique to obtain a sample for the study on novice teachers. In some respects, this reduced the likelihood of sample bias (Bhardwaj, 2019). Furthermore, the researcher would need more resources to analyse the whole population (Taherdoost, 2016). Therefore, sampling was a better option, especially with limited resources. Purposeful sampling saved time and money and provided faster results. In addition, to collect and store data, less space and equipment was needed.

For this qualitative study, the sample was vital to data collection and a crucial step in answering research questions and providing solutions to problems representing a particular population. Therefore, the study's results depended on a meaningful sample and a researcher's analytical skills (Shaheen, M., Pradhan, S., & Ranajee, 2019).

The following section discusses the instrumentation and data collection techniques of this study.

4.5 INSTRUMENTATION AND DATA COLLECTION TECHNIQUES

The researcher gathered information, conducted an empirical study, and then presented the findings of the phenomenon involving novice teachers (Flick, 2018). The qualitative approach, methodologies and ethical standards were applied to gather substantial evidence and identify credible answers to the issues under inquiry. For a qualitative researcher, obtaining pertinent data was essential since it answered the study questions, captured the phenomena of interest, and offered knowledge on various human experiences (Paradis et al., 2016). Qualitative researchers focus on examples and processes rather than connections between variables, and they may use a single method of data collection or a combination of methodologies (Punch & Oancea, 2014; Flick, 2018; Bhandari, 2020). When researching a topic in qualitative research, it is typical to mix various data collection techniques (Korstjens & Moser, 2018). Finally, the research topic makes all the difference; it dictates which techniques aid the researcher in gathering accurate data.

The data-collection instruments determine how data is augmented and what explanations the data can provide. Qualitative researchers may use the following instruments to collect data for qualitative research: interviews, ethnographic surveys, surveys, observations, questionnaires, archival research and secondary data collection (Bhandari, 2020). Thus, the researcher used

interviews as the primary data collection instrument for the study on novice teachers. Coherence or alignment between aspects of the research approach, methods and analysis was essential for collecting relevant data (Paradise et al., 2016). Although each study may use more than one data collection method, data collection in qualitative studies is typically unstructured and flexible (Korstjens & Moser, 2018). Furthermore, qualitative research seeks to select and create linguistic material to analyse and comprehend the respective social fields, participants' experiences, and clarification processes (Flick, 2018).

The primary data collection strategy employed by the researcher was semi-structured interviews. Depending on how structured they are—whether they ask open-ended or closed-ended questions—interviews are employed in a study (Bhandari, 2020). According to Quad (2019), there are different types of interviews, primarily qualitative, which researchers may utilise in their research design. The one-to-one interview is appropriate for participants who are comfortable sharing their experiences. However, it is the most common, time-consuming, and expensive approach. The focus group interview is a group activity which may comprise four to six participants. Interviews are also conducted over the telephone, involving questions that are easier to complete and forwarded to participants. In addition, questionnaires with openended questions are also engaged as data collection instruments.

For the study on novice teachers, the researcher chose one-to-one interviews as the data collection method. The research question and the methodology for data collection determined the number of interviews conducted by the researcher. During the interviews, participants responded to questions; the interviewer was the primary instrument trained to collect comparable data. The researcher uncovered participants' experiences and sorted in-depth information about the phenomenon through interviews (Quad, 2016). According to Clark et al. (2020), the required information determines a researcher's decision to use interviews as a primary data mode. Hence, the interview process involved the researcher and the participant in a conversation focused on information that ultimately contributed to problem-solving (Knott et al., 2022).

Interviews are necessary when participants' behaviour cannot be observed or felt. Therefore, Whipp (2018) posit that interviews are the primary tool for gaining access to participants' experiences. This tool assists the researcher in creating detailed, vivid, and comprehensive accounts of their events. Furthermore, interviews encourage participants to share information

in their own words, allowing for the accumulation of detailed knowledge and the comprehension of social processes (De Carlo, 2018). Thus, Benny and Huges (1970) stated that interviews are social researchers most used digging tool (Brinkmann & Kvale, 2014). In each case, interviewers attempt to establish rapport with participants to thoroughly understand their experiences and perspectives (Taylor, Bogdan & DeVault, 2016).

Non-directive, unstructured, non-standardised, or open-ended interviews are possible (Taylor et al., 2015). Unstructured interviews are free-flowing and do not have set questions. This type of interview is ideal for researching novice teachers, as in-depth interviews are required to answer the research questions. Semi-structured, in-depth interviews are face-to-face meetings between a researcher and participants to better understand the participants' perspectives, experiences, or situations. Before focusing on the study's interest, the interviewer establishes rapport with the participants, asks non-directive questions early in the research, and learns what is essential to participants (Taylor et al., 2015). The researcher had the choice of conducting structured, unstructured, or semi-structured interviews. The researcher conducted semi-structured individual interviews with the participants to gain a comprehensive understanding of the prospective teachers' experiences and perspectives during their first years of teaching.

The researcher preferred semi-structured interviews for this study on novice teachers. Semi-structured interviews allowed for some flexibility in question order and the open-ended nature of questions (De Carlo, 2018; Bhandari, 2020). Since the researcher follows a thematic structure, the interview is open-ended but orderly (Bhandari, 2020). The flow of the responses was determined by how the participants responded to the questions (De Carlo, 2018). The flexibility of the interview allowed the researcher to gain information on the missing aspects of the phenomenon or to open new dimensions of the problem. Furthermore, the researcher gained insight into the participant's belief systems and motivations for their actions (Whip, 2018).

Before conducting semi-structured interviews, the researcher considered the following factors (McNamara, 1999; Creswell, 2012):

- The interviewees were identified prior to the interview.
- The type of interview to be conducted was determined.

- During the interview, the researcher voice-recorded the questions and responses and took brief notes.
- Set up a quiet, suitable location for the interview.
- The participant signed the consent letter before beginning the interview.
- To implement a flexible plan that allowed for minor adjustments.
- During the interview, the researcher used probes to gather more information, and at the end of the interview, the researcher was courteous and professional.

Semi-structured interviews are ideal for eliciting specific information from participants (Quad, 2016). The researcher tailored the interview session by utilising a set of open-ended questions (see Appendix D and E). The choice of methods, instruments, and the researcher's role in data collection was critical in achieving the study's goal. Thus, interviews seek to reveal how people interpret their surroundings and the best way for the researchers to obtain information. In addition, for intensive and in-depth interviews, the qualitative research approach was the most popular.

4.6 DATA ANALYSIS AND DATA PRESENTATION

The qualitative researcher explored a specific phenomenon's values, meanings, beliefs, thoughts, experiences, and feelings and emerged with pertinent information (Tashakkori, 2003). After that, the generated data was analysed. Data analysis involves systematically viewing and organising interview transcripts, observation notes, or other non-textual materials to increase the understanding of the phenomenon under investigation (Bogdan & Biklen, 1982). Ontology (the nature of humans) and epistemology guide data analysis (knowledge and understanding). Four approaches emerge and are as follows: quasi-statistical, frameworks or matrices, interpretative, and sociolinguistic (Noble & Smith, 2014). According to Cohen, Manion, and Morrison (2007), data analysis entails data organisation, accountability, and explanation. The researcher used interpretative thematic data analysis procedures to extract relevant data on novice teachers.

There are fundamental principles that guide data analysis. These include transcribing the interviews; immersing in the data to obtain detailed information on the phenomena explored; developing a data coding system and connecting codes or units of data to form general themes/concepts, which can lead to theory development; identifying recurring and significant

themes; searching methodically for patterns; and providing an illuminating description of a phenomenon (Noble & Smith, 2014).

Qualitative data is subjective and rich and requires correct analytical procedures (Wong, 2008). First, the researcher organised the data before explaining and reporting on its findings. Second, the researcher organised and interpreted the generated data by identifying patterns, themes, categories, and regularities. Third, data was gathered from individuals and groups and analysed qualitatively. Fourth, the researcher used interviews to generate data from novice teachers and school personnel. Finally, the researcher's task was to analyse and represent the data generated from participants logically (Noble & Smith, 2014).

Analysis meant reading numerous transcripts of participants. The idea was to look for similarities or differences as well as themes and categories in the data generated from novice teachers. The researcher then compiled the data generated from the participants so as not to misinterpret it. The data analysis was inductive, and the focus of the researcher was to construct meaning from the data generated and provide a detailed description of the phenomenon. Finally, the researcher classified the participants' data so as not to misinterpret them.

The researcher incorporated systematic processes to code, categorise, and identify themes for the research on novice teachers. According to Patton (2002), the fundamental stages in data analysis that occur after extracting essential details from the volume of raw material are coding and categorising. As a result, coding and finding meaning for each data extract is critical (Peel, 2020). Codes are tags or labels for the themes or topics the researcher identifies. According to Clarke and Braun (2017), codes are the building blocks the researcher uses to identify patterns and comprehensively describe and give meaning to the problem under investigation. Morse (2008:727) defines codes as "a collection of similar data sorted into the same place," This arrangement is advantageous because it allows the researcher to identify and categorise the data.

Qualitative research is complex; it generates large amounts of data, making analysis time-consuming and complicated. Documenting the transition from volumes of data to final themes is one step toward ensuring the transparency of the processes involved in data analysis. Although researchers interpret the data differently, understanding and appreciating how the

pieces develop is critical to demonstrating the robustness of the findings (Noble & Smith, 2014).

The researcher outlined the most significant findings in each category and included pertinent exact quotes to support the findings. The quotes were selected based on their significance and how well they captured the study's findings. Data interpreted represented a range of participants. A code represented each participant. The interpreted data was analysed and contrasted with relevant earlier research. A chapter with conclusions and recommendations followed the data analysis section.

4.7 TRUSTWORTHINESS OF THE STUDY

Trustworthiness is crucial in any qualitative study, especially when generating detailed data during participant interviews and for findings to contribute to theory and benefit practice (Daniel, 2019). The primary concern for the study to be considered trustworthy is the criteria developed by Lincoln and Guba, known as dependability, credibility, transferability, and conformability of research.

According to Stacey (2019), for trustworthiness to prevail in qualitative research, systematic processes must be followed, particularly when organising and analysing data. Therefore, the researcher explored novice teachers' experiences and conducted several procedures to establish trustworthiness and confidence in the research. According to Pilot and Beck (2014), it is critical to address the issue of trustworthiness during data collection and interpretation. According to Lincoln and Guba (1985) and Connelly (2016), credibility, reliability, transferability, and confirmability create trustworthiness in research procedures.

4.7.1 Credibility

Credibility is an essential criterion for determining trustworthiness in this study on novice teachers. Building trust in the study's validity and findings is called credibility (Polit & Beck, 2014). Following standard procedures when conducting the study is critical (Connelly, 2016), and by reviewing the generated data, the participant significantly contributes to the study's credibility. To establish credibility, qualitative researchers use techniques such as prolonged engagement with participants, observation, peer debriefing, member checking, reflective journalism and detailed description (Gunawan, 2015; Connelly, 2016). The researcher engaged

in member checking, engagement with the participant and a detailed description of the research on novice teachers.

During the various stages of the study, member checks aided in establishing trustworthiness. First, the researcher established credibility by asking participants to verify the transcribed data (Creswell, 2014). Credibility or trustworthiness prevented researcher obscuration and bias during data analysis and interpretation (Earnest, 2020). Each participant received the transcript for verification. If a participant was dissatisfied with the data's performance, they could suggest changes or reject the interpretation. The procedure for member-checking entailed participants verifying the accuracy of the recorded data (Guba, 1981). According to Guba and Lincoln (1981), member checking is critical for increasing trustworthiness.

The authenticity of the data ensured the study's credibility; member-checking procedures concluded after transcribing the generated data—implored participants to validate the transcribed data's interpretation and accuracy. In addition, data on the experiences of novice teachers were generated from principals and deputy principals, department heads, senior and experienced teachers, and novice teachers to ensure credibility.

4.7.2 Transferability

Transferability is the second factor in determining trustworthiness (Lincoln & Guba,1985). It refers to the extent to which research applies to various contexts or situations (Stenfors, Kajamaa & Bennett, 2020). Transferability is a problem in qualitative research because it does not seek to replicate (Stahl & King, 2020). According to Lincoln and Guba (1985), it is the researcher's responsibility to provide the database that allows potential researchers to make sound transferability judgments, not to provide a transferability index.

The transfer is only possible if the results fully describe the problem and apply to similar situations (Stahl & King, 2020). The researcher can facilitate transferability by providing a detailed description of the findings, interpretation, and purposeful sampling. The design description included research processes, data generating techniques, data analysis, and data interpretation for the researcher to elucidate the final report. The methodology and time frames for data collection, as well as the duration of the study, are described. A clear description of research procedures is critical, particularly for other researchers who may want to replicate the study using similar investigations. The methodology must be transferable, particularly to other

researchers who can replicate or generalise the study using similar investigations or situations (Bhandari, 2022).

The following factors contribute to qualitative research transferability: (i) using demographic data and inclusion and exclusion criteria to find participants improves transferability (Campbell et al., 2020), (ii) encouraging readers and researchers to draw parallels between a study's findings and their own experiences (Barnes et al., 2005) and (iii) using the findings in different contexts where the concept of transferability is unrelated to a particular research design or type of data analysis (Rodon, 2008).

It is challenging to generalise qualitative results. Qualitative researchers, on the other hand, may relate the specifics of their study to current research on novice teachers. This study's findings apply to similar situations for novice teachers and other school stakeholders. Inexperienced teachers will be able to draw parallels between their situation and that of other school personnel.

4.7.3 Dependability

Lincoln and Guba (1985) offered a third viewpoint on trustworthiness: Dependability or trust. Polit and Beck (2014) and Moon et al. (2016) defined *Dependability* as the consistency of data over time and the study conditions. This is possible if researchers or study participants build trust during the research process (Stahl & King, 2020). To establish dependability, the researcher employed the following strategies: an audit trail, a code-recode strategy, stepwise replication, and peer review (Krefting, 1991).

4.7.4 Confirmability

Confirmability is the fourth perspective on trustworthiness. The level at which other researchers can verify or collaborate on the findings of an investigation is referred to as Confirmability (Baxter & Eyles, 1997; Connelly, 2016). Most importantly, to ensure that the data and results interpretation is genuine and derived from the participants (Stahl & King, 2020). Achieving Confirmability is through audit trails and reflexive journaling.

The researcher emphasised the importance of keeping an audit trail, data analysis, and methodology memos in the log up to date (Korstjens & Moser, 2018). The researcher meticulously recorded decisions and data analysis as the research progressed. The researcher

discussed the interview transcripts or notes during peer debriefing sessions. In addition, the researcher conducted member checks with participants. The researchers kept reflexive documents to reflect on, interpret, and plan data collection (Wallendorf & Belk, 1989). A reflective journal contained all fieldwork events, and a personal reflection on the study was maintained. Electronic record tapes/recorded and non-electronic-field notes, documents - materials used throughout the investigation will be stored for five years. The other strategies used were long-term engagement and developing rapport and trust, effective interviewing techniques, information identification safeguarding, introspection, and reflection.

According to Stacey (2019), for trustworthiness to prevail in qualitative research, systematic processes must be followed, particularly when organising and analysing data. The researcher explored novice teachers' experiences and conducted several research procedures to establish trustworthiness and confidence in the research. According to Pilot and Beck (2014), it is critical to address the issue of trustworthiness during data collection and interpretation. According to Lincoln and Guba (1985) and Connelly (2016), credibility, reliability, transferability, and confirmability create trustworthiness in research procedures. The detailed description provided information to validate the generated data. The data collection processes for the research on novice teachers were verified for trustworthiness by the researcher.

4.8 ETHICAL ISSUES

This section examines the researcher's ethical issues and strategies for meeting the challenges of qualitative studies on novice teachers to provide relevant and trustworthy results (Sanjari et al., 2014). Ethical behaviour is essential for collecting extensive and rich data during qualitative research (Kang & Hwang, 2021). Furthermore, ethical approval is required when a researcher interacts with qualitative research participants. As a result, the researchers followed the ethical principles of informed consent, confidentiality and privacy, beneficence, and producing honesty and integrity (Kang & Hwang, 2021).

Ethical principles, according to Žukauskas et al. (2018), are essential for the following reasons: (i) Research procedures must not only protect participants' rights and well-being but also minimize the risk of physical and psychological discomfort, damage, and threats; (ii) protecting the researchers' right to conduct legitimate research as well as the university's reputation when conducting or funding the study; (iii) reducing the likelihood of specific researchers,

institutions, and other partners being sued for negligence, and (iv) assisting research and scientific publication organisations with funding requests or as a prerequisite for publication.

4.8.1 Maintaining relationships with research participants.

The goal of qualitative researchers is to provide transferable and trustworthy results. The researchers' and participants' direct involvement in the research at various stages may pose ethical challenges. Furthermore, most qualitative research focuses on subjective experiences, which can pose an ethical dilemma for both the researcher and the participants (Aluwihaer-Samaranayake, 2012). There are often difficulties with confidentiality, negotiating access, minimising harm, respecting individual autonomy, preserving privacy, obtaining informed consent from participants, maintaining and managing relationships, and the potential effects of researchers on participants, as well as vice versa (Sanjari et al., 2014; Traianou, 2014; Kang & Hwang, 2021).

Ethical concerns were considered when establishing, maintaining, and terminating participant interactions. Maintaining and establishing mutual relationships is a moral requirement for building participant trust. It aids in eliciting honest responses from participants and contributed by generating rich and extensive data. The researcher secured comprehensive data by establishing relationships with the teachers of the King Cetshwayo District's five schools. Furthermore, the researcher upheld and adhered to ethical principles while conducting the research through interviews (Kang & Hwang, 2021).

Maintaining ethical relationships while conducting research is critical. As a result, the researcher used guidelines and protocols for all stages of the study. The researcher developed a good rapport with each participant and developed trust to obtain accurate data and assist participants in resolving issues surrounding their challenges (Kang & Hwang, 2021). The ethical aspects of the research showed concern and respect for the participants and their environments.

4.8.2 Upholding Informed Consent

Incorporating informed consent ensures that the participant's autonomy is respected and that they acted in their capacity and made their own decisions (Traianou, 2014). Therefore, informed consent is essential to ethical principles and policies for studying novice teachers. It entails respecting participants' voluntary participation and thus ensures that they entered the

study voluntarily (Xu et al., 2020; Grant, 2021). Informed consent comprises two parts: informed and consent (see Appendix C). The researcher informed the participants about their role in the study, how to use the data, and whether any consequences would be imposed (Fleming & Zegwaard, 2018). In addition to informing participants about the phenomenon under investigation, the methodology, and the potential risks and benefits of the study, researchers also educated participants about their rights as human subjects (Nishimura et al., 2013).

The researcher considered how to obtain consent and what information was required to inform participants about their role in the study (Traianou, 2014). Participants who sign the consent form acknowledge that they can withdraw from the study at any time. The informed consent process is a contract between the researcher and the participant in which the informed consent document plays a key role. The consent for the novice teachers was well designed and included sufficiently detailed, statutorily defined information to allow participants to make informed decisions, and readable and brief for complete and thorough reading (Grant, 2021).

The consent form and information sheet were well-written, unambiguous and concise. The consent form included the following details: (i) In an 'opt-in' rather than 'opt-out' approach, information on the right to withdraw at any time for any reason, including withdrawing the data which was already provided, (ii) assurance that participants' identities will be kept confidential, (iii) clarity of data ownership where participants own their raw data, researchers own the analyses, (iv) the right to access the data, (v) the right to request additional information, and (vi) information for the complaint process, such as contact for relevant parties and the ethics committee (Fleming & Zegwaard, 2018).

4.8.3 Privacy and confidentiality during research

The researcher conducted studies on novice teachers, ensuring participant anonymity and adhering to ethical guidelines. The researcher responsibly adhered to ethical guidelines and maintained privacy and confidentiality throughout the research (Kang & Hwang, 2021). Confidentiality is an addition to privacy that refers to the participants understanding of an agreement regarding how specific information is stored and shared (Weinbaum et al., 2018).

During the study, the researcher-maintained privacy and confidentiality by taking the necessary precaution to prevent the participants' identities from being known or discovered by others. The researcher used pseudonyms to identify each participant without disclosing their identity

(Kang & Hwang, 2021; Weinbaum et al., 2018). In addition, the researcher protected the research records with password-protected files and stored them in a room within locked cabinets for five years (Kang & Hwang, 2021).

4.8.4. Upholding beneficence

Qualitative research entails participants and their contributions to the investigation of a phenomenon. One of the most critical concerns in research is the possibility of harm. During data collection, the researcher considered the potential risk to participants, the community and the institution and thus protected, respected their autonomy, and ensured their well-being (Fleming & Zegwaard, 2018). This ethical behaviour of the researcher includes acts of beneficence, charity, and kindness that go above and beyond strict obligations (Arifin, 2018). Beneficence is a fundamental tenet of any research involving human participants, and as such, it could be considered a pillar of educational research (Weinbaum et al., 2018).

Beneficence is an ethical behaviour in which one acts to benefit others while promoting their safety and well-being (Pieper & Thomson, 2016). The researcher acted ethically by (i) not harming, (ii) minimizing harm, and (iii) maximising potential benefits. In addition, the researcher adhered to the ethical principle of beneficence by avoiding questions that could cause participants psychological or physical harm, which may result in them suffering physical, emotional, and reputational harm during the study (Fleming & Zegwaard, 2018).

Traianou (2014) classified potential harm as follows:(i) physical discomfort, injury, and permanent incapacity; (ii) emotional distress, loss of self-esteem, or stress-related illness; (iii) material harm, such as loss of liberty due to incarceration, job termination, loss of income, wealth, or property damage. (iv) negative consequences for one's reputation, status, or relationships with significant others because of revealing previously unknown information to a relevant audience.

The more frequently or longer participants participate in research, the higher their risk of harm. However, if the participant is present, he or she must be fully informed; the risks must be included in the informed consent so that the participant can make sound decisions before participating in the research (Kang & Hwang, 2021). When considering capacity harm, Fleming and Zegwaard (2018) recommend that researchers approach harm from most intensive to least intensive to eliminate, isolate, and reduce the risk. Any potential hazards must then be

made known to the participants. Furthermore, protecting vulnerable participants from mistreatment and manipulation is critical for researchers to consider when researching vulnerable societies (Kang & Hwang, 2021).

During the informed consent process, the participants from this study acknowledged that the investigation posed no risk and that they were safe. In addition, participants gained assurance of the importance of maintaining honesty and integrity in data collection, analysis, and presentation of results.

4.8.5 Upholding honesty and integrity

Qualitative research explored phenomena by examining events, occurrences, and experiences in depth. Unfortunately, non-quantifiable data in qualitative research can lead to misinterpretation of research findings and false conclusions (Orb, Eisenhauer, & Wynaden, 2001). As a result, achieving honesty in all scientific communication is critical. The researcher must provide accurate data, results, methods, procedures, and publication status (Žukauskas et al., 2018).

Falsifying and distorting data and misleading colleagues, agencies, or the public have serious consequences (Žukauskas et al., 2018). The researcher was honest and truthful, with ethically sound conduct. There was no need for fabricated data, false results, or leaving out important information. Instead, in this study, the researcher reported the entire set of findings, minimised or eliminated bias in data collection methods, and revealed fundamental theories and beliefs.

The researcher maintains honesty and accuracy in reporting results as an ethical aspect of integrity (Weinbaum et al., 2018). The researcher also determined whether additional research or solutions were required by reporting the findings (Kang & Hwang, 2021). In addition, the researcher avoided plagiarism, falsifying data and results (Weinbaum et al., 2018). Informed consent, privacy and confidentiality, honesty and integrity of the participants were all important ethical considerations during the data collection process.

The researcher first sought ethical approval from the University of South Africa. Permission was obtained from the KwaZulu-Natal Department of Education and the five schools in the King Cetshwayo District (see Appendix B and F). Finally, the researcher was able to obtain the participants' informed consent. The participants were informed of the study's nature,

purpose, and objectives. Their participation was voluntary, and they could withdraw from the study at any time.

There were no risks, and participants were assured of their privacy and confidentiality during the interview and data collection process. In addition, participants gained assurance that the researcher generated data under strict ethical conditions to address the research objectives and improve the efficacy of novice teachers.

4.9 LIMITATIONS OF THE STUDY

Qualitative research involves gathering and analysing participant perspectives and experiences to address the study's problem. Therefore, the researcher generated data from a small number of participants. In addition, the study only focused on novice teachers from primary schools in the Cetshwayo District. Since secondary schools were not included in the study, generalizing the findings to the teaching profession was not considered. It was also time-consuming to complete the processes in qualitative research because of the massive volume of data providing detailed accounts of novice teachers' initial years.

Furthermore, because of personal experiences and feelings, data generated from novice teachers needed to be more open to interpretation. Participants had greater control over the generated data content; therefore, the researcher needed help to verify participant perceptions thoroughly. Furthermore, other researchers and readers may have to accept that the transferability of the study's results is less likely and may yield different conclusions.

4.10 SUMMARY

In this chapter, a detailed description of the research design, procedures for collecting data, and analysis were provided. The researcher utilized a descriptive research design with an interpretative paradigm to explore the challenges faced by novice teachers. Through this method, the researcher gained insight into the experiences of novice teachers. The goal was to generate relevant data for the study, leading to research-based strategies for problems faced by novice teachers. The thirty-five participants were selected through purposeful sampling and accumulated relevant data through semi-structured interviews. The research questions guided the coding process and categorised the findings. While eliciting novice teachers' experiences, ethical issues, reliability, transferability, and trustworthiness prevailed. Finally, the data was interpreted and analysed before being presented in Chapter.

CHAPTER 5

DATA PRESENTATION AND DISCUSSION

5.1 INTRODUCTION

Chapter Four of this study examined the research methodology on effective teaching strategies for novice teachers in King Cetshwayo District, KwaZulu-Natal. There were discussions on the study paradigm, plan, design, participant selection, methodologies, data gathering, and presentation techniques. Also discussed were the data analysis, ethics, validity, dependability, and restrictions.

To gather data, the researcher conducted semi-structured interviews with five department heads, four senior management members, and fifteen inexperienced novice teachers with less than five years of experience in the field. This investigation focused on five specific schools in the King Cetshwayo District. Throughout this chapter, the researcher presented, analysed and interpreted the information gleaned from novice teachers, frequently citing their real-world experiences during data presentation.

5.2 RESEARCH PARTICIPANTS

To ensure confidentiality and protect the participants' anonymity, the researcher assigned unique identifiers or codes to each group of participants. Novice teachers were identified as NT 1 to NT 15, experienced teachers as ET 1 to 10, department heads as DH 1 to DH 5, and senior management as SM 1 to SM 4. This approach allowed for precise identification of individuals without revealing their actual names or positions. By maintaining confidentiality, the research was conducted with integrity and respect for privacy, fostering an environment of trust. The following table 5.1 presents the research participants in the King Cetshwayo District.

Table 5.1: Research participants with their respective codes in five selected primary schools in the King Cetshwayo District in KwaZulu-Natal.

Primary Schools	School	School	School	School	School
	A	В	C	D	E
Novice Teachers (NT)	NT 1 NT 2 NT 3	NT 4 NT 5 NT 6	NT 7 NT 8 NT 9	NT 10 NT 11 NT 12	NT 13 NT 14 NT 15
Experienced Teachers (ET)	ET 1 ET 2	ET 3 ET 4	ET 5 ET 6	ET 7 ET 8	ET 9 ET 10
Department Heads (DH)	DH 1	DH 2	DH 3	DH 4	DH 5
Senior Management (SM)	SM 1	SM 2	SM 3	SM 4	-
Total	7	7	7	7	6

5.3 DISCUSSION OF THE RESEARCH DATA

5.3.1 Introduction

The meticulously analysed data has yielded insightful categories and subsequent themes that comprehensively explored effective teaching strategies for novice teachers in King Cetshwayo District, KwaZulu-Natal. The following research objectives guided the interviews:

- identify the significant challenges and problems facing novice teachers in the initial years of teaching in primary schools in KwaZulu-Natal.
- establish the roles and responsibilities of mentors, the School Management Team and other stakeholders in the development of novice teachers in primary schools in KwaZulu-Natal; and
- determine which strategies, if any, are currently offered to novice teachers to overcome their problems and be more effective in these schools; and

 develop strategies in the form of a model to introduce more effective induction programmes of novice teachers in primary schools in the King Cetshwayo District of KwaZulu-Natal.

The qualitative data analysis required a 5-step process (Campuslabs, 2018).

- Prepare and organise the data. Print out the transcripts and gather notes, documents, or other materials.
- Review and explore the data.
- Create initial codes.
- Review the codes and revise or combine them into categories.
- Identify various themes for each category.

The categories were identified according to the objectives of the study. During the initial phase, the researcher thoroughly examined the data and recorded comprehensive notes. Following this, the data was categorised and assigned corresponding codes. The codes and corresponding data were then systematically integrated and arranged into prospective categories. The categories were thoroughly analysed. During this process, subsequent themes were derived from each category. Ultimately, the themes proved to be instrumental in enhancing the overall congruity of the research. See Table 5.2 below.

Table 5.2: Categories and identified themes.

Themes that emerged		
Challenges in the initial days		
Challenges with managing time		
Challenges in mentoring and induction		
Challenges with classroom management and		
discipline		
Support with curriculum issues		
Support with professional development.		
Support with parent engagement		
Support with administration.		

3. Strategies to support novice teachers	Mentoring and coaching
	Communication, knowledge sharing and
	collaboration.
	Behaviour management practices
	Instructional strategies and classroom
	management practices
	Collegial support
	On going professional development training
	Motivating teachers

5.3.2 Category 1: Challenges faced by novice teachers during early years of teaching

The novice teachers in this study encountered a myriad of challenges during their first year in the classroom. Among the challenges they encountered were difficulties on the first day, insufficient induction programmes and mentoring, time management, curriculum management, classroom management, disciplinary problems, stress and workload concerns, administrative challenges and parental issues. The following themes are derived from this category and will subsequently be discussed.

5.3.2.1 Theme 1: Challenges in the initial days

The first teaching days were turbulent and undeniably challenging for the participants, without any grace period after graduation. The participants expected a gentle transition into the school setting, unaware that schools expected them to perform all duties at the same level as their more experienced colleagues (ET 8). Furthermore, the participants had to align themselves with the school's ethos, adhere strictly to its code of conduct, vision, and mission statements, deliver practical lessons, and maintain order and discipline in the classroom. They had to master how to deliver the curriculum, prepare and administer assessments effectively, and school policies while navigating classroom dynamics, including varying academic levels, pacing, workloads, and communication with parents and learners. Expectations were non-negotiable and had to be met to ensure a successful tenure at the school. Below are some extracts from the participants' interviews describing the challenges they faced in the first few days:

Young teachers are burnt out before they even start because they are overwhelmed (DH 4).

I was thrown in the deep end, and you always need to support that person till they find their feet (NT 1).

Novice teachers are expected to manage a class, deal with discipline, do playground duty, play sports, and be involved in planning, assessment, recording and moderating (SM 2).

Expect novice teachers to know the basic things to manage the class in terms of marking the register, having good classroom control, training in terms of discipline, and having good or adequate subject knowledge (SM 2).

They can do what we can do as teachers with experience. They can fall on our path because we groom them as senior teachers (ET 8).

Novice teachers had to perform at the same level as experienced teachers, regardless of the demanding nature of the job (ET 8). Punctuality and timely arrival for a class were non-negotiable (ET 1). It was also imperative to foster an environment where learners felt comfortable sharing their challenges. Considering their diverse backgrounds, handling learners' concerns with the utmost care and sensitivity was crucial. Participants had to exude optimism, approachability, sympathy, empathy, and availability while interacting with learners. In addition, it was also the responsibility of the participants to impart morals and values to their learners. Experienced teacher participants echoed that teaching is a significant profession; therefore, it was crucial to encourage novice teachers (ET 1; ET 2; SM 5). The experienced participants shared their thoughts and opinions about teacher expectations in the following manner:

We need someone cultured and grounded because that's what children lack now (ET 1).

The first skill should be patience, and you should be a people person who does not get irritated and agitated because you teach large numbers (ET 1).

Make it easy for learners to approach you about anything that happens outside of school, even at home (DH1).

Experienced teacher participants asserted that novice teachers possess a solid understanding of the subject matter. However, implementing it in a classroom with diverse learners required significant support (ET 2). Most often, theoretical knowledge is needed to translate better into practical situations (ET 4). One participant shared that novice teachers initially found it challenging to teach and communicate effectively with all their learners; they had to learn how to approach them perceptively. Novice teacher participants established that apart from discipline and classroom management, learner diversity was particularly challenging and hampered curriculum delivery (DH 1). The following are quotations from participant interviews in which they discuss the difficulties they encountered during lessons:

Going to stand in front of the learners was a problem for novice teachers. You find that the person has a lesson plan in place, but when the period ends, the lesson still needs to be completed (DH 1).

You will not walk into a perfect class where you get 80 per cent from learners. You will only get 10 per cent. These learners are struggling (ET 2).

There were various situational factors, such as different cultures, environments, and learner backgrounds, that novice teachers needed to adjust without delay, as Makoa & Segalo (2021) stated. Novice teachers needed to be responsive to learners' needs and experiences. To ensure successful completion of subject tasks, they had to undergo rigorous training that encompassed cultural sensitivity, classroom inclusivity, and effective implementation of methods that catered to diverse learning styles. The participating schools held high expectations for novice teachers, expecting them to be passionate about teaching, knowledgeable, and committed to inclusive education. The following excerpts represent management members' perspectives on new teaching expectations:

They are familiar with the term and know how to prepare the lessons to accommodate diversity and implement and keep track of whether the outcomes were met (SM 1).

When the child comes to school, the teacher must meet the child's needs; it means that the teacher needs to adapt, not the child to adapt (SM 1).

Novice teacher participants expressed their frustration that their tertiary education did not adequately prepare them for the challenges they faced in the real world. Despite being introduced to concepts such as diversity in learners, the importance of intrinsic education, and the application of inclusive education during their studies, novice teachers often felt overwhelmed and confused when confronted with learners from diverse backgrounds and those with learning disabilities in an actual school setting. The department head (DH 4) stated, "For me, you need to be passionate about what you do so you can bring out the best in kids because it is about harnessing kids so that they exercise their full potential in whatever they are doing."

Eredics (2019) highlighted the failure of teacher education programs to provide novice teachers with the necessary knowledge, skills, and tools to teach in diverse classrooms effectively. However, creating an inclusive learning environment requires a collaborative effort from a team of teachers, administrators, support staff, parents and guardians (Paju et al., 2022) with their unique expertise and perspectives. Inexperienced educators discussed the challenges they faced with customised instruction and diversity:

So, how do we do inclusive education in a short time? Especially with so much diversity, we have learners with so many different backgrounds (NT 5).

It's part of the policies; you have to be able to handle all different children no matter what's wrong with them, even disabilities. But what do you do if you don't have the resources and technology in that case? So, it affects us negatively (NT 5).

Novice teachers often encounter significant challenges due to socioeconomic factors. Mupa and Chinooneka (2015) found that learners from underprivileged homes often lack resources and support networks, adversely affecting their academic achievement and making it more demanding for teachers to engage them effectively in the learning process. To address these challenges, novice teachers need access to various teaching methods and techniques, teaching material, technology and resources to meet the diverse needs of learners from different socioeconomic backgrounds.

In the initial days of a teaching career, novice teachers must possess robust technological skills to operate modern devices proficiently. They must adopt a technologically advanced approach to ensure learner development (ET 1). Furthermore, learners have shown positive reactions to

contemporary methods and technology. Participants acknowledged that starting a new job can be daunting, but meeting these requirements without negotiation was imperative. The Department Head stressed the need of using technology to help with curriculum implementation.

So, when they come to work, they don't even know when to start with files because everything is through computers (DH 1).

The kids we teach nowadays are more exposed to technology, so when you go to class, you must be the more involved teacher. Part of that must be technology; must be technoliterate (DH 1).

Learners nowadays, for them to learn, must see what you are teaching them. If you give them worksheets and write on the board, they get bored, but if you use technology, they get more involved in the lesson (DH 1).

The study revealed that novice teachers require support from experienced teachers to enhance the quality of their teaching. This support helps them build the necessary skills and knowledge in differentiated learning, classroom management, discipline, sports supervision, and maintaining school order. Additionally, it aids them in comprehending the South African Schools Act and adapting to their school's culture and values.

5.3.2.2 Theme 2: Challenges with managing time

A lack of time management skills among novice teachers in the five participating schools negatively affected classroom instruction and learning. Time management is the process of organising one's tasks, responsibilities, and activities to achieve a balance between personal and professional obligations. Novice teachers often need help to balance instructional activities within time limits, leading to work-related stress and impeding learner development. As a result, it was often impossible to nurture learners' physical, emotional, social, artistic, spiritual, and intellectual growth. Novice teachers in this study stressed that meeting deadlines while striving to develop well-rounded learners was challenging (Rasima, 2018). The following excerpts were extracted from interviews with new teachers about time management:

One of the challenges they faced was to adjust. Time management was a big problem (DH 1).

When I received the workload, it was a challenge to tackle each day—managing every day what we would do and what we would teach (NT 8).

At the end of the day, you must meet the deadlines. So, you must make sure (NT11).

Time management in the first year was difficult, especially in meeting deadlines. I have an interesting management who understood I was still getting on my feet (NT 13).

Teachers had to accept that efficient time use was crucial (Meador, 2023). Novice teachers often find themselves pulled in various directions, addressing multiple learner concerns; allocating adequate time to each learner was challenging. According to Kyriacou (1993), novice teachers frequently experience difficulties with managing their time in a new environment (Çakmak, Gündüz & Emstad, 2019).

In this study, experienced teachers noticed that novice teachers needed help with time management in the classroom and with administrative tasks due to their lack of familiarity with the professional teaching environment. Novice teachers find transitioning from an academic to a professional setting challenging, mainly due to the stark contrast between new and experienced teachers. During their transition, novice teachers encountered many problems, according to experienced educators:

New graduates come in, and their experience is outside the real classroom. They are struggling a lot with time management (ET3).

I find that they are a bit slow, which I suppose because they are getting used to the routine of it. We are so used to it, it is like second nature to us, you know (ET 7).

The pace at which we work is overwhelming, for sometimes, meeting deadlines. They struggle with those things; their work ethics differ (ET 3).

Planning classroom instruction involves critical factors such as teaching time, activity duration, learner potential, and attention span. Novice teachers need to schedule and plan for the various phases of the lesson, including the time allotted for learner engagement (Pendlebury & Bak, 2002). Moreover, novice teacher participants had to help struggling learners understand the lesson while ensuring time was effectively managed. Thus, ensuring learner understanding of the lesson within time constraints was challenging (Khan et al., 2016). Novice teachers encountered the following challenges in completing the lesson and assisting learners with barriers:

With the thirty minutes, it is hard because I can only do what I came to teach (NT 14).

Time management was definitely something I had to adjust to. I also needed to learn how long I could teach, how long I would formally present the lesson, and how long the activity was. I also had to learn about my learners and see how long their attention span was (NT 3).

I did struggle at the beginning. I spent too much time pressing the content than teaching and did not have time for activities (NT 2).

Effectively managing workload and time was a substantial hurdle and a daunting task for novice teachers. According to Ntsoane (2017), individuals experience high stress levels due to their heavy workloads and time commitments. While the teaching role required a commitment to deliver the curriculum within a specific time frame efficiently, novice teachers still needed to be relieved of this concern. The participants had to undertake many tasks, including but not limited to lesson planning, activity organization, curriculum development, class monitoring, information provision, discipline maintenance, teacher absence coverage, record-keeping, and assessment evaluation (Desouky & Allam, 2017).

Many participants pointed out that effectively managing their workload within a specified period posed a challenge. Some teachers needed help completing their assigned tasks within the given timeframe. In contrast, others needed trial-and-error strategies to effectively manage their time while teaching, evaluating, and grading learners. Novice teachers had to develop efficient time management skills to handle their responsibilities easily. The following quotes about workload and time management concerns were extracted from the interviews:

We had a teacher who held us back because of time management. Only completed the first term work in the second term (ET 9).

So, coming and trying to do everything within that stipulated time was challenging. The workload was crazy then, but it was also my first year. I was doing a trial and error to see what worked and what did not work (NT 9).

Then, it is time to set the assessments, administer them, mark them, and get all the administration done. You will be teaching three subjects, and you need to make sure everything is done, and all the marks are done. It was terrible, it was stressful (NT 7).

Finding enough time during the day was impossible. During break time, you had to sit and work after school. It is not like you can be stuck on one thing; it is constant, just working, progressing, and trying to get everything done (NT 6).

In this study, experienced teachers established that novice teachers need practical time management skills. Learners need structure, discipline, and an adequate classroom management system to ensure inexperienced teachers stay focused. There may be inadequate provision of course material, incomplete syllabus coverage, late submission of learner grades, delayed grading of learner work, and difficulty in tracking long-term teaching plans. Sometimes, especially in class, they spend so much time disciplining the learners instead of teaching and find the teaching time is less when it is time to hand in the marks for the submission. The following excerpts show that novice teachers struggled to complete their tasks:

Sometimes, they fall behind. There is a deadline for submission of marks. If they can pull up on that because sometimes, we have the assessment programs, we know what to do, when to do it (ET 8).

One of the challenges they faced was to adjust. Time management was a big problem. You find the person has a lesson plan in place, but when in class the period ends, the lesson still needs to be completed. Even with marking, no time management (DP1).

There is also time management regarding finishing a particular section for a specific time frame. Your lesson preparation is expected to be on par with your time (ET 5).

Based on the analysis of the available data, it is a definite conclusion that novice teachers require immediate assistance in effectively managing their time. Factors such as inexperience, heavy workloads, language barriers, insufficient lesson planning, pacing issues, disorganization, and disruptive learners all contributed to time management challenges. Such obstacles significantly impeded the smooth execution of lesson plans. The challenges faced by novice teachers, such as navigating complex issues, require professional development opportunities to overcome, as noted by Al-Naimi et al., (2020).

5.3.2.3 Theme 3: Challenges in mentoring and induction

Regular mentoring and induction programs can positively impact teacher retention, instructional practices, working conditions, and learner achievement, according to studies by Ingersoll and Strong (2011) and Schmidt et al. (2017). For novice teachers, transitioning from preservice to classroom teaching can be daunting, and therefore, proper preparation through well-designed induction and mentoring programs is essential. However, structured induction programs thus far are the responsibility of schools, as noted by participants in this study (DH 3). Novice teachers needed adequate mentoring and induction to avoid negative impacts on their well-being and instructional effectiveness (ET 3). The following extracts relate to the need for mentoring and induction:

We have not done a mainstream orientation or induction programme at school (DH 3).

Novice teachers need to know who I get my stock and exercise books from; if you need curriculum support, go to that person (ET 3).

Several novice teachers shared their experiences of starting work without proper training or orientation. Participant NT 6 had anticipated a few days of observation to learn about school operations; unfortunately, they had to assume duty immediately without support or direction. Similarly, participants NT 7 and NT 12 were left to figure things out independently. As a result, they had to rely on other teachers for help and support. Fortunately, participant NT 5 received assistance from their department head, who had experience teaching the same grade level. A

lack of orientation programs made it difficult for novice teachers to succeed, but they still thrived with the help of colleagues and department heads.

The lack of mentorship for novice teachers, as experienced by NT 7, and the limited orientation programme provided to NT 5 highlighted the need for better support for novice teachers. While the orientation process covered essential administrative and regulatory matters, ET 4 highlighted the significance of ongoing learning through the act of questioning. Novice teachers found navigating the school environment overwhelming, while colleagues struggled with time constraints when helping. As one participant noted, induction is crucial for exposing novice teachers to the realities of school life, and clear guidelines from the education department are necessary. Even with the guidance of a mentor, NT 11 faced significant challenges as a novice teacher. Novice teachers faced obstacles but took the following initiative to seek out extra resources and support to overcome them:

I expected to have a mentor, someone to show you the ropes. There was no time to teach you how to do the work. You walk in and start working immediately (NT 6).

The HOD taught the same grade. I had to find my way because it was only the HOD I could go to get help. Basically, they teach you the ins and outs, the admin part of it and rules and regulations (NT 5).

I did not receive any training or orientation. I sort of had to figure out as I was going through the way, obviously with the help of other teachers as well (NT 7).

The first few days were hectic because you try to familiarise yourself and people are busy. You cannot trouble everyone. It is worse for the novice teacher from a tertiary institution—no words for that one. Overwhelming (ET 4).

There was no orientation program. I learnt everything along the way and had to be quick, although I was novice. The majority of my friends are teachers from other schools; if I didn't know something, I would just ask them (NT 12).

I feel like they need to do some orientation before you get into the school, based on what you need to expect, based on what you need to do (NT 11)

While schools are taking steps to support novice teachers, participants in the study believe that more action is required. The guidance of experienced teachers was crucial in helping novice teachers effectively navigate daily routines and improve pedagogical approaches (Dias-Lacy & Guirguis, 2017). However, this study revealed that experienced staff may require support to provide appropriate mentorship due to time constraints.

At the beginning of the school year, participants were immediately tasked with teaching regardless of limited prior training. Despite being only in their third week of employment, they quickly familiarised themselves with the learners' pace and names. However, the participant was left to orient himself and learn independently with only rudimentary guidance from the department head and principal (NT 13). As a novice teacher, adhering to the school's culture and rules was crucial, as there was still much to learn. The participant was mentored and provided with ATPs and textbooks but still felt that further training was necessary (NT 15). The following extracts reveal the need for ongoing mentoring due to the difficulty of learning all procedures initially:

It is not only the first week, but as you go on with novice teachers, you mentor them. Some tasks can't be done or mentioned to them on the first day or first week (ET 9).

They teach you the ins and outs, the admin part, and rules and regulations. The orientation was a few hours. They covered the policies, the document, the education, the department revelations, and the code of conduct (NT 5).

Participants who aspired to teach were trained and supported to manage classroom dynamics effectively. Nevertheless, insufficient school programs impeded theoretical knowledge application to real-life situations, leaving novice teachers struggling to cope. The following extracts from the interviews refer to the participant's struggle during the initial stages of teaching:

When I arrived, I had to teach; there wasn't much training at that stage because it was the beginning of the year, and I was put in the deep end. And I had to learn the pace of the learners, their names, etc. (NT 13).

I wasn't oriented; I basically had to learn everything on my own. I took myself through my HOD and principal. They introduced me to the basics (NT 13).

When you come to a school, there is a culture that you follow, the rules and everything. You don't know everything. I was mentored. In my opinion, I felt that I needed more (NT 15).

Based on the data analysis, it is evident that the mentoring programme in the five schools varied in terms of its implementation. Novice teachers were introduced to school personnel and familiarised with the school infrastructure and curriculum issues often by the school's department head. It was daunting for novice teachers to deal with subject content, manage learning, and adopt school culture and learning strategies to effectively address their challenges without a go-to person or a dedicated mentor. Due to time constraints and the availability of personnel, immediate training, discussion and perusal of school policies, procedures for acquiring resources, and the practical demonstration of the school's teaching standards were limited. Thus, schools faced challenges securing adequate time and personnel to sustain mentoring throughout the year.

5.3.2.4 Theme 4: Challenges with classroom management and discipline

Padayachie (2013) emphasised the importance of effective classroom management and discipline for optimal learning outcomes. It is imperative to improve efficiency in handling classroom responsibilities and discipline to achieve better learner outcomes. According to Nelson-Danley (2021), to establish a conducive environment for optimizing learning and quality teaching, it is essential to establish a solid foundation, communicate expectations clearly, identify objectives, and proactively address disciplinary concerns. However, novice teachers struggled with this, experiencing reality shock due to a lack of knowledge and strategies. The participants shared their unique experiences, thoughts, and feelings on these challenges.

Maintaining discipline and managing the classroom is crucial for novice teachers, who often struggle to balance discipline issues. There must be more than a friendly demeanour to handle classroom behaviour effectively. Inexperienced teachers frequently felt overwhelmed by learners' behaviour and sought solutions to counteract demanding and attention-seeking behaviour. The study also revealed that learners respond differently to male and female

teachers. Difficulties with maintaining discipline and managing a classroom were expressed in the following extracts:

Should I be friendly or firm and strict? It was finding a balance when it comes to discipline in the classroom. Also, discipline and classroom management would be linked (NT 7).

I was supposed to maintain discipline. I did have an issue where I wanted a lot of discipline in the class (NT 9).

For novice teachers when it comes to discipline and classroom management, there is a struggle because of my personality, I am always a goodie two shoes, and children see me as an easy target. They look at me as a friend (NT 8).

Then, with discipline, I am not too hard with the kids. When disciplining them, we had to do it to continue our work. When the learners lack discipline, we sometimes waste time disciplining them (NT 11).

Initially, I was drowning because you get these learners who try to take advantage. I noticed the kids reacted better to the male teachers and differently to the female teachers (NT 5).

I had to sit down and look into it and analyse the situation. How am I going to handle this specific child? How to balance the case in the classroom because you cannot teach in a disruptive classroom, fidgeting, complaining (NT 5).

The cramped conditions and large class sizes proved challenging for novice teachers. Despite training to handle 15-20 learners, they faced classrooms designed for 40-45 or more. Motivating senior learners to pay attention in small classrooms was a difficult task. Inexperienced teachers believed learners took advantage of their youth and needed discipline, which was detrimental to their teaching. Some participants believed learners misbehaved due to a lack of discipline at home. The following extracts refer to the challenges of class sizes and their impact on classroom management and discipline:

I was extremely terrified because of the numbers. The school I was at before had 15, and the limit may be up to 20. When I came here, it was a real shocker for me (NT 1).

We have classes of 45, and as a novice teacher, it is very difficult to discipline them because they see me as this young teacher (NT 2).

If you are novice, learners like to take chances. You find the teachers who have been here for the longest time; learners will behave in these classes. Also, some learners at home must be more disciplined (NT 15).

The numbers were high, and we did not have the space that those numbers required, so that became a discipline issue. It becomes difficult if you have a large number and must be managed by one person (NT 3).

The beginning was very difficult, especially with bigger kids like grade seven were worse than the grade six (NT 2).

Due to their communication barriers with their teacher and peers, learners significantly contribute to classroom disruptions. Novice teachers introduced creativity, a strategy to reward learners for their learning and instil discipline in learners to combat persistent misbehaviour (NT 13). Training manuals helped resolve problems with discipline and classroom management. The best course of action was a constructive confrontation with learners while providing them with the attention they desperately desired (NT 12). The following excerpts refer to how the novice teacher faced challenges related to classroom management and discipline:

I had to return to classroom management to my books. It was not easy because I couldn't shout or say anything. They wanted attention, you give that attention (NT 12).

One of my subjects at that time was classroom management, and I used different strategies. It was trial and error with that as well. I tried one method and saw it did not work, so I chose a different one. I didn't know what to do anymore because nothing felt like it was working (ET 3).

Discipline because of the language barrier. I had to come up with novice techniques to get there. I started doing a reward system with stickers (NT 13).

Participants observed that learners displayed empathy and responded to how teachers handled misbehaviour among their peers. Novice teachers directly addressed disciplinary issues, while experienced teachers delved into the underlying causes of misbehaviour. Management tried to offer feedback and support to motivate learners to adhere to classroom rules (Terada, 2021). Participants NT 9 indicated, "I would shout at one child, and the other child would get frightened. My HOD did bring it to my attention and explained to me how to go about doing things."

Establishing a positive classroom atmosphere and earning learners' trust and cooperation is crucial for effective management, as emphasised by Williams and Burden (1997). Novice teachers received guidance and support from experienced colleagues and administrators to develop strong classroom management skills. Learners attempted to challenge novice teachers, but senior teachers' presence quickly altered their behaviour (ET 7). Some novice teachers possessed exceptional management skills that enabled them to identify and address problematic learner behaviour. The following excerpts demonstrate novice teachers' need for support from mentors:

Novice teachers come in and cannot control the classes—even grade 4 classes (ET 10).

When they come, they don't know whether to shout at the kids, which hinders performance in the classroom (DH 1).

They get rude towards them when you tell them this is a new teacher. Well, when we are there with the new teacher, they will obviously behave (ET 7).

Their discipline skills are quite good; about two or three of them. They are able to identify the problem learners straight away (ET 7).

The research participants faced significant challenges in managing a classroom and maintaining discipline. They needed help in ensuring a structured learning environment for their learners. Lack of experience with behaviour management techniques during the early

years of teaching was a primary reason why discipline problems persisted. Finding the right balance between being friendly and strict, dealing with disruptive learners, managing large classes, facing learners' attitudes towards male and female teachers, facing a lack of parental support, and experiencing difficulties in disciplining techniques were some of the problems novice teachers encountered. Due to their lack of experience, teachers could only connect with some learners and felt disconnected from others.

5.3.3 Category 2: Support from experienced teachers and school management team

According to the data retrieved, novice teachers received support as they transitioned into school teaching. However, it is essential to note that the level of support varied across different schools. Novice teachers received guidance and support from various sources such as school management teams, experienced teachers, subject heads, peers, online resources, and external teachers through workshops, discussions, meetings, feedback, collaborative efforts, open door policies, professional development, collegial support, and motivation. The most important priority was to ensure a seamless transition by strictly following the policies and procedures of the school in question. Novice teachers received guidance on how to be effective classroom managers, teachers, and administrators through practical experience. Experienced professionals had to recognize the challenges faced by novice teachers and provide comprehensive solutions to support their growth. The following themes are derived from this category and will subsequently be discussed.

5.3.3.1 Theme 1: Support with curriculum issues

Novice teachers revealed that they sought guidance from experienced teachers and department heads in their school environment. By gathering information and participating in discussions, novice teachers learned teaching methods (NT 7). Networking with peers in similar positions and seeking advice from seasoned professionals during this transitional phase greatly benefitted novice teachers. Despite needing expertise, they were determined to follow procedures and policies effectively to achieve their objectives. Some of the teachers shared their experiences on what transpired during the training phase:

We were getting help from different places, coming together, and discussing with each other. This is what worked for me (NT 7).

As a novice teacher, I did not know anything, and the training I received was not seen in a negative light. It was just a stern way. I had to do things by the book, but I enjoyed it. It helped me grow because I would do things haphazardly if they did not train me (NT 8).

Basically, our induction is to introduce themselves and show them the work I am currently teaching. I showed her my prep file and daily forecast, which we were supposed to teach (ET 7).

Novice teachers reported that, despite their mentors needing more training or time to assist them during their transition into teaching, they received consistent guidance from the school department head. They felt that they were learning how to handle different situations within the school every day but acknowledged that it could be difficult to hear negative feedback or admit when they were wrong. Nevertheless, these participants recognised that receiving positive feedback and being assured they were on the right track was essential for their development:

It is not easy sometimes when you hear a no. Sometimes, it is also good when we say we are wrong. We need someone like that as a teacher to tell us that. We know we are going on this path. That is what helps us to grow every day (NT 8).

One teacher helped and comforted me by telling me I would get used to the school (NT 14).

I was given all the different policies, how to take leave, how to go about it, and the teachers' dress code. There was corporal punishment that was not allowed (NT 9).

Data also showed that department heads mentored novice teachers and offered an open-door policy, providing the necessary training. Participants often sought assistance from senior teachers and department heads to gain experience. Participant NT 13 did not receive formal training and depended on colleagues or department heads for assistance. Nonetheless, the participant acknowledged that learning occurred through practical experience:

The new teachers and our HODs put us under their wing at our school. They have an open-door policy. We receive lots of training (NT 3).

When I feel overwhelmed and don't understand something, I turn to my HOD or one of the senior teachers for guidance. They have more experience than I do, so I try to learn from them and gain more experience myself (NT 11).

I wasn't given training. I just basically had the help of my colleagues and my HOD. Whenever I had questions or problems, they would assist me. I learnt along the way (NT 13).

The department heads introduced novice teachers to their mentors during orientation, assigning each novice teacher a mentor from their grade level. Meetings were held at the start of the term to guide teaching, conducting assemblies, and record-keeping. One participant received a formal orientation booklet covering all training aspects and suggested yearly training. Nonetheless, the participant acknowledged that learning occurred through practical experience:

I did have a short orientation meeting with the head of the department when I started. I was also given mentor teachers whom I could refer to during the first couple of terms (NT 9).

They guide everything that is expected of us, from when we arrive to when assembly begins, marking the register, and starting to teach, among other things (NT 10).

I received a formal orientation. There were even booklets which we had to read. Everything was done formally so they wouldn't have any questions or gaps in the training (NT 8).

The grade convenors provided unwavering support to novice teachers, guaranteeing a seamless transition. Novice teachers were given comprehensive instructions for each term, encompassing quad duties, organizing class lines, prioritizing learner needs after breaks, enforcing discipline, inculcating values, and acting as mentors to learners. Buddy teachers, too, held several duties, including imparting lessons, organizing schedules, detecting knowledge gaps, and giving direction. From the first day, they assist novice teachers and ensure

compliance with staff room regulations and afternoon duties. The following excerpts demonstrate the encouragement and assistance provided by grade convenors and buddy teachers:

The grade convenors tell them exactly what needs to be done and how with duties. Suppose a child is doing something wrong. Don't say it is not your child that you don't have to worry about. We should be caring for every child, trying to help them, mentor their learning in every way possible. So, it starts from the top (ET 9).

Mentoring by buddy teachers includes lessons on how to do ground duty, how to read the roster, what time teatime is, the rules of the staff room and things like that, not only about teaching (DH 5).

The previous teacher gave me her file and showed me the books I must use. I also received ATP's and textbooks, and then they gave me files and stationery (NT 15).

Data emerging from the study revealed that novice teachers often struggle with meeting deadlines, which can be a source of anxiety during their first year. The school management team recognised the challenges of administrative tasks, particularly for those who needed to gain experience. For instance, completing learner profiles by the end of each term was daunting, but it is an essential task that helped teachers keep track of their learners' academic progress. Despite the learning curve, many teachers found this aspect of their job fascinating and rewarding. Ultimately, thoroughly understanding each learner's educational history was crucial for providing an adequate education. The following excerpts are about the support provided by management members to novice teachers:

The first year was different regarding meeting deadlines, but management understood me well. They understood that I was getting on my feet; I was helped a lot on the way. So, like learner profile, I never came across that where I had to do a learner profile for a learner every term on their progress (NT 13).

This part of the year was the crunch time where reports, learner profiles, report comments, IQMS, the HOD comes and supervises you, and they do ongoing checks on us (NT 13).

Preservice teachers transitioning into their teaching careers received varying support from different schools. Some schools provided guidance on discipline, curriculum delivery, procedures, and policies, while others failed to do so. Novice teachers were advised on specific learners, planning records, content, daily forecasts, lesson duration, procedures, the code of conduct, classroom management, and classroom requirements. Collaboration among novice teachers was encouraged, and department heads provided training with an open-door policy and were willing to extend the training. Effective time management was essential during the training programme to ensure meeting all deadlines. In addition, all participants were advised to utilise the knowledge and skills they had gained to produce professional and exceedingly impactful presentations.

5.3.3.2 Theme 2: Support with professional development

Novice teachers must receive unwavering support, guidance, and ongoing training to become skilled teachers. Presenting and interpreting the curriculum are fundamental teaching components requiring steadfast commitment from school staff and novice teachers. In the study on novice teachers' challenges, mentors emphasised encouraging novices to avoid isolation and proactively support and interact with each other. Novice teachers prioritised engaging in conversation over conflict resolution as part of their development. The principles of the South African Council for Teachers (SACE) were adopted, thus promoting teacher professionalism and ensuring that teachers conducted themselves appropriately.

My mentor also told me not to be a lone ranger, so socially, we are all there as a team, so we have to support each other and socially interact with others and also deal with other teachers. We need to have a method of resolving conflicts (NT 8).

In terms of professional development, how I carry myself out, the audience, or the learner and how I should behave around other staff members (NT 8).

The principal has given us a code of conduct that helps because we know what we must do at work (NT 11).

Mentors in schools play a critical role as positive role models for novice teachers. Novice teachers looked up to their mentors for inspiration on teaching techniques and approaches. Improving classroom management skills was essential for all participants. Mentors, being seasoned teachers, possessed valuable insights on effective teaching and learning strategies.

Therefore, any recommendations regarding classroom management were greatly valued. One participant noted that mentors guided successful teaching methods, particularly in classroom management, administrative tasks, and professional development on presenting oneself in the classroom.

I received help from my mentor, especially when it came to classroom management tips. Your mentor is someone who guides you but also someone that you look up to and what to work with. So, lots of admin work. My mentor helped me with professional development and how I present myself in the classroom (NT 8).

At the beginning of each year, the Education Department conducts workshops to update teachers on various subjects. Novice teachers could attend these workshops to familiarise themselves with subject policies and requirements. NT 3, a participant, disclosed attending numerous workshops organised by the school, including CPTD. These workshops aimed to assist teachers in becoming familiar with school procedures. They focussed on completing tasks, implementing interventions, and exploring effective teaching strategies to improve curriculum delivery.

They attended only the department workshop. We sent novice teachers and even supplied transport for them (DH 5).

Everything is novice, even CPTD. If we were unfamiliar with it, the school workshopped or sent us for a workshop to receive adequate training (NT 3).

The purpose of the meetings was to train novice teachers and encourage communication with department and subject teachers across various levels. Discussions were held to find practical solutions for the challenges faced by the novices:

Support included meetings with both HODs and the subject teacher. Discussions are constructive because you get to know some things and are part of something (NT 11).

In January, a team building thing and understanding more of the things we discussed, especially when it comes to leaving, is the way you need to conduct yourself at work, which is really constructive (NT 11).

Novice teachers often face challenges, but schools provided some support to help them adjust to the environment, learners, and culture. One school offered a formal, structured orientation with essential information presented in the form of a booklet. Mentors guided novice teachers through administrative duties, delivering content, and meeting professional standards. Participants report that mentors are role models who help them imitate best practices. Novice teachers attending grade and subject committee meetings and department workshops gain tools to handle classroom challenges more effectively.

5.3.3.3 Theme 3: Support with parent engagement

Collaborating with parents to meet the needs of learners is a common practice in some schools. NT12, a novice teacher, effectively established a positive rapport with learners while also professionally addressing parental concerns. Additionally, the department head reached out to parents as needed. However, for novice teachers, engaging with parents can prove to be a daunting task.

Amidst the pandemic, educational institutions proactively connected with parents of learners who were facing academic difficulties. The department head played a pivotal role in ensuring clear and effective communication with the parents. The participants shared the following experiences on parent-teacher consultation:

Some do not attend to their learners' problems because most of the learner's parents are young (NT 8).

They don't give me any attitude. I just explain to them politely in the proper manner so that I don't have any bad relationship with the parent (NT 12).

We have parents' evenings, and when we have a problem, we call them in as soon as we encounter a severe issue. We have teachers on the committee for learner support (ET 7).

When Covid hit us, we did not have one-to-one parent meetings. We only had to call parents whose children were struggling. Again, I had support there as well. Then my HOD told me, this is the form you fill. You ask the parents these questions to find out this information (NT 13).

It was necessary to establish a consistent time to communicate with parents and keep them informed about their child's progress. Novice teachers were trained rigorously on how to handle parent interactions professionally. The school notified parents promptly whenever a learner struggled and demanded support, providing concrete evidence of meetings and intervention strategies. Department heads supported novice teachers consistently until they felt confident handling situations independently, and the Head of the Department intervened assertively when teachers could not resolve challenges with parents. The following passages discuss the assistance provided by management personnel to new teachers:

Have a set time to communicate with parents. If the learners are not performing well in the first and second tests, they should be able to tell if the child has a problem (ET 10).

There was no communication with the parents the whole year; the teacher only called the parents when the child was not promoted, which can be a problem (ET 10).

The HOD and the teacher meet with the parents. The HOD assists until the teacher is in the right position (ET 4).

If they face a challenge beyond one-on-one, together with the parents, then the HOD intervenes. When there is a challenge, go to the HOD first, discuss it, and get some guidance on handling such situations (ET 4).

When parents are called to discuss their child's behaviour, particularly in cases of bullying, it is often the case that parents view their child as blameless and have a skewed perspective. It is crucial, however, not to make excuses for the child's behaviour and to hold them and the child accountable for the actions.

That was one episode, basically, and the parent was very rude. Then, I had good parents who understood and were willing to support me as a teacher. You work with this child and change their situation (NT 5).

Whenever the problem escalates, the SMT deals with this. We have a meeting together, all of us with the parent, and we try and resolve the problem (NT 5).

According to participant feedback, schools excel at collaborating with parents. Novice teachers make building trust and establishing shared objectives a top priority. Some schools even conduct parent-teacher consultations to address learner needs effectively. Novice teachers are trained to conduct professional meetings with parents and receive full support from mentors and school administration during urgent times.

5.3.3.4 Theme Four: Support with administration

Novice teachers faced many obstacles, including managing administrative tasks alongside teaching and ensuring satisfactory outcomes. This process was time-consuming and overwhelming, requiring a significant amount of effort. Participants shared that simplifying administrative duties was challenging because they had to become familiar with various administrative tasks completed, checked, and reviewed by the Department of Education. Additionally, maintaining records was strenuous.

They cope even if it is difficult because they are not used to record keeping. We show them this must be the evidence because if the department comes, they must see the evidence of what you have done (ET 8).

We can help the novice teacher fill in the records and show the HOD (ET 5).

Some schools utilized a show-and-tell approach, providing teachers with a step-by-step method to efficiently compile subject files containing skills, values, assessments, diagnostic analysis, intervention strategies, subject improvement, and results. School mentors were responsible for demonstrating and guiding novice teachers with practical administrative duties, filling in gaps and addressing aspects not covered in tertiary education.

The new teacher receives guidance on the ATPs and where to get the information, step by step on how to use the ATP and the content from the books, skills, and values. Learned how to set a test or exam and create questions using Bloom's taxonomy (ET 6).

So, you can cover all that work, all the skills and values you need to teach, so you are not only showing them you are doing an example. From there, how to set a test or an exam because many don't know the different levels or how to prepare questions. You must sit with them and show them Bloom's taxonomy (ET 6).

Also, the admin that comes with teaching. I got a lot of assistance from all the teachers and the HOD. It really helped me with subject improvement; again, it is something taught outside of varsity (NT 2).

Experienced teachers and department heads provided varying levels of support to novice teachers based on each school's goals. Novice teachers needed to close any gaps in their knowledge and skills quickly. School programmes require completion of the curriculum, submission of learner scores, curriculum planning and tracking, and tracking of learner efforts. Participants received information and tools, but support needed to be more consistent due to time limitations and school employee availability. Novice teachers were responsible for seeking assistance on their own. Administrative tasks were time-consuming, and delivering information to a diverse classroom was challenging. Some schools offered additional support through planned techniques to quickly onboard novice teachers.

5.3.4 Category **3:** Strategies to support novice teachers

The success of novice teachers heavily depends on the support strategies they receive during their training. These strategies are typically provided through mentoring and school professionals who aim to equip novice teachers with the necessary skills, techniques, methodology, and knowledge of the school's policies and procedures. Different schools may use a range of approaches, such as effective collaboration, knowledge sharing, communication, collegial support, motivation, and continuous professional development, to ensure novice teachers are fully prepared. By implementing these strategies, schools aim to facilitate a smooth transition for novice teachers, with the development process hinging on the school's support systems and the motivation of the novice teachers. The following themes are derived from this category and will subsequently be discussed.

5.3.4.1 Theme 1: Mentoring and coaching

Novice teachers faced numerous challenges during their early teaching years, affecting their curriculum delivery, learners' progress, and sustainability. Some schools tried to employ effective mentoring and coaching to support novice teachers' growth in both their professional and personal aspects (Vikaramin, Mansor & Hamzah, 2017). Mentoring was particularly valuable in keeping teachers in the classroom during their difficult early years (Mkrtchyan & Gurin, 2022).

Teachers who serve as mentors rely on their professional experience, teaching skills, teacher education, and personal experience to impart their knowledge of instruction (Mkrtchyan & Gurin, 2022). Establishing a successful working relationship with mentees requires time and effort on the mentor's part. Lasczik, Hudson and James (2019) suggested that good relationships are built through effective communication, attentive listening, trust, modelling lessons, providing feedback, exploring the prerequisites for teaching, and sharing the mentor's extensive teaching experience.

During an interview, one participant mentioned that the mentorship onboarding period at their school lasted at least a year (DH 2). The department head actively participated in coaching and teaching novice teachers through sessions, mentoring, and leading by example (DH 2). Participant ET 8 mentioned that "At the same time, the production cycle continued throughout the year."

According to participants, newcomers frequently encounter difficulties at the beginning of their careers. Participants requested a week to observe and shadow someone, especially those studying from home rather than attending an educational institution, highlighting the importance of mentoring and coaching (NT 10). In addition, NT 13 shared that novice teachers in an unfamiliar setting must receive a comprehensive orientation and acquaint themselves with new individuals and procedures. Every educational institution operates differently. Therefore, having a mentor to steer them in the right direction would be advantageous. Participant NT 13 commented that "We would have been significantly more equipped if we received proper instruction from the outset instead of being abruptly thrown in."

Influential mentors possess a solid reputation, coaching ability, strong communication skills, knowledge of teacher development stages, understanding of adult learning, and exceptional classroom pedagogical and instructional knowledge (Koki, 1994). Furthermore, they should exhibit strong interpersonal skills. Participants acknowledged that the department head's mentoring enabled them to gain and implement efficient classroom management strategies. During the orientation session, DH 2 gave novice teachers an overview of the school's policies, procedures, and systems. Mentors were instrumental in communicating school requirements. As per ET 6, mentoring should involve not just the mentee but also the HOD and management.

The HOD must provide guidelines for their expectations during the mentoring process. We are so focused on the new teachers and just putting them with the experienced teachers, but we don't tell them this is what you need to do, how you need to groom them up, what you need to show them (ET 6).

According to DH 3, department heads rigorously monitor novice teachers throughout the year and ensure they are promptly paired with experienced mentors to provide the necessary support. Weekly or bi-weekly meetings are held with the senior and novice teachers to discuss progress and challenges the mentor faces. These may include novices who refuse to take advice or learn from their seniors or are concerned about the senior teacher's willingness to guide them. Time management was also crucial, as mentors needed to devote a few hours per week after school.

NT 1 reported that although not attached to a mentor or an experienced teacher, the HOD was the one that assisted, "The help related to lesson planning, assessments, and everything to teach".

They were our HOD as well as our mentors. Very, very helpful, most support received in curriculum coverage and discipline. The younger learners' parents are very protective, as they should be, but sometimes you need a balance (NT 3).

She was there to tell me this is the programme of assessment, this is how you fill things, this is what is expected, this is the daily focus. And she helped me a lot with disciplining the kids and managing a classroom (NT 11).

Simbirsk (2016) emphasised the importance of mentorship in establishing, aiding, and directing first-year teachers' professional development. With mentorship, novice teachers can fulfil their expected responsibilities and succeed in their careers. Mentorship is a continuous learning process for teachers that begins in their initial years and persists throughout their careers. The following are excerpts from interviews about the support provided by mentors:

At the school where I was previously, we immediately attached a mentor as soon as a new teacher came in. That educator was never without a senior teacher to assist. The mentorship was there for at least until the duck could swim (ET 3).

In our school, there is no lack of mentoring because there is always a new teacher to mentor, and they also feel free to ask other teachers (ET 5).

Mentoring programs are crucial in addressing curricular challenges faced by novice teachers. According to Avalos (2016), teachers must divide the curriculum into daily lesson plans and learner activities that align with the required standards, knowledge, beliefs, norms, and values. Inexperienced teachers benefitted from the professional guidance of experienced teachers who acted as mentors. They assisted novice teachers in developing their teaching skills, welcoming them to their new environment, and helping with curricular activities. The following extracts reveal the support novice teachers receive from mentors:

I wish we had experienced teachers who could help these new teachers become familiar with the institution and all the procedures and things happening within an institution (NT 4).

Through mentoring, the buddy teacher and grade convenor discuss content, teaching strategies, how to unpack the lesson, and how to teach maths, fractions, and methods. (ET 10).

Mentors provide support and guidelines to new teachers on keeping records, marking learners' books consistently, giving learners homework, recording what has happened, recording injuries, and informing parents (ET 8).

They are attached to the oldest teacher here, the most experienced teacher in that grade. They learn from them for days and then pass them on afterwards. The common support areas will be your classroom management, discipline, and curriculum (ET 1).

At schools, the principal and other relevant staff are the teachers' point of contact through the Buddy System Programme if they encounter any problems. Implementing this programme is crucial for professional development. Guiding teachers in this programme should possess moral values, patience, and friendly personality traits such as approachability, cheerfulness, responsibility, and honesty. According to Abdullah, Alzaidiyeen, and Seedee (2019), a guiding teacher who acts as support in this programme is a guiding force that provides support and challenges to their colleagues.

Darby (2022) suggested that teachers should look for a colleague to discuss their teaching issues with instead of addressing classroom issues alone. The most important thing to remember is that finding a teaching partner can be a fantastic way to improve as a teacher who values equity. Consulting with a dependable colleague can provide a forum for discussing classroom issues, fresh concepts, and adjustments to the curriculum or homework. This person can be a sounding board and an idea buffer. The following extracts provide details on the support received from teaching partners:

The buddy teacher is a teacher who has been in the school for many years and knows the ins and outs and will tell you how to do it, what to do when to do it, and how to handle parents (ET 10).

There is also a grade convenor; they buddy with that person. Teaches them the basic ethos of the school. From there, they know what we are talking about when they sit in the senior phase or intermediate phase meeting (DH 5).

They are probably given a run-down regarding the school's general rules and what is expected of them (ET 6).

We have a buddy teacher. You know that whenever you have a problem photo coping, how to do this, how we dismiss learners, which ways can she try for punishment, the learner that is struggling, we go to (ET 10).

Studies conducted by Gholam (2018), Mangope et al. (2018), Pennanen, Heikkinen & Tynjälä (2020), Salvage, Cannon & Sutters (2015), and Schulleri (2020) have shown that mentoring is a crucial tool for novice teachers to develop their professional and personal skills in a real-world teaching and learning environment. Novice teachers often struggle with classroom management and curriculum delivery and look for mentors to guide them in teaching subjects and instructional strategies (Athanasese, 2022). Mentors who teach the same subjects and grade levels as novice teachers are often selected to form natural resource partnerships that help them teach learners more effectively (Ross et al., 2011).

It is essential to choose mentor teachers who possess the necessary skills and subject-matter expertise and are committed to working with novice teachers. Mentors provide a safety net for

novice teachers as they test their knowledge and skills (Ross et al., 2011). Since mentor's guide mentees in their teaching careers, they should be subject-matter experts with teaching experience (Maringe & Ojo, 2017; Wasonga, Wanzare & Dawo, 2015). The following extracts discuss the support from subject-specific mentors:

They attached teachers already teaching the different subjects. Try to match them with what they have studied or what they know (ET 6)

They assisted with assessments because the teacher was new and inexperienced. The mentor assisted because she had experience in teaching (NT 14).

She did help me. She also had experience in. So, she was really helpful when it came to assessments. She even showed me the website to download the assessments (NT 14).

There is mentoring taking place, yes, assigned through subjects and phases and looking at the needs of a particular teacher (ET 4).

I had mentors who helped me grow in different subjects, and they contributed a lot to what I am doing at the moment with different subjects (NT 4).

5.3.4.2 Theme 2: Communication, knowledge sharing and collaboration

Educational institutions need to adopt effective collaboration and knowledge-sharing strategies in addition to mentoring novice teachers, as suggested by Astuti (2016). Mazorodze and Mkhize (2022) highlighted the benefits of the knowledge-sharing approach and found that it enhanced cooperation, information availability, and decision-making in higher education. Collaboration among teachers is a crucial component of their professional lives as it allows them to continuously evaluate and enhance their teaching strategies (Vangrieken et al., 2015). Moreover, novice teachers often need help communicating at an educational institution, which is crucial for teaching and learning to continue. As highlighted by Nowacki and Bachnik (2016), knowledge sharing, which involves imparting knowledge to others within an institution, is essential to communication within the educational environment.

To supervise novice teacher training, Mikser et al. (2020) suggested that the school management team plays a vital role. Engaging with more experienced colleagues, arranging

group projects to share expertise, and participating in other activities can help young specialists improve their professionalism and, more importantly, their self-confidence (Astuti, 2016). Participant NT 10 stated that, "You have to find your way into this team because we have to work together at the end of the day. So, teamwork is very important because a lot gets done."

Prioritizing knowledge management is crucial for professional development, as not paying attention to this aspect can have severe negative consequences for any educational institution. When employees cannot access vital information required to perform their duties, productivity and relationships can be adversely affected. Research has proven that sharing knowledge can significantly improve teamwork and productivity in the workplace while ensuring the institution's knowledge base is secure for future use, even during personnel changes (Belin, 2021). One participant emphasised the importance of schools taking the lead in implementing technology:

Teachers are techno-savvy, the fourth industrial revolution, coding. It is good to be under leadership that's open and "willing to learn". It changes the dynamics. It changes the whole school; it makes it fun to be there, the technology, the different methods, and the different resources (NT 3)

Novice teachers at one of the participating schools gained knowledge through an induction programme at the start of the academic year. They received a manual that covers essential information such as policies, processes, grades, subjects, projects, exams, events, co-curricular and curricular activities, sports, and the code of conduct. Additionally, the school management team advised novice teachers to read the code of conduct for teachers and learners to enhance their knowledge (DH 2). Novice teachers were encouraged to seek assistance and advice on handling discipline problems at any stage through collaboration with experienced teachers (ET 9).

Sit with them as senior teachers tell them how it is to be done. If there are problems, they can come to us any time, and we will help with discipline. We give them different advice on how to handle their discipline problem (ET 9).

The schedule for specific and general meetings were communicated, and school requirements were defined. At staff meetings, there were discussion on school and staff matters and phase

meetings on teaching, curriculum, and discipline. Certain schools had grade convenors who organised meetings, informed teachers about what they needed to do, delegated the examiner and moderator for tests, recognised issues, sought solutions, and arranged standardised examinations. Participant ET 10 also reported that grade convenors' rotations occurred every two years. ET 6 mentioned that they had weekly meetings at their school to discuss what was happening and how novice teachers were dealing with challenges and experiences. In addition, novice teachers exchanged their experiences and ideas with other novices. Furthermore, the department head highlighted issues that novice teachers face:

The grade convenor usually calls the meeting, tells us what to do, delegates who sets which test, and who does what (ET 10).

You are a convenor for two years, and the next two years will be another teacher; it is not the same person all the time (ET 10).

We do have subject meetings in our school, so here we meet subject teachers for a particular subject. New teachers can be part of the subject meeting (ET 4).

Yes, the new teachers, our HOD, put us under their wings at our school. They have an open-door policy (NT 3).

Collaboration among teachers during these meetings helped novice teachers feel less isolated and unsupported. Participant ET 6 suggested having weekly meetings to discuss issues, experiences, and ideas. Novice teachers shared their experiences and ideas with other novice teachers. Department heads and teachers become friendly and empathetic towards novice teachers by sitting in committee meetings to address challenging issues (ET 6).

Teachers collaborate to share knowledge, evaluate teaching methods, assist colleagues, and develop new teaching techniques (Vangrieken et al., 2015). Collaboration between experienced teachers and novice teachers is essential for effective professional development. This partnership helps teachers gain a deeper understanding of their subject matter, rethink their current teaching strategies, and learn new techniques to use in the classroom (Patzer, 2023).

According to Mikser et al. (2020), mentoring programs succeed when supervisors drive the process and help their workers achieve their professional goals and improve their classroom management skills. Teachers learn more from their colleagues than from mentors or traditional workshops and seminars. Collaborative strategies also lead to more creativity in the classroom, increased confidence in teaching abilities, and greater job satisfaction among teachers (Patzer, 2023).

Novice teachers greatly benefited from their assigned mentors, who provided essential support, guidance, and information about school processes and procedures. ET 4 highlighted the mentors' helpful communication and their role in assisting with time management. The monitoring schedule for novice teachers was aligned with a term program, providing them with advanced notice of lesson observations and allowing them to prepare assessment plans and lesson materials. NT 3 also mentioned the Professional Learning Communities (PLC) at their school, where teachers shared solutions to challenges in different subjects, strategies, and resources, making it a valuable learning and communication platform for novice teachers.

The term programs align with what is needed at a particular time, giving time to prepare. Will know precisely when observation of lesson will take place, book control, and submission of lesson and assessment plans (ET 4).

Planning had to be child-centred- to occupy learners. It would not have worked if I had gone with the teacher-centred approach (NT 3).

Teachers wrote instructions rather than relying solely on verbal communication through WhatsApp or vague directives. The school provided clear policies and procedures to ensure clear and transparent communication. Department Head (DH 1) indicated, "We communicate via group chats and WhatsApp if it is an urgent message or does not need a meeting. However, if it needs a meeting, a communication book is sent, and when we meet, we discuss and decide."

Effective communication with learners and parents is essential for teachers to achieve advanced performance. Novice teachers must develop interpersonal communication skills and adapt their approach to the learners' level. The skills required in this context differ significantly from those taught in universities. Misunderstandings often arise from a need for more communication,

mainly when dealing with sensitive issues involving parents, children, and staff. To tackle these challenges head-on, novice teachers should improve their communication skills when interacting with learners and parents.

Communicating at the children's level is a skill. A huge difference must come down to the learners' level (ET 3).

Without communication, there is much misunderstanding, and if there is a misunderstanding, there is a problem. So, with communication, it is a matter of prioritising it and being sensitive when dealing with parents, children, or staff (NT 8).

Also, how we speak with the learners, we can only speak if it is well-prepared English. So, when we teach, we have to build our vocabulary; reading many books helps build vocabulary, and the way we speak has to be eloquent (NT 8).

According to the Institute of Education at the University of Warwick, teacher leaders are highly skilled teachers who teach in the classroom and step up as leaders when new ideas and advancements are required. They hold crucial positions where they offer unwavering support and critical feedback to their fellow teachers as they experiment and implement new teaching techniques and approaches. (Patzer, 2023).

5.3.4.3 Theme 3: Behaviour management strategies

Teachers, particularly new to the profession, face a significant challenge in managing classroom behaviour. More practical tools and strategies are needed to avoid frustration and quitting (Atkins & Morgan, 2018).

To address classroom behaviour, novice teachers can use preventative measures and positive consequences for appropriate learner behaviour. Implementing antecedent- and consequence-based behavioural interventions can create a positive classroom environment, reduce teacher stress, and enhance teaching enthusiasm, leading to improved learning experiences (Parsonson, 2012).

An antecedent strategy is applying a pre-planned, intentional classroom behaviour management technique (Parsonson, 2012). Schools offer disciplinary tools like demerit books

to aid novice teachers in managing difficult classroom situations (NT 8). Experienced teachers can explain how the system works and advise inexperienced teachers to complete discipline slips only after receiving proper instruction regarding the appropriate course of action. When demerits are assigned, the consequence is detention or completion of a task. Participant NT 5 stated that once someone has five demerits, they will receive detention. NT 9 noted that their school duration of detention increased from 30 minutes to one hour if ineffective. Unsupervised and unenforced detention led to continued disciplinary issues and transgressions by learners. NT 2 stated that misbehaving learners receive demerits, which may hinder their participation in extra-curricular activities. Conversely, well-behaved learners could participate in sports clinics and school events without problems. Some schools use colour-coded cards to track violations of school conduct, and receiving three red cards may result in suspension. The following extracts reveal the information received from participants on discipline strategies:

We have our demerit book; we give merits and demerits when learners do something disruptive, incomplete work or anything that is not allowed. After five demerits, we send the letter home (NT 9).

If they have a certain number of demerits, they don't participate. So, it was also a kind of positive reinforcement. If you behave, you join the sports (NT 2).

Some schools have colour-coded cards – if you have a red card, that's like a danger zone for the child, and if you get three red cards, you are suspended. (NT 8).

After the second detention, you contact the parent; the third detention is suspension. They forgive them by the third detention (NT 5).

The educator won't struggle with discipline if they are following the tools. There is no use saying go to a file and disciple a child. Right at the beginning, sit with the forms and explain how it is filled, what needs to be done (NT 3).

It is important to note that children learn the value of activities by being effectively taught the necessary skills to perform them. Learners can access and enjoy the action before being offered extrinsic rewards for acquiring and displaying the required skills (Parsonson, 2012). Participant NT 2 has adopted positive reinforcement by rewarding good behaviour with rewards, which motivates learners to complete tasks and exhibit good behaviour. This approach has proven to

be more engaging for learners and has led to increased productivity, as opposed to punishment, which can make them feel alienated and hinder learning (Taft, 2023). One of the participants (NT 2) indicated, "Rewarding good behaviour that worked for me - toys and stickers, they felt motivated. That also helped with discipline and also helped them complete tasks."

Taft (2023) advocated for an educational approach to managing challenging behaviour in the classroom. A positive classroom environment with teacher support for diverse needs is crucial. Participants found strategies for handling diverse learners online and using a document camera can prevent disciplinary issues and keep learners engaged.

A document camera projects on the board what you write. When you write on the board, your back sometimes faces the learner. That's why they take advantage (NT 8)

For classroom management, I got some excellent ideas from the net. Different methods to handle different children. Different strategies of teaching as well (NT 5).

5.3.4.4 Theme 4: Instructional strategies and classroom management practices

Effective learning development requires active teacher participation, a well-planned curriculum, and guidance from specialist teachers (Lunenberg & Ornstein, 1996; Saidin & Veloo, 2020). Specialist teachers are responsible for conducting subject planning to create an effective curriculum. In turn, subject heads transfer planning responsibility to novice teachers. If learners face difficulties, they first speak with the subject teacher. If the subject teacher is ineffective, they escalate the issue to the grade head and, if necessary, the department head. According to Department Head DH 2 mentoring occurs from the subject to the department head and indicated that "they also have a system where we choose senior teachers, grade heads,"

According to NT 7, university training for novice teachers is heavily theoretical. As a result, subject specialists help novice teachers master each subject. Additionally, experienced teachers mentor novice teachers in tasks like creating question papers, using moderation tools, developing subject improvement plans, maintaining records, discussing policies, and testing knowledge. Moreover, experienced teachers closely mentored novice teachers to understand the curriculum, assessment, and subject policies and create comprehensive lesson plans. The support mentors require is evidenced in the following extracts:

Firstly, they should understand the curriculum documents, the code of conduct for the learner and the educator and what is expected of them. Then, each subject has a policy that teachers must read (ET 5).

We studied more theoretical than practical work. I need to be oriented quite thoroughly as to what is expected of me and the subject I am doing. Get specific teachers who also specialise in that to sit with me in the beginning and tell me this is what is expected of me. So, there are no surprises, and I am left to figure it out (NT 7).

Have a comprehensive meeting with them, show them all the documents they need in possession and show them how they work, even if it is done over time. Today, we do the observation file; tomorrow, we do the mark book; on Wednesdays, we do the register (ET 3).

Attach criteria to teachers teaching the subject so they get the best experience regarding what they want to learn. (ET 6).

Four science teachers will set the assessments together- there is guidance there. Attaching an educator to a mentor slowly evolves because the mentor needs more free time (ET3).

Providing a comprehensive user manual from one school was highly influential in establishing a solid foundation for successfully delivering the curriculum. The manual provided valuable strategies for effective curriculum delivery, guidelines for classroom management, and resources for department heads to facilitate year-round monitoring and supervision, contributing significantly to the program's overall success. According to ET 3, "School B has a comprehensive package in place regarding HOD tools. The classroom management tools are given to the novice teachers at the beginning of the year."

Specialist teachers must implement innovative practices and modern technologies to improve learning. Consistent effort is required to maintain a diverse curriculum and teaching approaches (Kapur, 2021). Novice teachers should prioritize developing planning skills, attending professional development workshops, and reviewing, producing, and updating lesson plans to enhance their teaching abilities (AL-Naimi et al., 2020). In addition, the school website can

provide resources to support novice teachers with conduct, dress code, challenges, and solutions.

Novice teachers were given annual teaching plans (ATPs), lesson plan templates, subject trackers, and teaching plans from experienced teachers (NT 2) to help them get started. They also sought information about the purpose and function of ATPs and the assessment programme (NT 11). Experienced teachers were responsible for monitoring standardized exams, class evaluations, and assessments to meet the standards of the Department of Education and stay up to date with technological advancements.

That website should have all the challenges young teachers face and solutions. It becomes more accessible than just figuring out everything when you get there. It is just tricky if you are in this department. You are new; you have every information, and if it is changing, you can constantly update (NT 11).

Effective classroom management requires proactive strategies that foster a supportive learning environment for all learners, regardless of age or grade level. Content management and behaviour control are two critical components that teachers must consider when developing a comprehensive management programme (Fodness, 2023). Content management refers to controlling people, objects, and physical space in the classroom and delivering the curriculum. Teachers must willingly adapt their lesson plans or curriculum to effectively manage the classroom's content and the school's physical space and layout (Fodness, 2023).

To do this, novice teachers need essential strategies to maintain control in the classroom and create a comfortable, safe, and engaging learning environment (NT 8). Teachers had to employ learner-centred strategies to increase learners' interest and involvement and connect with their backgrounds and cultures. Teachers with good classroom management can inadvertently help novice teachers learn essential skills in managing learners, curriculum, time, and resources (ET 6).

Teachers support the learning environment without dominating it, and learners benefit from this approach. Rules maximise learning, and the teacher wants to build a supportive atmosphere for all learners. The learning environment had to be carefully curated, from grouping learners to arranging furnishings and enhancing the aesthetics with visual assets. Teachers were aware

of difficulties or problems that learners encountered, which impacted their concentration. Teachers had to ensure that learners felt comfortable and interested in their studies by investing effort into creating a welcoming and supportive environment (NT 8).

The teacher is accountable for building an environment conducive to learning. When many children know the rules, optimal learning and teaching can take place. Also, when we look at the furniture arrangement, sometimes children like working in groups. That's how they learn better (NT 8).

Also, regarding how I managed my class, I know how to sort the seating arrangements, even when I split the class to accommodate difficult children (NT 3).

For optimal learning, there should also be something that gives aesthetic value: the classroom with flowers and charts, some things that make them feel happy. So, when we teach, they are in a good mood because we don't know their challenges (NT 8).

It is learner centred. The teacher is not there to boss them around. They feel that they are valued, and they become interested in the lesson. Lesson plans link the different cultures (NT 8).

As a new teacher embarking on a career, it can be disheartening when colleagues discipline learners strictly. The action can lead to confusion and a false impression that all methods of discipline are acceptable. However, partnering with an experienced colleague who effectively manages the classroom could provide practical techniques to learn from (ET 6). Managing learner behaviour and maintaining a productive learning environment intimidates novice teachers. Therefore, Saidin and Veloo (2020) suggested that every novice teacher should be paired with an experienced teacher to receive guidance on managing learners from diverse backgrounds.

While some teachers may feel overwhelmed in the classroom environment, novice teachers can gain valuable insights from colleagues who have mastered classroom management, the curriculum, and time management. Remembering that each classroom is unique, and what works in one may not work in another is crucial. Therefore, teachers must be adaptable and willing to adjust as necessary (Fodness, 2023).

If you are with an educator who's managing the class, has different challenges and is doing it well, then you pick up these good ideas as well and adopt them into your classroom management and lessons (ET 6).

Classroom management involves teachers' methods to organize their classrooms to encourage learner collaboration and participation while minimizing disruptive behaviour, as stated by Arends (1997). Novice teachers are provided with various classroom management techniques at the beginning of their careers (Blake, 2017). A well-managed classroom demands a classroom management plan vital for social-emotional growth, academic engagement, and learning outcomes (Fodness, 2023).

Inexperienced teachers adapt their classroom management strategies to meet the needs of individual learners. Participants in the study conducted one-on-one reading sessions with some learners while assigning group tasks to others, especially in large classes (NT 1). Furthermore, NT 11 indicated that effective classroom management requires the preparation of lesson plans and daily schedules (NT 11). According to Beers (2012) and Sharplin et al. (2011), novice teachers should use the Internet to find extra information and resources when faced with challenges and issues. They must also pursue professional growth independently of their schools.

For the preparation of the lesson, you need to do it the day before. Obviously, when you get into class, you know what to do. If you need to google something, you get some information because, truly, with the books, it is not everything. Daily forecast needs to be updated to know when you will be doing this (NT 11).

5.3.4.5 Theme 5: Collegial support

Studies by Bottiani et al. (2019) and O'Brennan et al. (2017) have found that providing adequate support for teachers from colleagues can significantly lower stress and burnout levels, making collegial support an essential resource in schools for completing professional development. Teachers who receive support from their colleagues' report that it helps them to address school-related issues. Collegial networks among teachers can also provide natural stress support, according to Kaihoi, Bottiani, and Bradshaw (2022). It is unclear how much teachers depend on their colleagues for stress relief or if these relationships positively impact their mental

health. Teachers need professional support from their colleagues to avoid struggles with work adjustment or inadequate mentoring.

Novice teachers face challenges in their first years of teaching that can decrease with colleague support. Thomas et al. (2019) stated that having a robust social support network among colleagues correlates positively with job satisfaction and intrinsic teaching motivation. In the case of ET 3, the institution did not provide specialised coaching for novice teachers. However, the teachers offered each other mutual assistance by sharing knowledge and ideas about various aspects of the educational environment. Moreover, the department head provided concurrent supervision and mentorship to four teachers. Educational institutions should acknowledge the importance of collegial support and allocate adequate resources for novice teachers to achieve success.

There is no specific mentor the teacher is anchored to. I feel that when an educator comes to school, that should happen. It doesn't, but we have the HOD here, so every HOD handles four teachers (ET 3).

As reported by participants, many novice teachers received necessary support through collegial participation. Peers and mentors significantly impact novice teachers' efficacy. Those who benefit from this support are more likely to continue in their profession (Johnson, Kraft & Papay, 2012; Charner-Laird et al., 2016).

Experienced teachers often encourage novice teachers to take it one day at a time, assign less time-consuming tasks, and emphasise the importance of flexibility and adapting to job challenges. ET 9 boosted novice teachers' morale with stress-reducing team-building exercises. Balancing academic work with extracurricular activities is essential, and novice teachers are excited to participate in team building. According to NT 6, experienced teachers provided valuable assistance to novice teachers. As a result, novice teachers became more organised, focused on manageable tasks, and documented their progress. Additionally, they learned to record and store all subject-related research.

So, it is not only work, but we want a balance. New teachers are more eager than us for team building (ET 9).

She told me that in real life, the perfect world we live in is sink or swim out there. It is difficult everywhere. You have to adapt yourself, your mind, and your brain to think that you will have challenges anywhere and cope (NT 6).

Positive outcomes for learners and staff are linked to collaborative and supportive interactions. These outcomes include increased teacher satisfaction, flexibility, learning opportunities, and learner achievements (Johnson et al., 2012; Charner-Laird et al., 2016). As noted by experienced teacher ET 6, veteran teachers must take the time to get acquainted with their new colleagues, comprehend their backgrounds, encourage them during difficult times, and hold regularly scheduled meetings to discuss issues related to teaching. Novice teachers require guidance and support in their initial years, including assistance navigating school procedures and forming relationships with colleagues who can provide extra information and support. Establishing a supportive environment where teachers feel comfortable seeking guidance and support can lead to better learner outcomes and increased teacher development.

Experienced teachers should help novice teachers feel welcomed and included in the classroom by accommodating and encouraging them. It is important for educators to recognize the unique experience of novice teachers and prioritize relationship-building over curriculum completion and grading (ET 6).

Try to be more assistance to them if they are having issues in terms of difficulties. However, I also set a time every week to go through the problems they are having in terms of being able to teach because, in the first few years, they are trying to find themselves. I remember new teachers coming in; they were lost and did not know who to go to (ET 6).

During their early years of teaching, teachers should seek support, guidance, and learning opportunities from their colleagues, particularly those with more experience in specific subjects and phases (Charner-Laird et al., 2016). Novice teachers benefit from observing experienced colleagues' approaches and strategies for classroom management and learner engagement. Collegial support is crucial for novice teachers to understand learners' perspectives, receive suggestions, and determine what works best. NT 13 received guidance from an experienced teacher to improve their assessment of first-year learners. By the second year, they learned to evaluate learners' work and realised that daily variations in behaviour and attentiveness

required multiple assessments. Novice teachers need to seek guidance and support from experienced colleagues to ensure the best outcomes for their learners.

Advice – you may not take everything, but you may take what works for you (NT 11).

It became overwhelming for me at first in the first year, and in my second year, I was quite comfortable with how to mark and how to grade assessments (NT 13)

Aspiring teachers should strongly desire to impact their learners' lives positively, utilise the knowledge they gained during their studies, and acknowledge the need for ongoing learning (Feiman-Nemser, 2003). As a novice teacher at an urban school, NT 4 was initially surprised by the differences in his schooling experience. However, with support and encouragement from his colleagues, he quickly adapted to the school's operations and effectively performed his duties. He was particularly interested in the school's sporting events, award ceremonies, and celebrations.

I can promise you I am doing well every time.... I am always the programme director. I am swimming now (NT 4).

5.3.4.6 Theme 6: Ongoing professional development training

Novice teachers encountered diverse learners and institutions, leading to numerous challenges when starting their careers (Mahmoudia & Özkana, 2015). Professional development programs aimed to help novice teachers reflect on and learn from underlying sources of tension related to these issues (Stewart & Jansky, 2022). Teacher development programs were essential for maintaining high-quality instruction and enabling teachers to explore new career paths, develop innovative teaching techniques, and advance their professional growth as teachers and individuals (Mahmoudia & Özkana, 2015).

Schools use various methods to help novice teachers adjust to their subjects, including departmental subject workshops, internal development workshops, and professional learning communities (PLCs). At the start of the school year, workshops were arranged to review subject requirements. Additionally, participating schools hold meetings to discuss the curriculum, specifically how to structure lesson plans. Networking with teachers from different

schools is also encouraged, contributing to professional growth by exchanging ideas and implementing new approaches in the classroom.

For four years, I only attended one workshop- grade R specific. I attended an engaging first workshop (NT 13).

Weekly subject and grade meetings also occurred on Fridays (DH 2).

Networking with schools – teachers go to different schools to share ideas in the classroom and learn new ways (NT 8).

All teachers received identical information, but ET3 suggested providing paper materials for inexperienced teachers while acknowledging the necessity of digital means. This approach ensured that novice teachers could effectively execute their duties:

Workshops for CPTD were held. Our school does the SACE booklet. These are useful for new teachers—also the department workshops. New teachers are well supported (ET 3).

We have workshops and subject-committee meetings. We have booklet handouts. We even help them structure their reports (ET 5).

We have the Educator Act, the duties of an educator, and even the PAM document (ET 3).

DH 3 highlights the importance of professional development in differentiated learning to meet the needs of learners with varying styles. Whether new or seasoned, teachers should attend workshops to learn about diverse learning techniques and activities that are most effective for individual learners. Teachers can ensure every learner thrives by tailoring lessons. The following extracts highlight the need for professional development in differentiated learning:

Teachers can benefit from differentiated learning content if we know how learners perform and why they perform in a certain way; then, obviously, we can structure our lessons to cater to all the needs of the learners in our classes (DH 3).

Classroom is filled with learners with different learning styles, so just sticking to one teaching method will not do justice to all learners... (NT 8).

Networking with colleagues from nearby and remote schools is crucial for novice teachers to overcome classroom challenges. Online technologies like Classroom and Telegram help teachers learn how to collaborate when planning lessons and accessing information, leading to career development. The following extracts reveal the participants discussion on subject planning and presentation and the quest for resources:

When it comes to lesson plans in terms of preparation, there is research, textbooks, and lots of videos (NT 8).

For me, the biggest challenge was the ATP. I did not know how to use it, how to test, where to get the content. The ATP does not have content; you research the resources to use—no teacher's guide (NT 1).

I got into groups with other teachers from the district for each subject, which also helped share ideas, assessments, worksheets, and lesson plans (NT 2).

So, find out how other people do lesson plans, figure it out myself, find the resources on the internet or join telegram groups (NT 7).

Sometimes, when you watch the video, you learn a lot and exactly how you want to teach it. You learn from experienced professors from different countries and what methods they use. Differentiated learning can be adopted in South Africa (NT 8).

Professional development programs should address the daily challenges teachers face to benefit novice teachers entering the field (Gibbons & Cobb, 2017). A novice teacher from a school in the programme praised the professional development options, including Quality Management System (QMS), team building, quarterly staff training, and attending workshops. Additionally, the school's SMT has an open-door policy for inexperienced teachers to seek support and growth opportunities.

The school has QMS and staff development four times a year to capacitate us. SMT mainly uses the open-door policy. When you feel like you need assistance, you approach the SMT (NT 4).

Novice teachers believe continuous professional development (CPD) is crucial for improving teaching skills. Teachers persist with CPD throughout their careers, enhancing their professional and pedagogical practices. Tyagi and Misra (2021) highlighted that self-initiated and externally planned programs are the most common CPD methods for teachers.

I definitely think that new teachers coming into the system should have a workshop on everything that is required, starting with all the department documents, like subject improvement plan and following of ATPs, using CAPs document. (NT 2).

The department allocates the time; it must be a must because of standards; once they say this is how we will do, schools can follow that (NT 10).

Previous studies suggest that addressing the unique challenges faced by novice teachers during professional development can lead to innovative solutions. Collaborative discussions have resulted in valuable solutions, increasing participants' confidence (Stewart & Jansky, 2022).

5.3.4.7 Theme 7: Motivating teachers

Teaching is a profession that demands hard work and dedication, but it is also highly rewarding and fulfilling. It has the potential to make a positive impact on the next generation (Meador, 2023). As novice teachers face difficult situations like disruptive learners, learner issues, and pressure from superiors, school management teams must encourage and support them. According to Meek (2022), motivated and empowered teachers can establish a collaborative and engaging learning environment.

Starting a teacher's career at a school can be challenging, requiring much energy and endurance. Motivation is essential and classified as either extrinsic or intrinsic. Extrinsic motivation is affected by external factors such as rewards, evaluations, and test scores (Williamson & Blackburn, 2022).

Some schools prioritise inspiring and rewarding teachers for successfully handling teaching and learning needs, regardless of experience. Managing a classroom is challenging and requires weekly reviews of resource organisation and learner work and assessments. Having good time management skills is crucial, especially when grading learner assignments. One school awarded Teacher of the Year to those with excellent classroom management and gave intrinsic awards to encourage novice teachers. The following excerpts reveal the encouragement received by novice teachers:

I can safely say they are getting there, but the challenge is marking books. But ever since we awarded the teacher of the year, it has helped a lot (DH 2).

The system of awarding teachers. If you accumulate more at the end of the year, they get a big award. So, you become the teacher of the year (DH 2).

At the beginning of the year, the school organised workshops to review tasks, responsibilities, policies, and procedures. Meetings are held after each term to discuss successes, difficulties, and approaches in various areas of teacher functionality. Team-building exercises inspired novice teachers to perform their tasks proficiently. Department heads emphasised the importance of teaching careers seriously and belonging to a group for career advancement. Identifying with the educational institution gave an advantage. Management noticed that inexperienced teachers showed signs of relief after participating in certain activities.

It is important to inculcate the importance of teaching and the love for learning in new teachers. Teachers should be made aware that they are doing one of the most important jobs in the world. Everything they do in class impacts whether the child succeeds as an adult (DH 3).

At the beginning of the year, we have team building with the staff. After having this, you can see the relief on their faces. It gives them something. I am here now. I am part of something (DH 2).

ET4 strategically grouped novice teachers and engaged them in team-building activities to reduce workplace stress. Morning briefings provided updates on daily events, goals, and

expectations. These meetings helped inexperienced teachers plan their daily activities and fostered camaraderie among them, according to ET4.

Per term, our school has a function celebrating the spirit of unity. Avoid isolation, and the teacher feels comfortable. In the morning briefing, I gave instructions. In the morning, you know what is happening that day (ET 4).

Teachers were motivated and encouraged by their leadership abilities during team-building exercises, which allowed them to showcase their unique strengths. Novice teachers benefited from enhanced professional development, resulting in improved learner performance. The following extracts show participation in school activities was crucial for achieving these outcomes:

Initially, you feel a little bit of isolation just finding your place. I just jumped in at first and became part of it. It's either sink or swim. I also got involved in the social life of the school. I attended the staff events team building. They also get to see the different side of you. In team building- you see the different sides and the strengths that you have. You can showcase if you have leadership and other strengths that you have (NT 3).

We have staff activities, a staff fund committee, and weekend away trips to build your teams (NT 2).

Differentiating between motivated and unmotivated teachers is easy. Motivated teachers are passionate, dedicated, aligned with management and colleagues, and always striving for self-improvement. Unmotivated teachers need more interest, are disengaged, and put in minimal effort. While extrinsic rewards may provide temporary solutions, long-term change is possible by igniting intrinsic motivation (Williamson & Blackburn, 2022). The following extracts are from the interviews about teacher motivation and involvement:

Novice teachers are given more opportunities to take on challenges in schools, be part of different communities, attach to certain teachers and help them be part of things like school sports. Feel part of the school activities, and then you become and feel part of the school. Getting involved is important (DH 3).

I was then on the fundraising committee and developed very good strategies in that committee. I was doing things voluntarily, and I was the one who initiated things (NT 4).

Based on gathered data, newly appointed teachers encountered several challenges, including managing learner behaviour and achieving the desired academic performance. It was imperative to support educators in enhancing their classroom management skills and ensuring the successful delivery of the curriculum. A motivated teacher, driven by personal or external factors, can facilitate learning experiences for learners more effectively. To achieve optimal learning outcomes, some of the school management and personnel implemented various strategies to support and empower novice teachers.

5.4 SUMMARY

In this section, the researcher analysed data generated from novice teachers' experiences at five selected schools in the King Cetshwayo District. The data were presented thematically, highlighting the challenges and support provided to novice teachers. The challenges identified ranged from initial difficulties to time management, insufficient induction programmes, classroom management issues, curriculum delivery, administrative tasks, and parent communication. Several factors contributed to the slow development of novice teachers' skills, such as the classroom environment, learner background, motivation, communication barriers, interest, and learning obstacles that affected teacher performance. Support from stakeholders helped alleviate anxiety and provided a support system for novice teachers to continue with their responsibilities. Schools implemented strategies to address novice teacher issues, including coaching, communication, collaboration, collegial support, knowledge sharing, motivation, professional development, instructional strategies, feedback, and disciplinary control.

The following section summarises the study and presents its findings and recommendations. Additionally, it will introduce strategies in the form of a model to help effectively induct novice teachers in the King Cetshwayo District.

CHAPTER 6

SUMMARY, FINDINGS, RECOMMENDATIONS AND CONTRIBUTION

6.1 INTRODUCTION

The present study focused on the transition of novice teachers from pre-service to professional teaching, highlighting the challenges encountered by novice teachers in reconciling the pedagogy they learned in tertiary institutions with the realities of classroom teaching. The study examined the challenges and support mechanisms available to teachers with less than five years of teaching experience.

The current chapter presents a summary, findings, recommendations, contribution of the study.

6.2. SUMMARY OF THE STUDY

This chapter included a synopsis of the six chapters. The research focused on the challenges and strategies that schools in the King Cetshwayo district used to support novice teachers during the early years of their teaching profession. The study's primary objectives were to

- identify the major challenges and problems facing novice teachers in the initial years of teaching in primary schools in KwaZulu-Natal.
- establish the roles and responsibilities of mentors, the School Management Team and other stakeholders in the development of novice teachers in primary schools in KwaZulu-Natal.
- determine which strategies, if any, are currently offered to novice teachers to overcome their problems and be more effective in these schools; and
- develop strategies in the form of a model to introduce a more effective induction programme of novice teachers in primary schools in the King Cetshwayo District of KwaZulu-Natal.

Chapter 1 discussed the challenges novice teachers face in applying theoretical knowledge to practical classroom teaching (cf. section 1.1, page 1). The main issue was proper induction and overcoming overwhelming expectations (cf. section 1.1, page 1). The study's rationale was based on the constructivist view of learning, as advanced by Vygotsky and Piaget (cf. section 1.3, page 6). The research question was broken down into sub-questions (cf. section 1.4, page 6), and the objectives and goals were derived from these sub questions (cf. section 1.5, page

7). A qualitative research design was used to explore the difficulties and experiences of novice teachers (cf. section 1.6.1, page 8). The research paradigm (cf. section 1.6.2, page 9), research approach (cf. section 1.6.3, page 10), population and sampling (cf. section, 1.6.4, page 12), specific instruments, and data collection techniques were described (cf. section, 1.6.5, page 13). Building trust with participants was also highlighted (cf. Section 1.7, page 15). Section 1.8 outlined the ethical considerations researchers must consider when conducting research.

In Chapter 2, the reviewed literature highlighted the challenges and strategies of novice teachers. The term "novice teacher" was intentionally defined by several researchers in section 2.2.1. The school's expectations of novice teachers were explored in section 2.2.2. Section 2.2.3 explained how novice teachers were able to efficiently teach in the 21st-century classroom. Also, the challenges experienced by novice teachers with a focus on common issues such as instructional practices (cf. section 2.3.3, page 34), classroom management (cf. section 2.3.3, page 34), stress and workload (cf. section 2.3.4, page 35), social challenges (cf. section 2.3.5, page 36), adaptational challenges (cf. section 2.3.6, page 37), and technological challenges (cf. section 2.3.7 page 37) was examined. Section 2.4 highlighted the importance of induction programmes, and section 2.5 discussed the models and programs of different countries. The researcher explored teacher induction programmes in South African provinces. These included the induction programme in Johannesburg schools (cf. section 2.6.2, page 50), the Tembisa induction programmes for novice teachers (cf. section 2.6.4, page 51), induction programmes for novice teachers in Limpopo Province (cf. section 2.6.4, page 52), and the school support programme for novice teachers in Western Cape (cf. section 2.6.5, page 53).

Chapter 3 explored the constructivist approach as a theoretical framework to study novice teachers' experiences. The chapter covered the concept of constructivism (cf. section 3.1, page 56), the origin of constructivism (cf. section 3.3, page 57), and the principles of constructivism (cf. section 3.4, page 58). The contributions of constructivist theorists, including Piaget (cf. section 3.5.2, page 62), Vygotsky (cf. section 3.5.3, page 64), Dewey (cf. section 3.5.4, page 65), and Bruner (cf. section 3.5.5, page 66), were also explored. Constructivist pedagogy is utilised in creating classroom environments, activities, and methods that facilitate meaningful learning (cf. section 3.6, page 69). The researcher discussed the influence of Piaget and Vygotsky on classroom learning and teaching methods. Section 3.7 compared the constructivist approach to conventional teaching methods. Section 3.8 explored studies on the role of constructivism in knowledge construction. In section 3.9, the researcher discussed how

constructivist teaching practices required learners to internalise and transform new knowledge. Section 3.10 outlined challenges related to constructivist approaches, drawing from studies conducted in Iraq, Kenya, and Ethiopia. Section 3.11 considered constructivism as part of teacher training programmes while acknowledging novice teachers' difficulties in implementing constructivist principles. Finally, section 3.12 discussed the relevance of constructivism for novice teacher education in South Africa.

Chapter 4 discussed the research methodology. In section 4.2, the main research questions and sub-questions reiterated the purpose of the study. The study's objective emanated from the research question in section 4.2. Section 4.3.2 discussed the phenomenology research design. Section 4.3.3 delved into the research paradigm, where the interpretive approach is the lens through which the researcher viewed the challenges faced by novice teachers. The philosophical assumptions of epistemology (cf. section 4.3.3.2, page 88) and ontology (cf. section 4.3.3.1, page 87), as well as the research methodology (cf. section 4.3.3.2, page 88) that formed the foundation of the interpretive research paradigm, were explored. The researcher used the phenomenological qualitative research approach outlined in section 4.3.2 to interpret and analyse the data generated and focused on the population, sample size, and the sampling techniques used to select participants (cf. section 4.5, page 91). The researcher explained the system used to analyse the data, and the chapter outlined the systematic processes used to code, categorise, and identify themes in the data (cf. section 4.6, page 94). The study's trustworthiness in section 4.7, addressed credibility, transferability, dependability, and confirmability. Ethical principles were also applied to ensure relevant and trustworthy results (cf. section 4.8, page 99) — finally, a discussion on the study's limitations is in section 4.9.

In chapter 5, the qualitative results were presented and analysed. The research participants were given their respective codes in section 5.2 and a review of the study objectives in section 5.3.1 was provided. In addition, a five-step process to analyse the data, with categories based on the study's objectives. Section 5.3.1 also presented the themes that emerged: novice teachers faced various challenges in the initial days (cf. section 5.3.2.1, page 108), managing time (cf. section 5.3.2.2, page 112), mentoring and induction (cf. section 5.3.2.3, page 116), and classroom management and discipline (cf. section 5.3.2.4, page 119). A seamless transition into the profession meant novice teachers receiving guidance and support from experienced teachers and senior management (cf. section 5.3.3, page 123). Support strategies in the school environment were explored and presented (cf. section 5.3.4, page 132)

6.3 FINDINGS FROM THE STUDY

The primary objective of this empirical study was to present research-based strategies that can support and develop novice teachers in the King Cetshwayo District. Upon thorough analysis, the results obtained from the study were meticulously examined and discussed in detail, considering the research objectives set at the beginning of the research process.

6.3.1. Findings about objective one: To identify the significant challenges and problems facing novice teachers in the initial years of teaching in primary schools in KwaZulu - Natal

After analysing the literature and empirical data it was evident that novice teachers needed support transitioning from pre-service to professional teaching. The main objective of this study was to identify any significant challenges and issues that novice teachers encountered during their initial years of teaching. The following significant findings emerged:

Novice teachers faced multiple challenges, including managing high expectations, adhering to school policies, managing workloads and time, classroom management, effectively delivering the curriculum, dealing with classroom dynamics, and communicating with parents and colleagues (cf. section 5.3.2, page 108, 5.3.2.1, page 108 and 5.3.2.2, page 112). In addition, novice teachers faced challenges managing classroom behaviour and disciplining learners, often experiencing a reality shock due to disruptions like attention-seeking behaviour, gender-based responses, friendly teacher demeanours, cramped conditions, large class sizes, lack of motivation in senior learners and undisciplined behaviour resulting from home environments. Incomplete tasks, delayed grading submissions, and the need to discipline learners were severe obstacles to learning. Assistance was needed to develop time management skills due to issues detracting from teaching time (cf. section 5.3.2.2, page 112 and 5.3.2.4, page 119).

Furthermore, novice teachers encountered various issues related to learners, such as diverse backgrounds, learning disabilities, communication barriers, completion of activities, and learner behaviour. Novice teachers faced challenges in creating a welcoming environment for learners with diverse backgrounds and had to demonstrate understanding and responsibility when imparting values. Novice teachers, particularly those working with diverse learners, needed help to apply their theoretical knowledge effectively in real-life situations despite having a solid grasp of the subject matter. This gap between theory and practice proved a significant obstacle (cf. section 5.3.2.1, page 108 and 5.3.2.3, page 116).

Schools faced difficulties communicating with diverse learners and required novice teachers to be knowledgeable and committed to inclusive education. This meant acquiring rigorous training in cultural sensitivity, inclusivity, and diverse learning and teaching styles. They needed access to methodologies and techniques to assist learners with learning barriers and to address learner's overwhelming feelings and confusion. The study highlighted the need for an inclusive learning environment where teachers, managers, support staff, parents, and guardians work together towards a common goal (cf. section 5.3.2.1, page 108).

The study revealed that novice teachers struggled with time management, causing a negative impact on classroom instruction and learning. They faced challenges balancing instructional activities, high work-related stress, and hindering learner development. The most critical obstacle was efficient time use, balancing the individual needs of learners with classroom tasks and administrative duties. This task was particularly challenging for novice teachers, who had to deliver the curriculum within a specific timeframe, which resulted in increased stress and difficulty in understanding the material (cf. section 5. 3. 2. 2, page 112).

The study highlighted the difficulties experienced by novice teachers in lesson planning, curriculum development, monitoring, providing information, covering content after the teacher's absence, record-keeping, and assessments. The study found that novice teachers needed help completing their duties and developing efficient time management skills. In addition, the use of trial-and-error strategies to evaluate teaching and grade learners (cf. section 5.3.2.1, page 108 and 5.3.2.2, page 112). Time management challenges, a lack of experience, heavy workloads, language barriers, insufficient lesson planning, pacing issues, disorientation, and disruptive learners were the major obstacles. The obstacles faced by novice teachers made it challenging to execute lesson plans efficiently, necessitating support to develop time management skills (cf. section 5.3.2.2, page 112).

The study revealed inconsistent implementation of orientation or induction programmes. Sometimes, department heads focused only on introducing novice teachers to the school personnel, school infrastructure, and curriculum implementation. Schools expected novice teachers to assume their duties without support or direction, leaving them to rely on senior teachers and department heads who, most of the time, faced time constraints. This lack of support made it difficult for novice teachers to implement school policies and teaching standards fully (cf. section 5.3.2, page 108 and 5.3.2.3, page 116). Subsequently, this was

particularly challenging for novice teachers, who find it overwhelming to navigate the school environment without clear guidance (cf. section 5.3.2.3, page 116).

Novice teachers often require additional resources and support to overcome obstacles, even when mentored by experienced teachers. Despite schools' efforts, participants believed more effort was needed for their development, and time constraints also limited the teachers' roles in mentoring. Novice teachers faced challenges in subject content, adapting to school culture, and learning practical strategies, and lacked dedicated mentors. Schools struggled to allocate time and personnel for sustained mentoring of novice teachers (cf. section 5.3.2.3, page 116).

Due to a lack of technological skills, some novice teachers struggled to integrate advanced technology into their lessons. Participants who received training were better equipped to handle classroom dynamics. In contrast, those who did not receive an adequate induction programme struggled to apply their knowledge in real-life classrooms (cf. section 5.3.2.1, page 108 and 5.3.2.3, page 116).

6.3.2. Findings about objective two: To establish the roles and responsibilities of mentors, the school management team and other stakeholders in the development of novice teachers in primary schools in KwaZulu-Natal

The study found that inexperienced teachers received varying degrees of assistance from senior teachers and department heads, reducing obstacles and enhancing the institution's objectives. The following significant findings emerged:

Participants received guidance and support from various sources, including school management, subject heads, peers, online resources, and external teachers. These resources facilitated discussions, meetings, feedback, collaboration, an open-door policy, collegial support, and motivation for novice teachers. However, more consistent support was needed to meet the school's requirements (cf. section 5.3.3.2, page 127; 5.3.4.2, page 137 and 5.3.4.6, page 150). The school provided informal support to novice teachers through mentors, who guided them through administrative tasks, content delivery, professional standards, assemblies, and record-keeping. Some participants requested more training or mentor support for novice teachers transitioning into teaching (cf. section 5.3.3.1, page 123 and 5.3.4.1, page 132).

The participants found the orientation programme inadequate and recommended a yearly training program. As a result, they relied on colleagues and department heads for guidance and practical experience. The department head assigned mentors to novice teachers, and some received regular guidance. The findings highlighted the department head's crucial role in mentoring, particularly in certain schools (cf. section 5.3.3.1, page 123). Furthermore, mentors played a significant role in preventing teacher isolation, providing practical support, and promoting collaboration among colleagues. They helped novice teachers familiarise themselves with conflict resolution and codes of the South African Council for Educators (SACE). Mentors not only provided guidance but also motivated and encouraged professional development. This included learning strategies, teaching methods, and administrative tasks (cf. section 5.3.3.2, page 127 and 5.3.4.1, page, 132).

Grade convenors and buddy teachers significantly mentored novice teachers in their development. They guided quad duties, class organization, learner needs, enforcement of discipline and instilling of values in learners. Buddy teachers also provided critical guidance on lessons, schedules, knowledge gaps, staff room regulations, and afternoon duties. (cf. section 5.3.3.1, page 123 and 5.3.4.1, page 132).

Schools provided adequate policies, procedures, and discipline guidance but needed more personnel to assist with mentoring. Novice teachers received specific guidance on subject planning, classroom management, and individual learning styles (cf. section 5.3.3.1, page 124). Meetings were held to assist novice teachers interact with department heads and subject teachers, and find practical solutions, resulting in participants developing the tools to handle classroom challenges more effectively (cf. section 5.3.3.1, page 123). School management organised workshops for novice teachers, providing updates on subject requirements and continuing professional teacher development (CPDT) procedures, information on task completion, intervention implementation, and teaching strategies for curriculum development (cf. section 5.3.3.2, page 127).

Novice teachers were encouraged to prioritise parent-teacher consultations, supported by mentors and school management. The department head guided novices to establish positive relationships with learners and maintain professionalism. However, meetings with parents were challenging; as a result, the department head often facilitated the communication between the novice teacher and parent. Consequently, novice teachers received training to hold meetings,

devise intervention strategies, and seek assistance. In challenging situations, the department head provided assertive intervention and support for handling serious problems like bullying (cf. section 5.3.3.3, page 129).

The study found that novice teachers faced administrative tasks and gained knowledge from experienced teachers and school administration staff. Educational institutions provided structured training sessions and practical demonstrations to enhance teaching skills. Mentors and managers supported novice teachers in practical tasks like filling gaps, compiling files, planning assessments, developing intervention strategies, and improving topics (cf. section 5.3.2.2, page 112).

6.3.3. Findings about objective three: To determine which strategies are currently offered to novice teachers to overcome their problems and be more effective in these schools.

The employment of novice teachers in the school necessitated various support strategies to ensure their success. The following significant findings emerged:

Novice teachers effectively utilized mentoring and coaching strategies, where experienced teachers shared their skills, techniques, methodology, and knowledge through collaboration, communication, collegial support, motivation, and continuous professional development. (cf. section 5.3.4, page 132; 5.3.4.1, page 132; 5.3.4.2, page 137). The department head guided novice teachers through mentoring sessions and modelling exercises, enabling them to implement classroom management strategies, communicate school policies, procedures, and systems, and address common issues (cf. section 5.3.4.1, page 132 and 5.3.4.2, page 137).

Novice teachers in some schools were paired with experienced mentors for weekly or biweekly meetings to discuss their progress and challenges, guiding them in responsibilities such as record keeping, grading, homework, injuries, communication, and discipline (cf. section 5.3.4.1, page 132 and 5.3.4.2, page 137). Novice teachers require mentorship from experienced colleagues, which can be time-consuming but crucial for curricular activities. The mentormentee relationship may evolve, and the onboarding process may take a year in some schools (cf. section 5.3.2.3, page 116 and 5.3.4.1, page 132).

The research suggests that novice teachers often learn from experienced teachers and require support in classroom management, discipline, and curriculum development. Experienced

teachers are often responsible for providing novice teachers with a starter pack, including annual teaching plans (ATPs), lesson plan templates, subject trackers, teaching plans, and information on annual teaching plans and assessment programs while monitoring exams, class evaluations, and meeting the standards of the education department (cf. section 5.3.4.4, page 143). Novice teachers benefit greatly from mentors during their teaching phase, who offer expertise in subject content, preparation of assessments, curriculum understanding, and instructional strategies, making experienced teachers natural resource partners (cf. section 5.3.4.1, page 132).

Schools use the Buddy system, and grade convenors have the experience to support novice teachers. Novice teachers are assisted with the school's ethos and introduced to grade procedures through regular meetings (cf. section 5.3.4.1, page 132 and 5.3.4.2, page 137). The user manual or school handbook with essential information on policies, processes, grades, subjects, projects, exams, events, sports, and codes of conduct are discussed. Grade convenors also encourage collaboration with novice teachers to address discipline issues (cf. section 5.3.4.2, page 137).

The study found that novice teachers received some support through communication, collaboration, and knowledge sharing. Novice teachers requested comprehensive meetings to learn about school requirements and submissions. These meetings focused on teaching, curriculum, and discipline, differentiated teaching methods, fostering teacher collaboration. The meetings discussed promoting diversity and inclusivity in a positive classroom environment. Novice teachers felt supported, and weekly discussions addressed issues and experiences. Schools empathised with novice teachers, addressing their challenges in professional learning communities (cf. section 5.3.4.2, page 137).

Participants appreciated mentors' open communication, especially about the information about school processes. They appreciated the monitoring schedule for novice teachers, aligned with the term program, and advanced lesson observation schedules (cf. section 5.3.4.2, page 137). Participants discussed using Professional Learning Communities (PLC) as a communication platform for sharing solutions and strategies. Teachers from the same subject area attended meetings to address issues. Specialist teachers initially handled subject planning and then transferred the planning to novice teachers after training. Novice teachers received guidance in

curriculum, assessments, and policies and created comprehensive lesson plans (cf. section 5.3.4.2, page 137 and 5.3.4.4, page 143).

Some schools implemented clear policies and procedures to ensure transparent communication with teachers regarding discipline, addressing potential issues with learners and parents. They encouraged using antecedent strategies and consequences-based behavioural interventions to address discipline issues. Experienced teachers explained the system to novice teachers, with some assigning demerits and detention when necessary. Participants also found strategies to handle diverse learners online and suggested using document cameras to prevent discipline problems (cf. section 5.3.4.2, page 137). Participants advocated for a comprehensive user manual and a school website to provide resources for novice teachers on conduct, dress code, challenges, and solutions (cf. section 5.3.4.2, page 137).

The study found that novice teachers primarily sought advice and training from senior teachers during professional training and shared their experiences and ideas with other novice teachers (cf. section 5.3.4.2, page 137).

6.3.4. Findings about objective four: To develop strategies in a model to introduce more effective induction of novice teachers in primary schools in the King Cetshwayo District of KwaZulu-Natal.

The teacher preparation and induction model construction emanated from the strategies reviewed in Chapter Two and the data extracted from the investigation on novice teachers.

The following significant findings emerged from the literature review:

The Droichead school-based model in Ireland aimed to alleviate first-time teacher challenges through mentoring, reflective practices, peer observation, and professional development. Mentors supported novice teachers, while professional teams collaborated with stakeholders to develop teachers (cf. section 2.5.2, page 43).

Qatar's SBSPC school-based support programme partnered with professional specialists to assist novice teachers in curriculum and instructional strategies, using cognitive coaching, mentoring, peer observation, study groups, workshops, lesson modelling, and collaboration (cf. section 2.5.3, page 44).

South Carolina implemented PRIDE, a teacher support programme for novice teachers, utilising strategies, activities, and constructive feedback for efficient teacher development through observation, conferences, and assessments (cf. section 2.5.4, page 44).

The NTCIM induction programme aided novice teachers in becoming effective instructional teachers through professional development, research-based resources, online assessment tools, and one-on-one mentoring (cf. section 2.5.5, page 45). Namibia also introduced an induction program, the NNTIP, in 2011 involving mentors, teacher specialists, and principals. The programme provided training for novice teachers, including coaching, mentoring, individual meetings, classroom observation, networking, and constructive feedback (cf. section 2.5.6, page 46).

The Australian National Teachers' Training Programme (ANTP) provided online induction for novice teachers, with an induction office, induction festival, and support group. Experienced teachers provided individual training and a platform for discussion. The programme also offered orientation, training, regular meetings, and policies (cf. section 2.5.7, page 47).

Johannesburg's district induction programme mainly centred on workshops rather than practical teaching skills for novice teachers. The programme addressed complaints and information provision but needed to prioritise mentor training (cf. section 2.6.2, page 50). Tembisa's induction programme included an orientation workshop, mentoring, and peer support, covering school basics, academics, environment, teaching materials and class management. However, formal networking, mentoring policy, a training programme for management teams, and availability of time to mentor needed to be considered (cf. section 2.6.3, page 51). The Limpopo province emphasized pre-service and continuous professional development, but more induction of novice teachers and structured mentorship programs were needed (cf. section 2.6.4, page 52).

6.4 RECOMMENDATIONS FROM THE STUDY

The data generated in this study was derived from the study's objectives. Recommendations were made in response to the problems and challenges that novice teachers face. The findings discussed above resulted in the following significant recommendations:

6.4.1 Recommendations for objective one: To identify the significant challenges and problems facing novice teachers in the initial years of teaching in primary schools in KwaZulu-Natal

- Schools must clearly communicate classroom teaching requirements, management, and discipline expectations to novice teachers. Design a teacher handbook outlining conduct, punctuality, dress code, and behaviour strategies, and communication (cf. section 5.3.4.2, page 137).
- To improve time management and classroom skills, novice teachers must adopt trial-and-error practices, allocate additional work hours, and establish classroom management systems (cf. section 5.3.2.2, page 112 and 5.3.4.1, page 132). Experienced teachers can dedicate weekly time to address issues and improve teaching styles. Collaborative opportunities and online resources can also enhance time management (cf. section 5.3.4.5, page 147).
- Experienced teachers play a crucial role in mentoring novice teachers, ensuring effective classroom management, discipline, subject teaching, time management, and problem-solving. This approach involves pairing novice teachers with experienced teachers, demonstrating effective teaching strategies, and assisting learners in balancing instructional activities. These mentors can also help learners develop time-management and multitasking skills, and prioritize tasks (cf. section 5.3.3.1, page 123; 5.3.2.2, page 112; 5.3.2.3, page 116 and 5.3.4.1, page 132). Specialist teachers must ensure that novice teachers are allocated sufficient time for effective lesson delivery, promoting learner engagement, presenting lessons and attention span strategies (cf. section 5.3.2.2, page 112; 5.3.4.2, page 137 and 5.3.4.6, page 150).
- Year plans should include mentoring, feedback, observation, and collaborative engagements (cf. section 5.3.2.3, page 116). Staff meetings, phase meetings, mentormentee and professional learning communities must provide feedback (cf. section 5.3.3, page 123 and 5.3.3.1, page 123). Organise workshops on classroom management, discipline, teaching, assessments, and subject requirements for novice teachers (cf. section 5.3.3.2, page 127). A comprehensive school website with procedures, policies, and systems must be available (cf. section 5.3.4.4, page 143).
- Effective discipline is crucial in teaching, and novice teachers must be trained to apply the merit system, maintain open communication with school management, and utilise learner-centred classroom strategies (cf. section 5.3.4.3, page 141). Introduce creativity and provide constructive confrontation to foster learning and address persistent

misbehaviour (cf. section 5.3.2.4, page 119). Positive reinforcement and trial-and-error classroom management methods must also be employed to address discipline and classroom management issues (cf. section 5.3.2.2, page 112).

6.4.2 Recommendations for objective two: To establish the roles and responsibilities of mentors, the school management team and other stakeholders in the development of novice teachers in primary schools in KwaZulu-Natal

- School managers should mentor novice teachers, provide professional learning opportunities, and foster a collaborative culture. They should offer high-quality induction programs for classroom management, lesson planning, assessments, and time management (cf. section 5. 3. 4. 2; page 137). Resources like textbooks, technology, and classroom facilities should also be provided. Management should also advocate with the district for additional resources and support (cf. section 5.3.2.1, page 108 5.3.3.2, page 127 and 5.3.4.6, page 150).
- The department head must train novice teachers, familiarise them with the school's infrastructure and curriculum, and provide ongoing feedback. They must also support mentors and maintain an open-door policy, ensuring all parties are informed and engaged (cf. section 5.3.3.1, page 123). The department head must coach and teach novice teachers through sessions, mentoring, and efficient classroom management strategies. They must also provide a comprehensive overview of the school's policies and procedures, setting expectations, providing resources, opportunities, and mentors, monitoring performance, and identifying areas for improvement (cf. sections 5. 3. 4. 1, page 132 and 5. 3. 4. 2, page 137). Regular evaluation and feedback are essential to help novice teachers enhance their teaching and assessment practices (cf. section 5.3.3.1, page 123 and 5.3.3.4, page 131).
- Mentors play a crucial role in teacher development, involving effective communication, trust, lesson modelling, feedback, and sharing classroom experiences. They welcome novice teachers, help with curricular activities, guide novice teachers on subjects and instructional strategies, and assist with tasks like setting question papers, record-keeping, homework, marking, injuries, and informing parents (cf. section 5. 3. 4. 1, page 132). Mentors act as role models, assisting novice teachers in emulating best practices and providing necessary support. They must allocate time, provide professional experience, and communicate school requirements to ensure effective support (cf. section 5.3.3.2, page 127).

- Experienced teachers provide personalized guidance to novice teachers, collaborating on lesson plans, assessments, and classroom management. They should offer constructive feedback, identify strengths and weaknesses, enhance teaching practices, build confidence, and offer encouragement (cf. section 5.3.3.2, page 127 and 5.3.4.6, page 150). Experienced teachers should also invite novices to observe their lessons, coplan lessons, create assessment tools, and assist in classroom management (cf. section 5.3.3.1, page 123 and 5.3.4.4, page 143). They should help develop effective lesson plans, assist in accessing high-quality materials, and encourage professional development. They also serve as role models, provide emotional support, and act as trustworthy confidant (cf. section 5.3.3.1, page 123 and 5.3.4.1, page 132).
- Schools should foster a conducive environment for novice teachers, promoting collaboration, mentorship, and professional development through mentorship, instructional materials, feedback, financial assistance, a buddy system, and formal evaluations (cf. section 5.3.3.1, page 123; 5.3.4.1, page 132 and 5.3.4.2, page 137).

6.4.3 Recommendations for objective three: To determine which strategies are currently offered to novice teachers to overcome their problems and be more effective in these schools

- Schools must provide a well-structured induction program, comprehensive classroom management training, and lesson plans to ensure a successful first year of teaching. Assessments, time management, adequate time to evaluate lesson plans, one-on-one guidance, and opportunities for ongoing professional development must all be included (cf. section 5.3.4.1, page 132).
- Classroom management abilities, implementing discipline, and organising lessons can be improved by identifying areas for improvement, locating resources, and modifying teaching tactics as necessary. Participating in networking events and workshops on educational technology, classroom management, and curriculum preparation may give a variety of learning opportunities that can be implemented in the classroom (cf. section 5.3.4.6, page 150).
- Opportunities for teacher professional development, such as workshops, seminars, online courses, and conferences, are crucial for identifying strengths and weaknesses, and enhancing new skills (cf. section 5.3.4.1, page 132 and 5.3.4.6, page 150).

- Collaboration improves resource sharing, lesson planning, and promotes best practices.
 Strategies like peer mentoring, class observation, and grade team meetings help novice teachers manage their workloads and stress.
- Building strong collegial relationships through mentoring programs, meetings, and classroom visits can also improve teaching outcomes. Collaborative planning sessions, online platforms, department seminars, support groups, peer coaching, workshops, and networking events can also be effective (cf. section 5.3.4.2, page 137 and 5.3.4.5, page 147).

6.4.4 Recommendations for objective four: To develop strategies in a model to introduce more effective induction of novice teachers in primary schools in the King Cetshwayo District of KwaZulu-Natal.

From the literature review and data generated during the study, the researcher identified strategies to support novice teachers. The following strategies were included in the model:

- Mentoring is a significant component that helps novice teachers meet the expectations and needs of their school and department. Mentors' primary role is to provide support and guidance during pre-service, in-service, and professional development. The school management team is critical in selecting, training, and assuring the availability of time and enthusiasm in mentoring novice teachers. Mentoring aids in learning, subject matter competency, testing and evaluation, administrative tasks, classroom management, discipline, effective communication, time management, and professional development (cf. section 5.3.2.2, page 112; 5.3.2.3, page 116 and 5.3.4.1, page 132).
- Professional development programs are critical for novice teachers' empowerment. The programmes include seminars, workshops, team teaching, online inductions, induction festivals, staff, grade, and professional learning committee meetings. Novice teachers can use these channels to develop networks, support systems, and resources in addition to learning from practice and experience (cf. section 2.5.7, page 47; 5.3.4.2, page 137; 5.3.4.4, page 143 and 5.3.4.6, page 150).
- To implement differentiated teaching, the model contained materials and tools for customising and tailoring lessons for learners of different skill levels. Workshops and seminars offer instructional tools for integrating inclusion and diversity into the curriculum. Mentors and specialised teachers improve instruction practice through

lesson observation, comments, media, lesson plans, and videos. Practical instruction from specialist teachers, retired and experienced teachers, grade heads, buddy teachers, grade convenors, subject matter experts, and university lecturers can enable the delivery of lessons effectively (cf. section 5.3.4.6, page 150 and 5.3.4.2, page 137).

- The initial phase of the teacher development programme included teacher preparation, discipline and classroom management strategies. The pre-service training programme focused on hands-on instruction by experienced mentors, followed by continuous evaluation and feedback of novice teachers. Professional development activities demonstrate how to incorporate technology, instructional materials, and learner support resources for retaining learners' attention. During the onboarding stage, there is a clear demonstration of support, evaluation, and feedback. Novice teachers observe mentors and experienced teachers during the induction period to gain firsthand knowledge on handling discipline issues, time management, and classroom obstacles (cf. section 5.3.4.1; page 132 and 5.3.4.4, page 143).
- The model involves schools collaborating with teacher training institutions to align development activities. From the start of the year, student teaching is a priority involving observation, evaluation, and feedback. During their final year of studies, student teachers attend training schools to familiarise them with school requirements, policies, discipline strategies, technology, and classroom management. Pre-service teachers participate in workshops on teaching methodologies, diversity, inclusivity, and enhancing cultural competency. Workshops also cover curriculum implementation, assessment standards, subject requirements, and time frames (cf. section 5.3.3.2, page 127 and 5.3.4.4, page 143).

6.5 CONTRIBUTIONS OF THE STUDY

6.5.1. Introduction

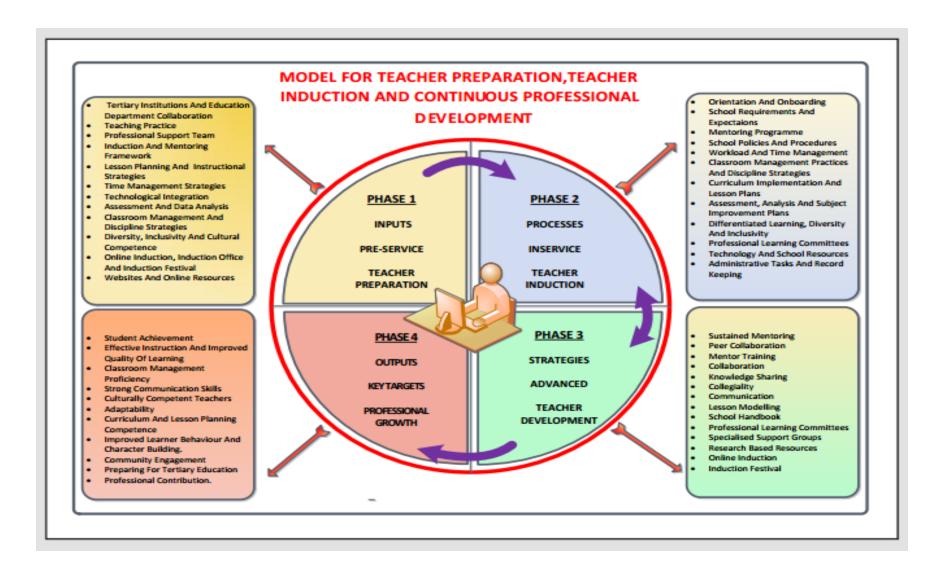
This section explored the researcher's contribution to the challenges faced by novice teachers. The data revealed numerous challenges novice teachers encountered and the support they received from school professionals. The researcher developed a model highlighting teacher preparation, induction, and continuous professional development as crucial elements for positive outcomes for learners and educational stakeholders. The study encompasses contributions to existing theory, expanded ideas for practice and policy amendments, debates, and theory formulation.

6.5.2 A model for developing professional development among novice teachers

A well-designed teacher induction model is essential for practical in-service training and continuous professional development. It should support teacher preparation, guide induction, and prioritise continuous professional development. This study on novice teachers has identified strategies and support systems for developing this model. The model comprises of four main components, namely teacher preparation, an induction process, strategic development, and outputs, interconnected across all phases. This model is presented below and the outcome and main contribution of this study and could assist novice primary school teachers.

This model consists of four phases and is depicted in Figure 6.1 below. Each of these four phases with their respective components are then discussed in detail to describe and explain the model.

Figure 6.1: Model for Techer Preparation, Teacher Induction and Continuous Professional Development (Own)



6.5.2.1 Phase 1: Inputs - Pre-service induction - Teacher preparation

The pre-service induction programme, a collaboration between tertiary institutions and the education department, aims to support novice teachers in their professional careers by providing them with knowledge, skills, and techniques to confidently manage classrooms and deliver the curriculum. This programme ensures competency and proficiency in their roles. The pre-service induction programme includes:

a) Collaboration between Tertiary Institutions and Education Departments

The aim is to align teacher education programs with the department's curriculum, policies, and standards, requiring comprehensive coursework and mandatory inclusion of school policies and procedures in teacher training institutions.

b) Teaching Practice

In the final year, a practice teaching period of at least two days per week should be provided to student teachers, allowing them to apply teaching techniques and theories in real classroom situations, gain insight into classroom management strategies, and acquire engaging learning methods.

c) Professional Support Team

A professional support team, which includes school administration, mentors, peer support, education specialists, professional learning communities, resource and technology support, collegial support, grade convenors, buddy support, and retired professionals, must work together to assist novice teachers. Teams provide comprehensive support and mentoring to prospective teachers to help them develop academic and personal skills.

d) Induction and Mentoring Framework

The education department should offer guidelines for novice teachers, covering needs assessment, onboarding strategies, mentoring, curriculum development, support network, technology, diversity, inclusivity, cultural competence, achievements, recognition, and feedback.

e) Lesson Planning, Instructional Strategies and Technological Integration

Teacher training programs must equip novice teachers with essential skills for effective lesson planning facilitation, including clear objectives, instructional strategies, assessments,

enrichment and inclusivity. Emphasis on critical thinking, creativity, innovation, communication, and collaboration while integrating technology into teaching practices using educational software, online resources, and digital tools.

f) Assessments and Data Analysis

Teach student teachers how to create assessments and analyse data to evaluate assessment practices and learner outcomes. Integrating data-driven strategies into teacher education can help measure student progress and improve instructional techniques.

g) Classroom Management and Discipline Strategies

The student-teacher development programme should combine theoretical and practical knowledge, focusing on classroom rules, organisation, differentiated instruction, effective time management, restorative practices, communication skills, proactive strategies, positive reinforcement, and conflict resolution.

h) Diversity, Inclusivity and Cultural Competence

The training programme must equip teachers with theoretical knowledge and practical skills to teach learners with diverse abilities and backgrounds.

i) Time Management Strategies

Time management strategies like setting goals, prioritising, assessing, and sharing are crucial during teacher training in institutions to ensure a smooth transition into the teaching profession.

j) Professional Development

Professional development is crucial for novice teachers to improve classroom management, discipline, inclusivity, technology integration, curriculum development, time management, and collaboration with school personnel, parents, peers, mentors, and subject specialists.

k) Online Induction or Induction office and Induction Festival

The Education Department mandates novice teachers to undergo an induction programme to develop the curriculum, classroom management, administrative tasks, policies, and a code of conduct accessible to all teachers and stakeholders. In addition, an induction festival may be hosted, featuring resources, technology showcases, computer-based lessons, workshops, and practical demonstrations with support teams and mentors.

1) Websites and Online Resources

The programme provides novice teachers with valuable online resources and professional development opportunities, covering lesson planning, assessment, subject content, worksheets, teaching materials, instructional practices, strategies, and methods, thereby enhancing their teaching skills.

6.5.2.2 Phase 2: Induction Process – Inservice Training

Schools implement an induction process to help novice teachers develop the skills and expertise for classroom management, collaboration with diverse learners, and designing instructional activities and assessment tasks. This in-service training aims to facilitate smooth transitions and navigate challenges, ensuring novice teachers are well-prepared for their new roles. The inservice training consists of:

a) Orientation and Onboarding

Orientation and onboarding are crucial for novice teachers to adapt to the school environment, providing them with essential information like the school's mission, policies, expectations, curriculum, mentoring, classroom organisation, technology, safety issues, and code of conduct.

b) School Requirements and Expectations

Before starting their teaching career, novice teachers should be familiar with the institution's expectations, including classroom management responsibilities, diverse lesson preparation, technology use, cultural understanding, collaboration with parents, subject experts, school personnel, commitment to professional development, and professionalism.

c) Mentoring Programme

The programme provides mentorship for novice teachers, guiding them through their transition period, ensuring clear expectations, orientation, training, structured mentoring time, and evaluation and feedback.

d) School Policy and Procedures

The induction programme teaches novice teachers about school policies and procedures, including the code of conduct, attendance, punctuality, dress code, emergency procedures, classroom management, discipline, lesson design, curriculum implementation, extra-curricular duties, cultural awareness, inclusivity, differentiated teaching methods, and technology use.

e) Workload and Time Management

Novice teachers face demanding workloads and receive mentoring and professional development to meet school demands. Training must include multitasking strategies, scheduling, prioritising, resource seeking, and collaboration with subject mentors and school personnel, including classroom organisation and lesson planning.

f) Classroom Management Practices and Discipline Strategies

Training novice teachers in classroom management and discipline strategies can help them overcome learning challenges. These strategies include classroom organisation, routines, rules, transitions, interactive lesson plans, differentiated tasks, transparency, and clear communication. Additionally, they should consider behaviour intervention strategies like merit and demerit systems, positive reinforcement, parent meetings, restorative practices, and conflict restoration.

g) Curriculum implementation and lesson plans

Specialist teachers must supervise novice teachers, assist in aligning the curriculum with the lesson plans and engage learners effectively. They must ensure that they understand curriculum standards and objectives, differentiate instruction methods for diverse learners, and integrate technology and resources for effective curriculum implementation.

h) Assessment and analysis of learner scores

Monitoring novice teachers' assessment preparation is crucial to identify areas for improvement in instructional teaching practices. Subject specialists or heads should ensure lesson alignment with the annual teaching plan, select appropriate assessments, determine question levels, marking, analyse test scores, create improvement plans, provide new targets, and implement remediation.

I) Differentiated Learning, Diversity, Inclusivity and Cultural Sensitivity

Novice teachers require support in delivering differentiated learning in diverse classrooms, identifying and addressing learners' needs for inclusivity. They should be provided with diverse learning materials, activities and resources, and encouraged to engage in professional development through workshops, discussion groups, online seminars, and professional learning communities.

j) Professional Learning Communities (PLCs)

Schools should establish professional learning communities involving experienced specialists, subject and peer teachers to provide support, strategies, solutions, resource sharing, lesson plans, and teaching styles for various content.

k) Technology and School Resources

Media centre personnel should provide novice teachers with a comprehensive list of school resources, enabling them to use the technology and resources for engaging practical lessons effectively. Utilising diverse resources like computers, digital tools, software, department sites, libraries, textbooks, subject resources, and differentiated learning can enhance lesson engagement and instruction.

1) Administrative Tasks and Record-Keeping

The model assists novice teachers in managing administrative tasks and record keeping, including lesson plans classroom management plans, attendance registers, parent-teacher consultation minutes, merit and demerits books, incident reports, SACE-recording of CPDT points, professional development workshops, projects, seminars, staff meetings, and professional learning community discussions. It also maintains files containing lesson plans, assessments, memorandums, improvement plans, and professional development workshops.

m) Professional Development

The education department and school should offer continuous professional development to novice teachers through workshops, practical training, networking, mentorship, engaging with specialist teachers, professional teams, induction programs, teambuilding, collaboration, and educational trends.

6.5.2.3 Phase 3: Strategies – Advancing teacher development

Teacher development is an ongoing process that continues throughout a teacher's career. It involves continuous learning, growth, and improvement to enhance instructional effectiveness and adapt to evolving educational trends. Developing novice teachers is essential for ensuring the success and growth of the education system. Novice teachers often require support, mentorship, and professional development to help them become effective teachers. Below are some strategies to develop novice teachers:

a) Sustained Mentoring

Sustained mentoring is a continuous support system for novice teachers, aiming to enhance their teaching skills over time. It involves pairing novice teachers with experienced mentors, providing clear roles, a structured plan, regular meetings, observations, feedback, and instructional practice modelling.

b) Peer Collaboration

Schools must promote collaboration among novice teachers to share their experiences and information and learn from each other, fostering group discussions, sharing experiences, and mentoring.

c) Mentor Training

Experienced teachers need pre-service training, techniques, communication, feedback surrounding difficulties, and school regulations to mentor novice teachers effectively. Role modelling, access to a mentorship handbook, and professional development are beneficial. Mentors should also receive coaching to help novice teacher set objectives.

d) Professional Development

The education department must offer continuous professional development opportunities for novice teachers, focusing on classroom management, curriculum development, assessment techniques, and pedagogical strategies. The initiative connects novice teachers with suitable workshops, courses, committees and seminars to improve their knowledge and network systems.

e) Collaboration, Knowledge Sharing and Communication

Novice teachers utilise collaboration, knowledge sharing, and communication skills to seek help from experienced professionals, ensuring effective teaching and learning for colleagues, learners, and parents.

f) Lesson Modelling

Lesson modelling is a teaching strategy that involves observing experienced teachers demonstrating effective teaching techniques and providing examples of successful teaching methods to encourage novice teachers.

g) School Handbook

A user manual is essential for novice teachers to understand the school's culture, policies, and expectations. It introduces staff and provides a mission statement, vision, organisational structure, policies, procedures, curriculum guidelines, classroom technology information, and professional development opportunities.

h) Professional Learning Communities

Professional Learning Communities (PLCs) aid new and experienced teachers by promoting collaboration on teaching practices, curriculum design, and learner outcomes, fostering idea exchange, and offering insights into classroom management, lesson planning, and learner assessment.

i) Specialised Support Groups

Novice teachers can benefit significantly from subject-specific support groups, which can help them address unique challenges and opportunities in their teaching environment. These groups foster collaboration and support among teachers, focusing on specific strategies and challenges and providing valuable insights and skills.

j) Research-based resource

The school must provide teachers with a library, lesson planning resources, research materials, and administrative support for tasks like photocopying, filing, and record-keeping.

k) Online Induction Programme/ Induction Office

An online induction programme and office can help novice teachers adjust to a new educational setting, helping them understand the school's culture, policies, and expectations, and receive the necessary support. An induction office with dedicated personnel, including an induction coordinator, is crucial for personalised support and regular meetings to address questions or challenges.

1) Induction Festival – provincial or national

The induction festival must offer novice teachers networking opportunities, school culture knowledge, and practical teaching insights covering classroom management, curricular alignment, technological integration, assessment and grading, ensuring long-term educational achievement.

6.5.2.4 Phase 4: Key outputs – Continuous development and targets

The key outputs of effective teachers are the observable and measurable outcomes of their teaching practices and their impact on learners, classrooms, and the school community. Effective teachers achieve key outputs for positive learning outcomes and a thriving educational environment. Below are some of the outcomes:

a) Student Achievement

The institution's academic benchmarks and goals are achieved through improved performance, high motivation, active participation, and receptiveness among learners.

b) Practical Instruction and Improved Quality of Learning

Clear and focused instruction aids learners in achieving learning goals, accommodating individual needs and abilities, and enhancing task completion, attention span, and classroom behaviour.

c) Classroom Management Proficiency

The classroom environment is enhanced through efficient routines, engaged learners, increased instructional time, safety, respect, and positive relations, promoting learner participation and engagement.

d) Strong Communication Skills

Effectively communicate, listen, and provide feedback to enhance relationships with learners, parents, and colleagues while meeting core performance standards and providing clear instructions on curriculum implementation.

e) Culturally Competent Teachers

Culturally competent teachers foster a positive learning environment, adapt tasks to meet learners' diverse needs and enhance learner retention and engagement.

f) Adaptability

Teachers adapt their teaching styles to incorporate new ideas and technologies, considering learner needs and interests, and differentiate teaching material and styles for maximum learner participation.

g) Curriculum and Lesson Planning Competence

Instructional goals should be clearly defined, and lesson plans should be tailored to engage and benefit a diverse range of learners, regardless of their abilities and needs.

h) Improved Learner Behaviour and Character Building

Improved learner behaviour towards family, peers and teachers increases teacher satisfaction and participation.

i) Community Engagement

Teachers should foster a learning community that is inclusive and supportive by involving parents and stakeholders beyond the classroom.

j) Preparing for Tertiary Education

Teachers are crucial in guiding learners through primary school, providing them with essential skills for tertiary education and employment.

k) Professional Contributions

Teachers collaborate to share best practices and knowledge and mentor each other, promoting professional growth.

6.5.3 Summary

The induction and development model enhances knowledge and practice in primary schools in Kwazulu-Natal Province. The model aims to enhance the proficiency and productivity of novice teachers by improving their practice and knowledge acquisition in the classroom. The school professionals are empowered to support novice teachers during their initial years of their teaching careers. Student teachers at tertiary institutions receive training on effective lesson planning facilitation, instructional strategies, assessments, educational software, online resources, and digital tools in line with the department curriculum and policies. The model offers guidelines for creating assessment tools, analysing data, measuring progress, and enhancing instructional activities before entering the school environment.

Included in the model are opportunities for comprehensive explanation of time management, restorative practices, positive reinforcement, conflict resolution, and communication skills. The model encourages novice teachers to foster diversity, inclusivity, and cultural competency,

enabling them to cater to learners with diverse abilities. Prior to being assigned to a school, student teachers undergo training in classroom management, discipline, inclusion, technology integration, curriculum preparation, time management, policies, and administrative chores. The novice teacher gains knowledge through various methods such as team building, workshops, seminars, online induction programmes, induction festivals, websites, specialised support groups, observations, and demonstrations.

The model improves instructional practices by incorporating extended teaching practices, thus enabling student teachers to acquire practical skills in the school environment and bridging the gap between university and classroom learning. Schools and districts provide well-structured orientation and induction programmes for novice teachers through a comprehensive curriculum, effective mentoring criteria, and competent mentors. Experienced teachers teach novice teachers' essential skills, while schools implement the curriculum through annual teaching plans, lesson plans, assessments, and evaluations.

It is evident from the model that teacher development practices have an ultimate influence on teacher and learner outcomes. Implementing diversity and inclusivity knowledge in the classroom is crucial for achieving positive learner outcomes. Pre-service and mentoring sessions help design lessons and implement differentiated instructional practices to ensure no learner is left behind. The meetings are scheduled for ongoing evaluation, professional development, and mentoring is significant.

The model combines tertiary institutions, school professionals, and district officials to improve novice teachers' experiences through professional development opportunities, structured induction programmes, and strict supervision. The model outlined various development activities, including professional development in creating instructional tools, sustained teacher development, and meeting school requirements and expectations. The model synchronises professional development, induction, and teacher preparation, utilising strategies to aid novice teachers in enhancing their knowledge and practical skills. The phases introduced research-based strategies to novice teachers, equipping them with the tools to manage the expectations and requirements of schools.

Through an introduction program, mentorship, professional development, curriculum implementation, individualized teaching, assessments, evaluation, communication, and

classroom management, the approach strives to bridge the knowledge gap between theoretical and practical components of school settings.

National policies concerning teacher preparation, induction, and professional development have an influence on newly appointed teachers' positions. The programme offers an extensive orientation programme and professional development opportunities for novice teachers. Education policies must encompass mentors' roles, training, time management, and the mentoring relationship duration. In addition to considerable hands-on education, the institution must provide a comprehensive mentorship and orientation programme. To meet the demands of challenging classrooms, teacher education programmes and educational institutions must collaborate closely to train newly appointed teachers.

6.6 LIMITATIONS AND DELIMITATIONS OF THE STUDY

Despite facing challenges in finding a convenient time to conduct interviews with thirty-five participants, the researcher managed to interview thirty-four participants. The researcher thoroughly transcribed and analysed the data generated from the interviews. The research findings, which focused on teachers in the KwaZulu-Natal province, have the potential to be highly informative and valuable.

An investigation conducted on novice teachers occurred in the King Cetshwayo district, and five schools were selected to participate. Although the sample size was limited, the study included fifteen novice teachers, ten experienced teachers, and four school managers. It is important to note that the study focused on novice teachers from grade one to seven teacher. Although no secondary schools were involved in the research, the study concentrated on novice teachers from public schools in urban areas, and their experiences were limited to the first five years of their teaching career.

Given the limited resources, the study could not study novice teachers over an extended period, nor could the researcher conduct an in-depth analysis of the challenges faced by novice teachers. However, the study covers the challenges experienced in the first five years of teaching, which is a starting point for further research. Overall, the study enlightens professionals about the experiences of novice teachers in urban public schools in the KwaZulu-Natal province, which can inform policy and practice.

6.7 AVENUES FOR FUTURE RESEARCH

Conducting further research on the challenges faced by novice teachers is crucial to improving the standard of education in South Africa, especially in primary schools in KwaZulu-Natal and other provinces, including those in rural and semi-urban areas, as well as public schools. The research should focus on understanding the challenges and experiences of novice teachers and providing them with the necessary support in their initial years of teaching. It is essential to examine the role of school leaders in implementing induction programmes and the support provided by tertiary institutions to novice teachers. Research on mentoring programmes, differentiated education, and diversity in the classroom is crucial. Collaborative strategies should be explored to help novice teachers acclimatise to school. Conducting research can identify the challenges novice teachers face and develop strategies to support their professional growth, which in turn can improve teaching quality and learning outcomes.

6.8 FINAL REMARKS

The study explored the challenges and experiences of novice teachers in their initial five years of teaching, focusing on the support they receive from school professionals. The findings reveal that novice teachers face diverse challenges, such as learner diversity, managing time, mentoring, induction, classroom management, and discipline. These challenges may overwhelm teachers, leading to disenchantment and potential departures from the profession. Schools have developed strategies to assist novice teachers, including orientation, induction, and mentoring. However, the support provided to novice teachers varies in terms of standards, with some schools offering high-quality support in areas such as curriculum and professional development, parental engagement, and administration. Navigating these challenges can be achieved through collaboration, feedback, motivation, ongoing professional development training, and knowledge sharing. The study underscores the importance of providing adequate and extended support for novice teachers' growth. It suggests developing a model with research-based strategies to assist tertiary institutions, schools, and education stakeholders in professional development.

REFERENCES

- Abdullah, A. G. K., Alzaidiyeen, N. J. A., & Seedee, R. (2010). The Effectiveness of Buddy Support System Implementation among Science Teachers: The Case of Malaysia. *Asian Social Science*, 6(4). https://doi.org/10.5539/ass.v6n4p122
- Abu-Tineh, A. M. (2015). The perceived effectiveness of the school-based support program. *European Journal of Training and Development*, *39*(8), 721–736. https://doi.org/10.1108/ejtd-02-2014-0008.
- Adak, S. (2017). Effectiveness of constructivist approach on academic achievement in science at secondary level. *Educational Research and Reviews*, *12*(22), 1074–1079. https://doi.org/10.5897/err2017.3298
- Admiraal, W., Kittelsen Røberg, K.I., Wiers-Jenssen, & Saab, N. (2023). Mind the gap: Early-career teachers' level of preparedness, professional development, working conditions, and feelings of distress. *Social Psychology of Education*, 26. 1759–1787 https://doi.org/10.1007/s11218-023-09819-6
- Ahmed, A. (2008). *Ontological, Epistemological and Methodological Assumptions: Qualitative Versus Quantitative*. https://files.eric.ed.gov/fulltext/ED504903.pdf
- Ahmed, G., Faizi, W. U. N., & Akbar, S. (2020). Challenges of Novice Teachers and Strategies to Cope at Secondary Level. *Global Regional Review*, *V*(1), 403-416
- Akhtar, I. (2016). Research Design. *SSRN Electronic Journal*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2862445
- Alase, A. (2017). The Interpretative Phenomenological Analysis (IPA): a Guide to a Good Qualitative Research Approach. *International Journal of Education and Literacy Studies*, *5*(2), 9–19. https://doi.org/10.7575/aiac.ijels.v.5n.2p.9

- Alhamad, R. (2018). Challenges and induction need of novice English as foreign language teachers in Saudi Arabia. *International Journal of Education and Literacy Studies*, 6(1), 50-63.
- Alharahsheh, H. H., & Pius, A. (2020). A Review of key paradigms: positivism VS interpretivism. *Global Academic Journal of Humanities and Social Sciences*, 2(3), 39–43. https://doi.org/10.4018/ijsem.2020010105
- Aljohani, M. (2017). Principles of "Constructivism" in Foreign Language Teaching. *Journal of Literature and Art Studies*, 7(1). https://doi.org/10.17265/2159-5836/2017.01.013
- Allan, G. (2020). Qualitative research. *Handbook for Research Students in the Social Sciences*, 177–189. https://doi.org/10.4324/9781003070993-18
- Allen, R., Burgess, S., & Mayo, J. (2017). The teacher labour market, teacher turnover and disadvantaged schools: new evidence for England. *Education Economics*, 26(1), 4–23. https://doi.org/10.1080/09645292.2017.1366425
- Allman, B. (2018). The Students' Guide to Learning Design and Research.

 In *edtechbooks.org*. EdTech Books.

 https://edtechbooks.org/studentguide/socioculturalism
- Al-Naimi, S. R., Romanowski, M. H., & Du, X. (2020). Novice Teachers' Challenges and Coping Strategies in Qatari Government Schools. *International Journal of Learning, Teaching and Educational Research*, *19*(9), 118–142. https://doi.org/10.26803/ijlter.19.9.7
- Alrajeh, T. S. (2021). Project-based Learning to Enhance Pre-service Teachers' Teaching Skills in Science Education. *Universal Journal of Educational Research*, 9(2), 271–279. https://doi.org/10.13189/ujer.2021.090202
- Altun, S., & Yücel-Toy, B. (2015). The Methods of Teaching Course Based on Constructivist Learning Approach: An Action Research. *Journal of Education and Training Studies*, *3*(6), 248-270.

- Aluwihare-Samaranayake, D. (2012). Ethics in qualitative research: A view of the participants' and researchers' world from a critical standpoint. *International Journal of Qualitative Methods*, 11(2), 64–81. https://doi.org/10.1177/160940691201100208
- Alzahrani, I., & Woollard, J. (2013). The Role of the Constructivist Learning Theory and Collaborative Learning Environment on Wiki Classroom, and the Relationship between Them. In *ERIC*. https://eric.ed.gov/?id=ED539416
- Amin, M.Y.M & Rahimi. A. (2018). Challenges Faced by Novice EFL Teachers. *International Journal of Humanities and Cultural Studies*, 5(1), 149-166.
- Andrew, T. (2016). Ontological issues in qualitative research in nursing. *Texto & Contexto Enfermagem*, 25(3). https://doi.org/10.1590/0104-0707201600453editorial
- Ariff, N., Mansor, M., & Yusof, H. (2016). Availability of Novice Teacher Professionalism:

 A Content Analysis. *International Journal of Academic Research in Business and Social Sciences*, 6(12). https://doi.org/10.6007/ijarbss/v6-i12/2502
- Arifin, S. R. (2018). Ethical considerations in Qualitative Study. *International journal of care scholars*, *I*(2), 30–33. https://doi.org/10.31436/ijcs.v1i2.82
- Asenahabi, B. M. (2019). Basics of research design: A guide to selecting appropriate research design. *International Journal of Contemporary Applied Research*, 6(5), 76-89.
- Aspers, P., & Corte, U. (2019). What is qualitative in qualitative research. *Qualitative Sociology*, 42(2), 139–160. https://doi.org/10.1007/s11133-019-9413-7
- Astalin, D. P. (2013). Qualitative Research Design: A Conceptual Framework. *International Journal of Social Science & Interdisciplinary*, 2(1): 2277-3630.
- Astuti, P. (2016, July 4). Practitioner of cooperative learning as part of novice teachers' professional identity. *Teflin Journal A Publication on the Teaching and Learning of English*, 27(2), 132. https://doi.org/10.15639/10.15639/teflinjournal.v27i2/132-152

- Athanases, S. Z., Abrams, J., Jack, G., Johnson, V., Kwock, S., McCurdy, J., & Totaro, S. (2008). Curriculum for mentor development: Problems and promise in the work of new teacher induction leaders. *Journal of curriculum studies*, 40(6), 743-770.
- Atkins, M. (2018). Behaviour Management Strategies for the Elementary School Setting. *Education Masters*. https://fisherpub.sjf.edu/education_ETD_masters/363
- Ávalos, B. (2016). Learning from Research on Beginning Teachers. *Springer EBooks*, 487–522. https://doi.org/10.1007/978-981-10-0366-0_13
- Baker, M. A. (2020). *Induction Support of Teachers Across South Carolina*. Columbia: University of South Carolina.
- Bansal, S. (2018). A constructivist perspective towards collaborative learning. *International Journal of Research in Social Sciences*, 8(5), 679-689.
- Baxter, J., & Eyles, J. (1997). Evaluating qualitative research in social geography: Establishing 'rigour' in interview analysis. *Transactions of the Institute of British Geographers*, 22(4), 505–525. https://doi.org/10.1111/j.0020-2754.1997.00505.x
- Becirović, S., & Akbarov, A. (2015). Impact of social changes on teacher's role and responsibilities in the educational system. *The Journal of Linguistic and Intercultural Education*, 8, 21–34. https://doi.org/10.29302/jolie.2015.8.2
- Behling, K., & Hart, D. (2008). Universal design: A model for professional development.

 In *Universal design in higher education: From principles to practice* (pp. 109–125).

 Cambridge, MA: Harvard Education Press.
- Belin, A. (2021). *Knowledge Sharing: 5 Strategies to Share Knowledge In the Workplace*.

 Info.aiim.org. https://info.aiim.org/aiim-blog/knowledge-sharing-strategies-for-the-workplace

- Berman, J., & Smyth, R. (2015). Conceptual frameworks in the doctoral research process: A pedagogical model. *Innovations in Education and Teaching International*, 52(2), 125–136.
- Betlewski, S. T. A. (2019). "Flourishing in the first years of teaching: Designing a framework for new teacher induction." *College of Education, Theses and Dissertations*. 150 Retrieved December 30, 2023, from https://via.library.depaul.edu/cgi/viewcontent.cgi?article=1151&context=soe_etd
- Bhandari, P. (2020, June 19). What is qualitative research? / methods & examples. Scribbr. https://www.scribbr.com/methodology/qualitative-research
- Bhardwaj, P. (2019). Types of sampling in research. *Journal of the Practice of Cardiovascular Sciences*, *5*(3), 157. https://www.j-pcs.org/text.asp?2019/5/3/157/273754
- Bin-Hady, W. R. A. (2018). A study of novice teachers' challenges at their practical teaching phase. *International Journal on Language, Research and Education Studies*, 2(3), 333–345. https://doi.org/10.30575/2017/ijlres-2018091203
- Bishaw, A., & Egiziabher, Y. G. (2013). Comparison of traditional and constructivist teaching approaches in using English language learning strategies; (grade eleven students of Bahir Dar preparatory school). *Ethiopian Journal of Education and Sciences*, 9(1), 1-14.
- Blake, A. L. (2017). How do we manage? Classroom management strategies for novice teachers in high-poverty urban schools. *National Teacher Education Journal*, *10*(2), 13-19. https://ntejournal.com/
- Boakye, C., & Ampiah, J. G. (2017). Challenges and solutions: The experiences of newly qualified science teachers. *Sage Open*, 7(2), 2158244017706710.
- Bogdan, R., & Biklen. S. K. (1982). Qualitative Research for Education. Allyn & Bacon.

- Bogdan, R. C. & Biklen, S. K. (1998). *Qualitative research in education: An introduction to theory and methods* (3rd ed.). Needham Heights, MA: Allyn & Bacon
- Bogdanovich, P. (2014). *The Importance of Checking for Understanding*. Dataworks Educational Research. https://dataworks-ed.com/blog/2014/07/the-importance-of-checking-for-understanding
- Booyse, C., & Chetty, R. (2016). The significance of constructivist classroom practice in national curricular design. *Africa Education Review*, *13*(1), 135-149.
- Botha, C. S., & Rens, J. (2018). Are they really 'ready, willing and able'? Exploring reality shock in beginner teachers in South Africa. South African Journal of Education, 38(3).
- Bottiani, J.H., Duran, C. A. K., Pas, E. T., & Bradshaw, C. P. (2019). Teacher stress and burnout in urban middle schools: Associations with job demands resources, and effective classroom practices. *Journal of School Psychology*, 77. 36-51. https://doi.org/10.1016/j.jsp.2019.10.002
- Brau, B. (2018). Constructivism. In R. Kimmons, *The Students' Guide to Learning Design and Research*. *EdTech Books*. https://edtechbooks.org/studentguide/constructivism
- Brown, R. B. (2006). *Doing your dissertation in business and management: The reality of researching and writing.* Sage Publications.
- Bruner, J. (1974). Toward a Theory of Instruction. Harvard University Press.
- Bruner, J. (1986). Actual minds, possible worlds. London.
- Bruner, J. (1990). *Acts of meaning Jérôme Seymour Bruner*. Cambridge [U.A.] Havard Univ. Press.
- Bruner, J. (1996). The culture of education. Harvard University Press.

- Çakmak M, Gündüz M., & Emstad, A.B. (2019). Challenging moments of novice teachers: survival strategies developed through experiences. *Cambridge J Educ.* 49(2), 147–162. doi:10.1080/0305764X.2018.1476465
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of research in nursing*: JRN, 25(8), 652–661. https://doi.org/10.1177/1744987120927206
- Campuslabs. (2018). How to analyse qualitative data. Baseline Help Centre. https://baselinesupport.campuslabs.com/hc/en-us/articles/204305675-How-to-analyze-qualitative-data
- Chaaban, Y., & Abdallah Abu-Tineh. (2017). Instructional Coaches' Perceptions of Professional Development: An Exploration of the School-Based Support Program. World Academy of Science, Engineering and Technology, *International Journal of Educational and Pedagogical Sciences*, 4(3).
- Charner-Laird, M., Szczesiul, S., Kirkpatrick, C. L., Gordon, P., & Watson, D. (2016). From collegial support to critical dialogue: Including new teachers' voices in collaborative work. *The Professional Educator*, 40(2), 1-17. https://www.proquest.com/docview/1852701684/fulltextPDF/36F58BA9BC874D 3FPQ/1?accountid=11041
- Cherry, K. (2022). *Jean Piaget Biography (1896-1980)*. Very well Mind. https://www.verywellmind.com/jean-piaget-biography-1896-1980-2795549
- Chetty, P. (2016). Importance of research approach in research. [online] *Project Guru*. https://www.projectguru.in/selecting-research-approach-business-studies/
- Clark, S. K. (2012). The Plight of the Novice Teacher. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 85(5), 197–200. https://doi.org/10.1080/00098655.2012.689783

- Clarke, V., & Braun, V. (2017). Thematic analysis. *The Journal of Positive Psychology*, 12(3), 297-298. doi:10.1080/17439760.2016.1262613
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research Methods in Education*. Routledge. https://doi.org/10.4324/9780203029053
- Connelly, L. M. (2016). Trustworthiness in qualitative research. *Official Journal of the Academy of Medical-Surgical Nurses*, 25(6), 435-436 https://pubmed.ncbi.nlm.nih.gov/30304614/
- Creswell, J. W. (2007). *Qualitative Inquiry and Research Design: Choosing among Five Traditions* (3rd ed.). Sage Publications.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Creswell, J. W. (2012). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). Thousand Oaks, CA: Sage.
- Creswell J. W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches* (4th ed.). Thousand Oaks, CA: Sage.
- Creswell, J. W & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approach.* Sage Publications.
- Cresswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing from five approaches* (4th ed.). Los Angeles, CA: Sage.
- Crotty, M. (1998). *The foundations of social research: meaning and perspective in the research process.* Sage Publications.

- Curry, J. R., Webb, A. W., & Latham, S. J. (2016). A content analysis of images of novice teacher induction: first-semester themes. *Journal of Educational Research and Practice*, 6(1). https://doi.org/10.5590/jerap.2016.06.1.04
- Dagar, A & Yadav. (2016). Constructivism: A Paradigm for Teaching and Learning. *Arts and Social Sciences Journal*, 7(4), 1-4.
- Daniel, B. K. (2019). Using the TACT framework to learn the principles of rigour in qualitative research. *Electronic Journal of Business Research Methods*, *17*(3), 118-129 https://doi.org/10.34190/jbrm.17.3.002
- 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).
- Darby, F. (2022). Get yourself a teaching buddy to help you thrive. The Campus, Learn, Share, Connect. https://www.timeshighereducation.com/campus/get-yourself-
- Darling-Hammond, L., & McLaughlin, M. W. (1995). Policies that support professional development in an era of reform. *Phi delta kappan*, 76(8), 597-604.
- Dash D. R (2019). *Philosophical Foundation of Education. Directorate of Distance & Continuing Education*. Uktar University: Vanivihar, Bhubaneswar-751007.
- De Beer, J., Petersen, N. & Van Vuuren, H. J. (Eds.). (2020). *Becoming a teacher: Research on the work-integrated learning of student teachers*. NWU Self-Directed Learning Series Volume 4. AOSIS
- De Vaus, D. A. (2001). Research Design in Social Research. London: SAGE.
- De Carlo, M. (2018). Scientific Inquiry in Social Work. references scientific research publishing.
 - $\underline{\text{https://www.scirp.org/(S(351jmbntvnsjt1aadkposzje))/reference/referencespapers.aspx}}\\ \underline{\text{?referenceid=2778202}}$

- den Brok, P., Wubbels, T., & Van Tartwijk, J. (2017). Exploring beginning teachers' attrition in the Netherlands. *Teachers and teaching*, 23(8), 881-895.
- Denzin, N. K., & Lincoln, Y. S. (2011). *The SAGE Handbook of Qualitative Research* (3rd ed.). Sage Publications.
- Department of basic education (DoE). (2011). Curriculum Assessment Policy Statements.

 Www.education.gov.za.

 https://www.education.gov.za/Curriculum/CurriculumAssessmentPolicyStatements(CAPS).aspx
- Department of Education (DoE). (1996). South African Schools Act. *Government Gazette*, *Notice*, (84). https://www.gov.za/documents/south-african-schools
- Department of Education (DoE). (1997). Curriculum 2005. Specific Outcomes, Assessment Criteria, Range Statements, Grades 1-9. Discussions Documents, Pretoria, Government Printer.
- Department of Education (DoE). (2002). Revised National Curriculum Statement Grades R-9 (Schools) Policy. Government Gazette No. 23405, Vol. 443. Pretoria: Government Printer.
- Desouky, D., & Allam, H. (2017). Occupational stress, anxiety and depression among Egyptian teachers. *Journal of epidemiology and global health*, 7(3), 191–198. https://doi.org/10.1016/j.jegh.2017.06.002
- Dias-Lacy, S. L., & Guirguis, R. V. (2017). Challenges for New Teachers and Ways of Coping with Them. *Journal of Education and Learning*, 6(3), 265. https://doi.org/10.5539/jel.v6n3p265
- Dickson, M., Riddlebarger, J., Stringer, P., Tennant, L., & Kennetz, K. (2014). Challenges faced by Emirati novice teachers. *Near and Middle Eastern Journal of Research in Education*, 2014(1). https://doi.org/10.5339/nmejre.2014.4

- Dilek, T., & Nilufer, Y.K. (2013). Preservice Mathematics Teachers' Knowledge of Students about Algebraic Concepts. *Australian Journal of Teacher Education*. *38*(2), 1-18.
- Dishena, R., & Mokoena, S. (2016). Novice teachers' experiences of induction in selected primary schools in Namibia. *Eurasian Journal of Educational Research*, 66: 335-354.
- Dlamini, M. E. (2017). A constructivist framework to prepare teachers for sustainable rural learning ecologies (Doctoral dissertation, University of the Free State (Qwaqwa Campus).
- Dooly, M., Moore, E., & Vallejo, C. (2017). Research ethics. *Qualitative Approaches to*Research on Plurilingual Education / Enfocaments Qualitatius per a La Recerca En

 Educació Plurilingüe / Enfoques Cualitativos Para La Investigación En Educación

 Plurilingüe, 351–362. https://doi.org/10.14705/rpnet.2017.emmd2016.634
- Drew, C. (2023). What is Constructivism in Education? Piaget's Pros & Cons. Helpful Professor. https://helpfulprofessor.com/constructivism/
- Driscoll, M. P. (1994). Psychology of learning for instruction. Allyn & Bacon.
- Du Plessis, E., & Marais, P. (2015). Reflections on the NCS to NCS (CAPS): Foundation Phase teachers' experiences. *The Independent Journal of Teaching and Learning*, 10(1), 114-126.
- du Plessis, P., & Mestry, R. (2019). Teachers for rural schools a challenge for South Africa. *South African Journal of Education*, *39*(1), S1–S9. https://doi.org/10.15700/saje.v39ns1a1774
- Dvir, N., & Schatz-Oppenheimer, O. (2020). New teachers in a changing reality. European *Journal of Teacher Education*, 43(4), 639–656.

 https://doi.org/10.1080/02619768.2020.1821360
- Earnest, D. (2020). Quality in qualitative research: An overview. *Indian Journal of Continuing Nursing Education*, 21(1), 76. https://doi.org/10.4103/ijcn.ijcn_48_20

- Erbil, D. G. (2020). A review of flipped classroom and cooperative learning method within the context of Vygotsky theory. *Frontiers in Psychology*, *11*, 1157.
- Erdem. E. 2001. *Program glistered glistered yaklasum.* (Constructivist approach in curriculum development). Unpublished master thesis. Hacettepe University, Ankara.
- Eredics, N. (2019). What new teachers need to know about inclusive classrooms? The Inclusive Class. http://www.theinclusiveclass.com/2019/10/what-new-teachers-need-to-know-about.html
- Ergunay, O., & Adiguzel, O. C. (2019). The First Year in Teaching: Changes in Beginning Teachers' Visions and Their Challenges. *Qualitative Research in Education*, 8(3), 276. https://doi.org/10.17583/qre.2019.4016
- Ertmer, P. A., & Newby, T. J. (1993). Behaviourism, cognitivism, constructivism: Comparing critical features from an instructional design perspective. *Performance improvement quarterly*, *6*(4), 50-72.
- Esau D. E 2017. Exploring beginner teachers' perceptions of school support to enhance their capability sets in relation to teacher education policy. PhD thesis. Bellville, South Africa: University of the Western Cape. Available at https://etd.uwc.ac.za/handle/11394/6297. Accessed 17 November 2021
- Esau, D. E., & Maarman, R. (2019). Re-positioning the competences of beginner teachers in South Africa: A capabilities perspective. *South African Journal of Higher Education*, 33(6), 111-132.
- Esau, D. E., & Maarman, R. (2021). Re-imaging support for beginner teachers in relation to initial teacher education policy in South Africa. *South African Journal of Education*, 41(4), 1-8. https://doi.org/10.15700/saje.v41n4a1906
- Essays, UK. (2018). Piaget and Cognitive Development Theory Lecture.

 https://www.ukessays.com/lectures/education/approaches/constructivism-1/?vref=1

- ETDP-SETA. (2021). Empowering Teachers for Resilient, Quality Education Systems for the next decade. Teacher Education & Development Summit Concept Document: 21-22 October 2021.
- Eyisi, D. (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. https://www.scirp.org/reference/referencespapers.aspx?referenceid=2866520
- Fantilli, R.D & McDougall D.E. (2009). A study of novice teachers: Challenges and supports in the first years. *Teaching and Teacher Education*, 25, 814–825.
- Feiman-Nemser, S. (2003). What new teachers need to learn. *Educational Leadership*, 60(8), 25-29. https://doi.org/10.12691/education-4-2A-4
- Fleming, J & Zegwaard, K. E. (2018). Methodologies, methods and ethical considerations for conducting research in work-integrated learning. *International Journal of Work-Integrated Learning, Special Issue*, 19(3), 205-213.
- Flick, U. (2018). An introduction to qualitative research. Sage.
- Flinders, D. J., & Thornton, S. J. (2013). *The curriculum studies reader*. Routledge, Taylor & Francis Group.
- Fodness, G. (2023). Classroom management strategies & techniques that work https://texestest.org/classroom-management-strategies-techniques/
- Flores, M. A., & Swennen, A. (2020). The COVID-19 pandemic and its effects on teacher education. *European Journal of Teacher Education*, 43(4), 453–456. https://doi.org/10.1080/02619768.2020.1824253
- Gaikhorst, L, Beishuizen, J., Roosenboom, B & Volman, M., (2017). The challenges of beginning teachers in urban primary schools. *European Journal of Teacher Education*, 40(1), 46-61, DOI: 10.1080/02619768.2016.1251900

- Gamborg, L., Webb, A. W., Smith, A., & Baumgartner, J.J. (2018). Understanding self-efficacy of novice teachers during induction. *Research Issue in Contemporary Education*, *3*(2), 16-26. http://www.leraweb.net/ojs/index.php/RICE
- Gatbonton, E. (2008). Looking beyond teachers' classroom behaviour: Novice and experienced ESL teachers' pedagogical knowledge. *Language Teaching Research*, *12*(2), 161–182. https://doi.org/10.1177/1362168807086286
- Gholam, A. (2018). A Mentoring Experience: From the Perspective of a Novice Teacher.

 International Journal of Progressive Education, 14(2), 1–12.

 https://doi.org/10.29329/ijpe.2018.139.1
- Giacomini, M. (2010). Theory matters in qualitative health research. In I. Bourgeault, R. Dingwall, & R. de Vries (Eds.), *The Sage handbook of qualitative methods in health research* (pp125–156). Thousand Oaks, CA: Sage
- Gibbons, P. Cobb. (2017). Focusing on teacher learning opportunities to identify potentially productive coaching activities. *Journal of Teacher Education*, 68(4), 411-425, 10.1177/0022487117702579
- Glasersfeld, E.V. (1995). *A constructivist approach to teaching*. In L.P. Steffe & J. Gale (Eds). Constructivism in education. Hillsdale, New Jersey Hove, UK: Lawrence Erlbaum Associates, Publishers.
- Glennie, E. J., Mason, M., & Edmunds, J. A. (2016). Retention and Satisfaction of Novice Teachers: Lessons from a School Reform Model. *Journal of Education and Training Studies*, 4(4). https://doi.org/10.11114/jets.v4i4.1458
- Gogus A. (2012) Constructivist Learning. In: Seel N.M. (eds) Encyclopaedia of the Sciences of Learning. Springer, Boston, MA.
- Goldhaber, D., Quince, V., & Theobald, R. (2019). Teacher quality gaps in U.S. public schools: Trends, sources, and implications. *Phi Delta Kappan*, *100*(8), 14-19.

- Grant, S.C. (2021) "Informed consent—we can and should do better," *JAMA Network Open*, 4(4). https://doi.org/10.1001/jamanetworkopen.2021.10848.
- Gray, A. J. (1997). *Constructivist teaching and learning*. Saskatchewan School Trustees Association, 97-07.
- Greiner, U., Hofmann, F., & Katskaller, M. (2017). Perspectives on mentoring novice teachers. *Global Education Review*, 4(4), 1-4.
- Gross, R. (2012). *Psychology: The Science of Mind and Behaviour 6th Edition*. Hodder Education.
- Grover, V. (2015). Research approach: An overview. Golden research thoughts, 4(8), 1-8.
- Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Technology Research and development*, 29(2), 75-91. https://doi.org/10.1007/bf02766777
- Guba, E. G., & Lincoln, Y. S. (1989). Fourth generation evaluation. Sage Publications.
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In &. Y. N. K. Denzin, Handbook of qualitative research (pp. 105-117). London: Sage.
- Gul, A. (2016). *Constructivism as a new notion in English language education in Turkey* (A dissertation submitted to the Kent State University College of Education, Health, and Human Services in partial fulfilment of the requirements for the degree of Doctor of Philosophy, Kent University)
- Gunatilaka, H., & Jayawickrama Withanage, D. (2022). Becoming an "owner" in a learner-centred context: a Sri Lankan experience at a postgraduate taught course in management and technology. *Journal of International Education in Busi*ness, *15*(2), 425-441.

- Gunawan, J. (2015). Ensuring trustworthiness in qualitative research. *Belitung Nursing Journal*, *I*(1), 10–11. https://doi.org/10.33546/bnj.4
- Guragain, S. (2021). For the beginner. Research Methods. Retrieved March 26, 2023, from https://shyamguragain.com.np/
- Harford, J., & O'Doherty, T. (2016). The discourse of partnership and the reality of reform: Interrogating the recent reform agenda at initial teacher education and induction levels in Ireland. *Centre for Educational Policy Studies Journal*, *6*(3), 37-58.
- Harikrishnan, M.G., & Firdose (2018). A Study on the Constructive based Teaching

 Strategies in Relation to Academic Achievement in English. *International Journal of Advance Research, Ideas and Innovations in Technology, 4*, 573-578.
- Harmsen, R., Helms-Lorenz, M., Maulana, R., van Veen, K., & van Veldhoven, M. (2019). Measuring general and specific stress causes and stress responses among beginning secondary school teachers in the Netherlands. *International Journal of Research & Method in Education*, 42(1), 91-108.
- Hein, G. (1991). Constructivist learning theory. *Institute for Inquiry. /http://www.exploratorium.edu/ifi/resources/. constructivist learning. HTMLs*
- Hesse-Biber, S. N., & Leavy, P. (2010). The practice of qualitative research. Sage.
- Hobbiss, M. (2018). Constructivism is a theory of learning, not a theory of pedagogy.

 Neuroscience explains why this is important. *Nature Partner Journals Science of Learning*. https://doi.org/10.1007/978-1-4419-1428-6_142
- Huber, S. G., & Helm, C. (2020). COVID-19 and schooling: evaluation, assessment and accountability in times of crises-reacting quickly to explore key issues for policy, practice and research with the school barometer. *Educational assessment, evaluation and accountability*, 32(2), 237–270. https://doi.org/10.1007/s11092-020-09322-yolum
- Hudson, P. (2012). How Can Schools Support Beginning Teachers? A Call for Timely Induction and Mentoring for Effective Teaching. *Australian Journal of Teacher*

- Hudson, S., Beutel, D., & Hudson, P. (2009). Teacher Induction in Australia: A Sample of What's Really Happening. *Research in Comparative and International Education*, 4(1), 53–62. https://doi.org/10.2304/rcie.2009.4.1.53
- Hussain, I. (2012). Use of constructivist approach in higher education: An instructors' observation. *Creative Education*, *3*(2), 179.
- Ingersoll, R. M., & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers: A critical review of the research. *Review of Educational Research*, 81(2), 201–233. https://doi.org/10.3102/0034654311403323
- Jackson P.W. (1986). The practice of teaching. New York: Teachers College Press.
- Jan, H. (2017). Teacher of 21st century: Characteristics and development. *Research on Humanities and Social Sciences*, 7(9), 50-54.
- Jia, Q. (2010). A brief study on the implication of constructivism teaching theory on classroom teaching reform in basic education. *International Education Studies*, *3*(2), 197-199.
- Johnson, A. M., Jacovina, M. E., Russell, D. G., & Soto, C. M. (2016). Challenges and Solutions when Using Technologies in the Classroom. *Adaptive Educational Technologies for Literacy Instruction*, 13–30. https://doi.org/10.4324/9781315647500-2
- Johnson, S. M., Kraft, M. A., & Papay, J. P. (2012). How context matters in high-need schools: The effects of teachers' working conditions on their professional satisfaction and their students' achievement. *Teachers' College Record*, 114(10), 1-39.
- Joubert, I. H. (2015). 'n Gids vir die beginner navorser. Pretoria: Van Schaik.
- Jumaat, N. F., & Tasir, Z. (2014). Instructional scaffolding in online learning environment: A meta-analysis. In 2014 international conference on teaching and learning in computing and engineering. pp. 74-77. IEEE.

- Kabir, S.M.S. (2016). *Basic Guidelines for Research: An Introductory Approach for All Disciplines* (pp.201-275) Edition: First Chapter: 9. Chittagong-4203, Bangladesh: Book Zone Publication.
- Kadenge, E. (2021). A district beginner teacher induction initiative in South Africa: The pressure and support contestation. *Perspectives in Education*, *39*(3), 214-227.
- Kaihoi, C. A., Bottiani, J. H., & Bradshaw, C. P. (2022). Teachers Supporting Teachers: A Social Network Perspective on Collegial Stress Support and Emotional Wellbeing Among Elementary and Middle School Teachers. *School mental health*, 14(4), 1070–1085. https://doi.org/10.1007/s12310-022-09529-
- Kang, E., & Hwang, H. (2021). Ethical conducts in qualitative research methodology:
 Participant observation and interview process. *Journal of Research and Publication Ethics*, 2(2), 5–10, ISSN: 2733 7146.
- Kaplan, L. S & Owings, W.A. (2021). Foundations of Education. Sage Publications.
- Karakose, T., Yirci, R., & Kocabas, I. (2014). A qualitative study of the novice principals' problems in the school management process and solutions. *Pakistan Journal of Statistics*, 30(6).
- Karataş, P., & Karaman, A.C. (2013). Challenges faced by novice language teachers: support, identity, and pedagogy in the initial years of teaching. *The International Journal of Research in Teacher Education*, *4*(3), 10–23. P11
- Karpagam, S., & Ananthasayanam, R. (2011). Role of Teachers in Constructivistic Approach. *Journal on School Educational Technology*, 7(1), 14-18.
- Kaushik, V., & Walsh, C. A. (2019). Pragmatism as a research paradigm and its implications for Social Work Research. *Social Sciences*, 8(9), 255. https://doi.org/10.3390/socsci8090255

- Kelly, N., Cespedes, M., Clarà, M & Danaher, P. A. (2019). Early career teachers' intentions to leave the profession: The complex relationships among preservice education, early career support, and job satisfaction. *Australian Journal of Teacher Education*, 44(3).
- Khalid, A., & Azeem, M. (2012). Constructivist vs traditional: effective instructional approach in teacher education. *International Journal of Humanities and Social Science*, 2(5), 170-177.
- Khan, H. M. A., Farooqi, M. T. K., Khalil, A., & Faisal, I. (2016). Exploring Relationship of Time Management with Teachers' Performance. *Bulletin of Education and Research*, 38(2), 249-263.
- Kidder L. H. & Selltiz C. (1981). Exploring Relationship of Time Management with Teachers' Performance. Bulletin of Education and Research (4th ed.). Holt Rinehart and Winston.
- Killen. D. R. (2019). Teaching strategies for quality teaching and learning. Juta.
- Kim, B. (2001). Social Constructivism. In M. Orey (Ed.), *Emerging perspectives on learning, teaching, and technology*. Retrieved online on 2nd of June 2022 from: http://epltt.coe.uga.edu/
- Kinnucan-Welsch, K. (2007). Reconsidering Teacher Professional Development Through Constructivist Principles. 2.
- Kivunja, C., & Kuyini, A. B. (2017). Understanding and Applying Research Paradigms in Educational Contexts. *International Journal of Higher Education*, *6*(5), 26–41. https://doi.org/10.5430/ijhe.v6n5p26
- Knott, E., Rao, A. H., Summers, K., & Teeger, C. (2022). Interviews in the social sciences. *Nature Reviews Methods Primers*, 2(1), 1–15. Nature. https://doi.org/10.1038/s43586-022-00150-6

- Ko, J., Sammons, P., & Bakkum, L. (2016). *Effective Teaching*. Education Development Trust Highbridge House.
- Ko, Y. C., Chan, K. B., Lai, G., & Boey, K. W. (2000). Stress and coping of Singapore teachers: A quantitative and qualitative analysis. *Social Science and Medicine*, 181-200. https://doi.org/10.1163/156852200512049
- Koca, A. (2016). Problems of Novice Teachers: Challenges vs. Support. *Journal of Education* in Black Sea Region, 1(2). https://doi.org/10.31578/jebs.v1i2.22
- Korstjens, I., & Moser, A. (2018). Series: Practical Guidance to Qualitative research. Part 4: Trustworthiness and Publishing. *European Journal of General Practice*, 24(1), 120–124. https://doi.org/10.1080/13814788.2017.1375092
- Kozikoğlu, S. (2017). A Content Analysis Concerning the Studies on Challenges Faced by Novice Teachers. *Cypriot Journal of Educational Sciences*, *12*(2), 91–106. https://doi.org/10.18844/cjes.v12i2.1278
- Krefting, L. (1991). Rigor in qualitative research: The assessment of trustworthiness. *The American Journal of Occupational Therapy*, 45(3), 214–222. https://doi.org/10.5014/ajot.45.3.214
- Kubeka, W. 2021. "Primary School Teachers' Perception on Staff Development: A Survey from Tembisa, South Africa." *The International Journal of Educational Organization and Leadership*, 28(1), 55-167. doi:10.18848/2329-1656/CGP/v28i01/155-167.
- Kubeka, W. M., & White, C. J. (2014). Staff development in primary schools: A survey from Tembisa, South Africa. *Mediterranean Journal of Social Sciences*, 5(27 P2), 683.
- Kuhn TS (1970) *The Structure of Scientific Revolutions*. Chicago: The University of Chicago Press.
- Kurt, S. (2021). *Constructivist Learning Theory*. Educational Technology. https://educationaltechnology.net/constructivist-learning-theory/

- Kvale, S., & Brinkmann, S. (2014). *Interviews: Learning the craft of qualitative research*, Sage
- Kyriacou, C. (1993) Research on the development of expertise in classroom teaching during initial teacher training and the first year of teaching. *Educational Review*, 45, 79–87
- Labinovicz, E. 1980. *The Piaget Primer: Thinking, Learning, Teaching*. Ontario: Addison-Wesley.
- Larochelle, M., Bednarz, N., Garrison, J., & Garrison, J. W. (Eds.). (1998). *Constructivism and education*. Cambridge University Press.
- Lasczik, A., Hudson, D. S., & James, S. (2019). Six ways to support new teachers to stay in the profession. *The Conversation*. http://theconversation.com/six-ways-to-support-new-teachers-to-stay-in-the-profession-106934
- Leavy, A., Banks, J., Conway, P. F., Darmody, M., Smyth, E., & Watson, D. (2015). *Review of the Droichead teacher induction pilot programme (Working Paper)*. https://doi.org/10.13140/rg.2.1.3518.6329
- Leavy, P. (2017). Research Design: Quantitative, Qualitative, Mixed Methods, Arts-Based, and Community-Based Participatory Research Approaches. New York, NY: The Guilford Press. ISBN 9781462514380. 300 pp. (Paperback). (2018). *Family and Consumer Sciences Research Journal*, 47(1), 101–102. https://doi.org/10.1111/fcsr.12276
- Lee, J. (2017). Hidden Challenges of Novice English Teachers in a Korean Independent School: Through an Ethnographic Lens. *The Qualitative Report*. https://doi.org/10.46743/2160-3715/2017.2876
- Leedy, P. D., & Ormrod, J. E. (2014). *Practical Research: Planning and Design* (10th ed.). Edinburgh Gate: Pearson Education.

- Letseka, M. (2014). The illusion of education in South Africa. *Procedia-Social and Behavioural Sciences*, *116*, 4864-4869.
- Li, L. I., & Zhang, F. (2015). Beginning teachers' induction in Australia: Characteristics, experience and development trend. *Studies in Sociology of Science*, *6*(1), 35.
- Lincoln, Y. S & Guba, E.G. (1985). *Naturalistic inquiry*. California: USA: Sage Newbury Park.
- Lincoln, Y. S & Guba, E. G. (1986). But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. New Directions for Program Evaluation. *New Directions for Program Evaluation*, 30, 73-84. https://doi.org/10.1002/ev.1427.
- Lincoln, Y. S & Guba, E.G. (1998). *Qualitative research in education: An introduction to theory and methods* (3rd ed.). Needham Heights, MA: Allyn & Bacon.
- Lockee, B. B. (2021). Online education in the post-COVID era. *Nature Electronics*, *4*(1), 5–6. https://doi.org/10.1038/s41928-020-00534-0
- Lunenburg, F. & Ornstein, A. (1996). *Educational Administration: Concepts and Practices*. California: Wadsworth.
- Maake, M. (2013). *Educators' experiences of the induction process by principals*. Repository.up.ac.za. http://hdl.handle.net/2263/40452
- Mack, N., Woodsong, C., Macqueen, K. M., Guest, G., & Namey, E. (2005). *Qualitative research methods: A data collector's field guide* (pp. 1–12). Fli Usaid. https://www.fhi360.org/sites/default/files/media/documents/Qualitative%20Research%20Methods%20-%20A%20Data%20Collector's%20Field%20Guide.pdf
- MacPhail, A., Tannehill, D., & Zuleyha Avsar. (2019). *European Physical Education Teacher Education Practices*. Meyer & Meyer Sport.

- Mahmoudia F., & Özkana Y. (2015). Exploring experienced and novice teachers' perceptions about professional development activities. *Procedia—Social and Behavioural Sciences*, 199, 57-64.DOI: 10.1016/j.sbspro.2015.07.487
- Makoa, M. M., & Segalo, L. J. (2021). Novice teachers' experiences of challenges of their professional development. *International Journal of Innovation, Creativity and Change*, 15(10), 930-942.
- Mangope, B, Mongwaketse, M.O., Dinama, B., & Kuyin, A.B. (2018). Teaching practice experiences in inclusive classrooms: The voices of University of Botswana special education learner teachers. *International Journal of Whole Schooling*, *14*(1), 57–92.EJ1179678.pdf (ed.gov)
- Maringe, F & Osman, R. (2016). Transforming the post-school sector in South Africa: Limits of a skills-driven agenda. *South African Journal of Higher Education*, 30(5), 120-140.
- Maringe, F. & Ojo, E. (Eds.). (2017). Sustainable Transformation in African Higher Education: Research, Governance, Gender, Funding, Teaching and Learning in the African University. Rotterdam: Sense.
- Marishane, R. N. (2014). Perceptions of Rural South African Teachers on the National Curriculum Change: "Are We Chanting or Marching?". *International Journal of Educational Sciences*, 7(2), 367-374.
- Marshall, B., Cardon, P., Poddar, A., & Fontenot, R. (2013). Does Sample Size Matter in Qualitative Research? A Review of Qualitative Interviews in Is Research. *Journal of Computer Information Systems*, 54(1), 11–22.
- Martin, N. D., Dornfeld Tissenbaum, C., Gnesdilow, D., & Puntambekar, S. (2019). Fading distributed scaffolds: the importance of complementarity between teacher and material scaffolds. *Instructional Science*, 47(1), 69-98.

- Mashau, T. S., Mutshaeni, H. N., & Kone, L. R. (2016). Teacher education: The South African context. *International Journal of Educational Sciences*, *14*(1-2), 167-173.
- Matsebane, T. M. (2015). *Experiences of induction by beginner educators in Bochum East Circuit, Limpopo Province* (Doctoral dissertation).
- Maxwell, J. A. (1996). *Qualitative Research Design: An Interactive Approach*. Thousand Oaks, CA: Sage Publications.
- Mayer, S. J. (2008). Dewey's dynamic integration of Vygotsky and Piaget. *Education and Culture*, 24(2), 6-24.
- Mazorodze, A. H., & Mkhize, P. (2022). An investigation into the knowledge-sharing practices for innovation in higher education institutions of developing countries. *Journal for Transdisciplinary Research in Southern Africa*, 18(1), 1-7. https://dx.doi.org/10.4102/td.v18i1.1230
- McBride, C. (2017). *Comparing effective teacher induction programme components and retention rates*. Conference: International Technology, Education and Development Conference, Mississippi State University, DOI:10.21125/inted.2017.1920
- McCarthy, C. J., Lambert, R. G., Lineback, S., Fitchett, P., & Baddouh, P. G. (2016).

 Assessing teacher appraisals and stress in the classroom: Review of the classroom appraisal of resources and demands. *Educational Psychology Review*, 28, 577–603.
- McCombes, S. (2019). *How to Create a Research Design*. http://www.scribbr.com/research-process/research-design
- McGeehan, A. (2019). A Study of New Teachers' Perceptions of Their Induction Programs.

 Seton Hall University Dissertations and Theses (ETDs).

 https://scholarship.shu.edu/dissertations/2609
- McLeod, S. A. (2019). Constructivism as a theory for teaching and learning. Simply Psychology. https://www.simplypsychology.org/constructivism.html

- McMillan, J. H. & Schumacher, S. (1993). *Research in education: A conceptual understanding*. New York: Haprer Collins.
- McMillan, J.H., & Schumacher, S. (2001). Research in education: A conceptual introduction. New York: Longman.
- McNamara, C. (1999). General Guidelines for Conducting Interviews, Authenticity Consulting, LLC, http://www.managementhelp.org/evaluatn/intrview.htm
- Meador, D. (2023). 7 Factors that Make Teaching So Challenging. Retrieved from https://www.thoughtco.com/factors-that-make-teaching-challenging-and-hard-4035989
- Meador, D. (2023). Strategies for Teachers to Maximize Student Learning Time. Retrieved from https://www.thoughtco.com/strategies-for-teachers-to-maximize-student-learning-time-40656674035989
- Mecham, E., Newell, E. J., Reina, L. J. & Stewart, C. (2021). Navigating Pandemic Schooling for Novice Teachers. *Educational Research: Theory and Practice*, 32(1), 90-96
- Meek, J. (2022). *Education Advanced, Inc.* Education Advanced, Inc. https://educationadvanced.com/resources/blog/strategies-for-motivating-teachers-top-11-strategies-to-implement/
- Mercer, R. (2020). Teacher Training, Beliefs, and Use of a Constructivist Learning Environment Supported by Instructional Technology. *Dissertations*. https://aquila.usm.edu/dissertations/1792
- Merriam, S. B. (2002). Qualitative Research in Practice. Jossey-Bass.
- Merriam-Webster: *America's Most Trusted Dictionary*. (n.d.). Www.merriam-Webster.com.

 Retrieved December 14, 2023, from

 https://www.merriamwebster.com/thesaurus/referred%20%28to%29

- Mhlaba, R. E. (2019). *Mentoring novice natural science teachers: a case study in the Gauteng Province* (Doctoral dissertation).
- Michel, H. A. (2013). *The First Five Years: Novice Teacher Beliefs, Experiences, and Commitment to the Profession* (Doctoral dissertation, UC San Diego)
- Mikser, R., Õun, T., Tuul, M., Kukk, A., & Hussar, D. (2020). Novice preschool teachers' professional skills as assessed by preschool principals and the novice teachers themselves. *Journal of Early Childhood Teacher Education*, 1-18.
- Misra, P. K. (2019). Teaching teachers to use constructivist approaches: A proposal. *i-Manager's Journal on School Educational Technology*, 14(4), 56.
- Mkrtchyan, V. A. (2022). Mentoring Role in Novice Teacher Training Process: A Review of International Experience. *European Proceedings of Educational Sciences*. https://doi.org/10.15405/epes.22043.24
- Modisaotsile, B. M. (2012). The Failing Standard of Basic Education in South Africa. Africa *Institute of South Africa*, 72.
- Mogashoa, T. (2014). Applicability of constructivist theory in qualitative educational research. *American International Journal of Contemporary Research*, *4*(7), 51-59.
- Mohajan, H. (2018). Qualitative Research Methodology in Social Sciences and Related Subjects. *Journal of Economic Development, Environment and People*, 7(1), 23-48.
- Mohammed, S.H & Kinyo L. (2020). The Role of Constructivism in The Enhancement of Social Studies Education. *Journal of Critical Reviews*, 7(7).
- Moon, K., & Blackman, D. (2014). A guide to understanding social science research for natural scientists. *Conservation biology: the journal of the Society for Conservation Biology*, 28(5), 1167–1177. https://doi.org/10.1111/cobi.12326

- Moon, K., Brewer, T. D., Januchowski-Hartley, S. R., Adams, V. M., & Blackman, D. A. (2016). A guideline to improve qualitative social science publishing in ecology and conservation journals. *Ecology and Society*, 21(3). https://doi.org/10.5751/es-08663-210317
- Morgan, D. (2007). Paradigms Lost and Pragmatism Regained: Methodological Implications of Combining. *Journal of Mixed Methods Research*, (1), 48-76.
- Morrison, D., & Collins, A. (1995). Epistemic fluency and constructivist learning environments. *Educational Technology*, *35*(5), 39-45.
- Morse, J. M. (2008). Confusing Categories and Themes. *Qualitative Health Research*, *18*(6), 727–728. https://doi.org/10.1177/1049732308314930
- Mohamed Adam, H. (n.d.). Research Population. *Www.academia.edu*. https://www.academia.edu/5563491/Research
- Moll, L. C. (2004). *Vygotsky and education: instructional implications and applications of sociohistorical psychology*. Cambridge University Press.
- Muhamad, M & Seng G, H. (2019). Teachers' perspective of 21st century learning skills in Malaysian ESL classrooms. *International Journal of Advanced and Applied Sciences*, 6(10), 32-37
- Muhammad, A. E. (2021). Social Constructivist Approach: Opinions of History Teachers at Intermediate Secondary Schools. *European Journal of Educational Research*, 10(3), 1423-1436.
- Mugambi, M. M. (2018). Linking constructivism theory to classroom practice. *International Journal of Humanities Social Sciences and Education*, 5(9), 96-104.

- Mukeredzi, T.G., Mthiyane, N & Berthram, C. (2015). Becoming professionally qualified: The school-based mentoring experiences of parttime PGCE students. *South African Journal of Education*, *35*(2), 1-9.
- Mupa, P., & Chinooneka, T. I. (2015). Factors contributing to ineffective teaching and learning in primary schools: Why are schools in decadence? *Journal of Education and Practice*, 6(19), 125-132. https://eric.ed.gov/?id=EJ1079543
- Mtitu. E.A. (2021). *Learner-centred teaching in Tanzania: Geography teachers' perceptions and experiences*. https://doi.org/10.26686/wgtn.17006401
- Mvududu, N. H., & Thiel-Burgess, J. (2012). Constructivism in Practice: The Case for English Language Learners. *International Journal of Education*, *4*(3), 108–118. https://doi.org/10.5296/ije.v4i3.2223
- Mwanda, G., & Midigo, R. (2019). Understanding the Bottlenecks in Methodological Adoption of Constructivism in Secondary Schools in Kenya. *Online Submission*, *5*(1), 141-150.
- Nally, M., & Ladden, B. (2020). An Exploration of an Induction Programme for Newly Qualified Teachers in a Post Primary Irish School. *International Journal for Transformative Research*, 7(1), 19–25. https://doi.org/10.2478/ijtr-2020-0003
- Nantanga, S.P. (2014). Novice Teachers' Experiences of Induction in Selected Schools in Oshana Region, Namibia.
- Nel, H., Mil, B., Hons, B., Com, D., & Phil, D.2018. The nature and elements of research paradigms: Interpretivism. https://www.skillsuniverse.com/2018/09/17/the-nature-and-elements-ofresearch-paradigms-interpretivism/
- Nelson-Danley, K. (2021). Veteran vs. Novice Teachers: Classroom Management

 Approaches. (2021, September 17). TeachHUB.

 https://www.teachhub.com/classroom-management/2021/09/veteran-vs-novice-teachers-classroom-management-approaches/

- New Teacher Centre, (2015). Teacher Training, Evaluation, and Compensation intervention report: New Teacher Centre Induction Model. U.S. Department of Education, Institute of Education Sciences, *What Works Clearinghouse*. http://whatworks.ed.gov
- Ngang, T. K., Kanokorn, S., & Prachak, B. (2014). The Perspective of School Principals on Novice Teachers' Collective Work. *Procedia Social and Behavioural Sciences*, *116*, 2655–2659. https://doi.org/10.1016/j.sbspro.2014.01.630
- Ngwira, H., & Potokri, O. C. (2019). Induction of women beginner teachers at two South African Community Secondary Schools. *Problems of Education in the 21st Century*, 77(6), 774–789. https://doi.org/10.33225/pec/19.77.774
- Nishimura, A., Carey, J., Erwin, P. J., Tilburt, J. C., Murad, M. H., & McCormick, J. B. (2013). Improving understanding in the research informed consent process: a systematic review of 54 interventions tested in randomized control trials. *BMC medical ethics*, *14*(1), 14-28. https://doi.org/10.1186/1472-6939-14-28
- Noble, H., & Smith, J. (2014). Qualitative data analysis: a practical example. *Evidence-based nursing*, *17*(1), 2–3. https://doi.org/10.1136/eb-2013-101603
- Nowacki, R., & Bachnik, K. (2016). Innovations within knowledge management. *Journal of Business Research*, 69, 1577-1581. doi: 10.1016/j.jbusres.2015.10.02
- Nozari, A. Y., & Siamian, H. (2014). The Effects of Problem-Solving Teaching on Creative Thinking among District 2 High School Students in Sari City. *Materia sociomedica*, 26(6), 360–363. https://doi.org/10.5455/msm.2014.26.360-363
- Ntsoane, L. D. (2017). The role of School Management Team members in the induction of novice teachers in rural schools (Doctoral dissertation, University of Pretoria).
- O'Brennan, L., Pas, E., & Bradshaw, C. (2017). Multilevel examination of burnout among high school staff: Importance of staff and school factors. *School Psychology Review*, 46(2), 165-176. https://doi.org/10.17105/SPR-2015-0019.V46-2

- OECD (2008). International Conference, Learning in the 21st Century: Research, Innovation and Policy. *Assessment for learning: Formative assessment*.
- OECD. (2009). Creating Effective Teaching and Learning Environments: First Results from TALIS. Paris: OECD publishing.
- OECD (2019). Supporting and guiding novice teachers: Evidence from TALIS 2018. Paris: OECD Publishing.
- OECD (2020), *The Impact of Covid-19 On Student Equity and Inclusion*, Paris: OECD Publishing.
- Okogbaa, V. (2017). Preparing the Teacher to Meet the Challenges of a Changing. *Journal of Education and Practice*, 8(5), 81-86.
- Olubunmi, K. A. (2023). Effects of Teachers' Professional Development on Students' Academic Achievement. https://doi.org/10.32388/01sp81
- Olusegun, B. (2015). Constructivism Learning Theory: A Paradigm for Teaching and Learning. *Journal of Research & Method in Education*, *5*(6), 66-70.
- Omona, J. (2013). Sampling in Qualitative Research: Improving the Quality of Research Education. *Makerere Journal of Higher Education*, 4(2), 169 185.
- Onwuegbuzie, A. J., & Frels, R. (2016). 7 Steps to A Comprehensive Literature Review: A Multimodal & Cultural Approach. Sage.
- Orb, A., Eisenhauer, L., & Wynaden, D. (2001). Ethics in qualitative research. *Journal of Nursing Scholarship*, 33(1), 93–96. https://doi.org/10.1111/j.1547-5069.2001.00093.x
- Öztürk, M., & Yıldırım, A. (2013). Adaptation challenges of novice teachers.

 Hacettepe Üniversitesi Eğitim fakültesi Dergisi [Hacettepe University Journal of Education], 28(1), 294-307.

- Padayachie, S. (2013). *Management strategies for establishing discipline in primary* classroom in a KwaZulu-Natal District. Pretoria: UNISA (Dissertation Masters).
- Paju, B., Kajamaa, A., Pirttimaa, R., & Kontu, E. (2022). Collaboration for inclusive practices: Teaching staff perspectives from Finland. *Scandinavian Journal of Educational Research*, 66(3), 427-440. DOI: 10.1080/00313831.2020.1869087
- Palys, T., & Atchison, C. (2014). *Research decisions: Quantitative, qualitative, and mixed methods approach* (5th ed.). Toronto, Canada: Nelson Education.
- Panizzon, D. (2018, September 3). Beginner teachers: Induction and mentoring. Teacher

 Magazine.

 https://www.teachermagazine.com/au_en/articles/beginner-teachers-induction-and-mentoring
- Paradis, E., O'Brien, B., Nimmon, L., Bandiera, G., & Martimianakis, M. A. (2016). Design: Selection of Data Collection Methods. *Journal of graduate medical education*, 8(2), 263–264. https://doi.org/10.4300/JGME-D-16-00098.1
- Pardjono, P. (2016). Active learning: The Dewey, Piaget, Vygotsky, and constructivist theory perspectives. *Journal Ilmu Pendidikan Universitas Negeri Malang*, 9(3), 105376. https://doi.org/10.17977/jip.v9i3.487
- Paronjodi, G. K., Jusoh, A. J., & Abdullah, M. H. (2017). A comparative study of beginning teacher induction in Malaysia and Victoria (Australia): A review of the literature. *Journal of Research, Policy & Practice of Teachers and Teacher Education*, 7(1), 36-48. https://doi.org/10.37134/jrpptte.vol7.no1.5.2017
- Parsonson, B. (2012). Evidence-based Classroom Behaviour Management Strategies. *Kairaranga*, *13*(1).
- Patton, M. Q. (2002). *Qualitative Research and Evaluation Methods* (3rd ed.). Sage Publications.

- Patzer, R. (2023). Sharing good practice: Strategies to encourage teacher collaboration. Iris Connect. https://blog.irisconnect.com/uk/sharingand-collaboration-in-schools
- Peel, K. (2020). A Beginner's Guide to Applied Educational Research Using Thematic Analysis. *Practical Assessment, Research, and Evaluation*, 25(1). https://doi.org/10.7275/ryr5-k983
- Pennanen, M., Heikkinen, H.L., & Tynjälä, P. (2020). Virtues of mentors and mentees in the Finnish model of teachers' peer-group mentoring. *Scandinavian Journal of Educational Research*, 64(3), 355–371. https://doi.org/10.1080/00313831.2018.1554601
- Petrie, C. (2020). Spotlight: Quality education for all during COVID-19 crisis (hundred Research Report #01). United Nations.
- Piaget, J. (1971). *Psychology and Epistemology: Towards a Theory of Knowledge*. New York: Grossman.
- Piaget, J., & Duckworth, E. (1970). Genetic Epistemology. *American Behavioural Scientist*, *13*(3), 459–480. https://doi.org/10.1177/000276427001300320
- Pieper, I., & Thomson, C. J. (2016). Beneficence as a principle in human research. *Monash Bioethics Review*, 34(2), 117–135. https://doi.org/10.1007/s40592-016-0061-3
- Pietarinen, J., Pyhalt, K., Soini, T & Salmela-A. (2013). Reducing teacher burnout: A socio-contextual approach. *Teaching and Teacher Education*, *35*, 62-72.
- Podolsky, A., Kini, T., Darling-Hammond, L., & Bishop, J. (2019). Strategies for attracting and retaining educators: What does the evidence say? *Education Policy Analysis Archives*, 27(27), 38. https://doi.org/10.14507/epaa.27.3722
- Poiner, J. (2017). Sizing up teacher induction. Advancing Educational Excellence. Thomas B. Fordham Institute

- Polit, D. F., & Beck, C. T. (2014). Essentials of nursing research: Appraising evidence for nursing practice 8th ed. Wolters Kluwer/Lippincott/Williams & Wilkins Health.
- Poom-Valickis, K. (2014). Novice teachers' professional development during the induction year. *Procedia Social and Behavioural Sciences*, 112, 764 774.
- Punch, K. F., & Oancea, A. (2014). Introduction to research methods in education. Sage.
- Putnam, L. L., & Banghart, S. (2017). Interpretive Approaches. *The International Encyclopaedia of Organizational Communication*, 1–17. Wiley. https://doi.org/10.1002/9781118955567.wbieoc118
- Quad, A. D. J. P. (2016). Research tools: Interviews & questionnaires. *Retrieved from Research Methodology in Education: https://lled500. trubox. ca/2016/225*.
- Rahman, M. 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. https://doi.org/10.5539/jel.v6n1p102
- Ramango, S. P. (2014). *Teachers' experiences of continuing professional development in a secondary school in Tembisa*. University of Johannesburg (South Africa).
- Rasima, H. B. (2018). Implementation of Holistic Education in Shaping Akhlakul Karimah at Madrasah Aliyah Al-Munawwarah Guppi in Parepare. In 2018 3rd International Conference on Education, Sports, Arts and Management Engineering (ICESAME 2018) (pp136-138). Atlantis Press.
- Raven, J. 2022. How SC is keeping new teachers in the profession. Nexstar Media Inc.
- Reese, W. J. (2013). In search of American progressives and teachers. *History of Education*, 42(3), 320-334

- Republic of South Africa. (1996). Constitution of the Republic of South Africa. *Government Gazette*, 378(17678)
- Republic of South Africa. (1996b). Act No. 84, 1996: South African Schools Act, 19
 Republic of South Africa. (1996c). Act No. 27, 1996: National Education Policy Act, 1996.
 Government Gazette, *370*(17118)
- Resnick, L. (1987). The 1987 presidential address: Learning in school and out. *Educational Researcher*, 16(9), 19.
- Resnik, D.B. (2015). What is ethics in research and why is it Important? National Institute of Environmental Health Sciences.

 Revised National Curriculum Statement Grades R-9 (Schools) | South African

 Government (www.gov.za)
- Richardson, V. (2003). Constructivist pedagogy. *Teachers' college record*, 105(9), 1623-1640.
- Robert, C. (2013). Advantages & Disadvantages of Constructivism in Teaching. Classroom.
- Rodon, J., Sesé, F. (2008). "Towards a Framework for the Transferability of Results in IS

 Qualitative Research," Sprouts: *Working Papers on Information Systems*, 8(17).

 https://www.researchgate.net/publication/239797431_Towards_a_Framework_for_the

 _Transferability_of_Results_in_IS_Qualitative_Research [accessed Feb 23 2023]
- Rodríguez, R., Mayo, I., & Gago. A.R.A & Álvarez, R. (2017). Initiation into Teaching from the Perspective of Primary School. *Journal of new approaches in educational research*, 6(2):103–111.
- Ross, D.D., Dodman, S., Vescio, V., Adams, A., & Humphries, E. (2011). Secrets of Successful Teaching: Supporting Professional Learning. Gainesville, FL: Lastinger Centre for Learning.

- Ross, D.D., Vescio, V., Tricarico, K, & Short, K. (2011) *Secrets for Mentoring Novice Teachers. Gainesville*, FL: Lastinger Centre for Learning.
- Rout, S., & Behera, S. K. (2014). Constructivist approach in teacher professional development: An overview. *American Journal of Educational Research*, 2(12A), 8-12.
- Russell, K. (2021). Active vs. passive learning: What's the difference? Ed.S. in Teacher Leadership in Thomas University: GA
- Sali, P., & Kecik, I. (2018). Challenges of First Years of Teaching in Turkey: Voices of Novice EFL Teachers. *English Language Teaching*, 11(4), 117-131
- Salvage, S.L., Cannon, D., & Sutters, J.P. (2015). The yellow brick road to licensure:

 Mentoring student teachers through the practicum experience. *Art Education*, 68(4), 22-27.
- Sanjari, M., Bahramnezhad, F., Fomani, F. K., Shoghi, M., & Cheraghi, M. A. (2014). Ethical challenges of researchers in qualitative studies: The necessity to develop a specific guideline. *Journal of medical ethics and history of medicine*. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4263394/
- Sasson, I. Kalir, D., & Malkinson, N. (2020). The role of pedagogical practices in novice teachers' work. *European Journal of Educational Research*, 9(2), 457-469. https://doi.org/10.12973/eu-jer.9.2.457
- Saunders, B., Kitzinger, J., & Kitzinger, C. (2015). Anonymising Interview data: Challenges and Compromise in Practice. *Qualitative Research*, *15*(5), 616–632. https://doi.org/10.1177/1468794114550439
- Schmidt, R., Young, V., Cassidy, L., Wang, H., & Laguarda, K. (2017). *Impact of the New Teacher Centre's new teacher induction model on teachers and students*. Menlo Park, CA: SRI International. https://newteachercenter.org/wp-content/uploads/NTC_i3-Validation-evalbrief_062017_final.pdf

- Schulleri, P. (2020). Teacher mentoring: Experiences form international teacher mentors in Kazakhstan. *Asian Journal of Education and Training*, *6*(2), 320-329. https://doi.org/10.20448/journal.522.2020.62.320.329
- Schwarzer, D., & Grinberg, J. G. A. (2017). Successful teaching: what every novice teacher needs to know, Rowman & Littlefield.
- Schweisfurt, M. 2013. Whose pedagogy for whose development? Learner centred education in international perspective. *Comparative Education* 49(4), 537-539.
- Seifert, K. (2012). *Educational psychology*. Connexion. https://www.coursesidekick.com/management/33257
- Selye, H. (1978). The stress of life. McGraw-Hill.
- Senom, F., Zakaria, A. R., & Ahmad Shah, S. S. (2013). Novice teachers' challenges and survival: Where do Malaysian ESL teachers stand? *American Journal of Educational Research*, 1(4), 119-125. https://doi.org/10.12691/education-1-4-2
- Shah, R. K. (2019). Effective Constructivist Teaching Learning in the Classroom. *Online Submission*, 7(4), 1-13.
- Shaheen, M., Pradhan, S., & Ranajee. (2019). Sampling in qualitative research. *Advances in Business Information Systems and Analytics*, 25–51. https://doi.org/10.4018/978-1-5225-5366-3.ch002
- Shanks, G., & Bekmamedova, N. (2018). Case study research in information systems. *Research Methods*, 193–208. https://doi.org/10.1016/b978-0-08-102220-7.00007-8
- Sharplin, E., O'Neill, M., & Chapman, A. (2011). Coping strategies for adaptation to new teacher appointments: Intervention for retention. *Teaching and Teacher Education*, 27(1), 136–146. https://doi.org/10.1016/j.tate.2010.07.010

- Shenton, A.K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22, 63-75.
- Sheppard, V. (2020). Research Methods for the Social Sciences: an Introduction.

 In pressbooks.bccampus.ca. Pressbooks.

 https://pressbooks.bccampus.ca/jibcresearchmethods/
- Siegel, H. (2004). The bearing of philosophy of science-on-science education, and vice versa: The case of constructivism-Constructivism in science education: A philosophical examination.
- Sileyew, K. J. (2019). Research Design and Methodology. *Text Mining Analysis, Programming and Application*, 1–12. Intechopen. https://doi.org/10.5772/intechopen.85731
- Sims, S., & Allen R. (2018) Identifying schools with high usage and high loss of newly qualified teachers, *National Institute Economic Review*, 243(1), 27–R36.
- Singh, S., & Yaduvanshi, S. (2015). Constructivism in science classroom: Why and how. *International journal of scientific and research publications*, 5(3), 1-5.
- Skosana, P. S., & Monyai, R. B. (2013). Learner-centred policies with reference to constructivism in the implementation of the curriculum. *International Journal of Humanities and Social Science Invention*, 2(9), 51-58.
- Slaughter, T. (2009). Creating a successful academic climate for urban students. *Techniques*, 16-19.
- Slevitch, L. (2011). Qualitative and quantitative methodologies compared: ontological and epistemological perspectives. *Journal of Quality Assurance in Hospitality & Tourism*, *12*(1), 73–81. https://doi.org/10.1080/1528008X.2011.541810
- Smit, T., & Du Toit, P. H. (2016). Transforming beginner teacher mentoring interventions for social reform. *South African Journal of Education*, *36*(3).

- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of business research*, 104, 333-339.
- Sowell, M. (2017). Effective Practices for Mentoring Beginning Middle School Teachers: Mentor's Perspectives. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 90(4), 129–134. https://doi.org/10.1080/00098655.2017.1321905
- Sözen, P.H. (2018). Challenges of novice teachers. 4th International Conference on Advances in Education and Social Sciences, (526-530). Istanbul.
- Spacey, J. (2020). 16 Examples of Constructivism. Simplicable. Retrieved online on the 20 May 2020 from: https://simplicable.com/en/constructivism
- Spaull, N. (2013). South Africa's Education crisis. The quality of education in South Africa. 1994-2011. South Africa: CDE.
- Stacey, P.A. (2019) ECRM 2019 18th European Conference on Research Methods in business and Management, Google Books. Academic Conferences and publishing limited.https://books.google.com/books/about/ECRM_2019_18th_European_Conference_on_Re.html?id=Uc-hDwAAQBAJ
- Stahl, N. A., & King, J. R. (2020). Expanding approaches for research: Understanding and using trustworthiness in qualitative research. *Journal of Developmental Education*, 44(1), 26-28.
- Steffe, L. P., & Gale, J. E. (Eds.). (1995). Constructivism in education. Psychology Press.
- Stenfors, T., Kajamaa, A., & Bennett, D. (2020). How to Assess the Quality of Qualitative Research. *The Clinical Teacher*, *17*(6), 596–599. Wiley.
- Stewart, T. T., & Jansky, T. A. (2022). Novice teachers and embracing struggle: Dialogue and reflection in professional development. *Teaching and Teacher Education: Leadership and Professional Development*, *1*, 100002. https://doi.org/10.1016/j.tatelp.2022.100002

- Stofflett, R. T. (1999). Putting constructivist teaching into practice in undergraduate introductory science. *European Journal of Science Education*, *3*(2), 1-13.
- Stols, G., Ferreira, R., Pelser, A., Olivier, W., van der Merwe, A., de Villiers, C., & Venter, S. (2015). Perceptions and needs of South African Mathematics teachers concerning their use of technology for instruction. *South African Journal of Education*, *35*(4), 1–13. https://doi.org/10.15700/saje.v35n4a1209
- Stratton, S. (2021). Population Research: Convenience Sampling Strategies. *Prehospital and Disaster Medicine*, *36*(4), 373-374. doi:10.1017/S1049023X21000649
- Strong, M. (2009). *Effective teacher induction and mentoring: Assessing the evidence*. New York, NY: Teachers College
- Suhendi, A. (2018). Constructivist learning theory: The contribution to foreign language learning and teaching. *KnE Social Sciences*, 87-95.
- Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016). A Coming Crisis in Teaching? Teacher Supply, Demand, and Shortages in the U.S. Research Brief. *Learning Policy Institute*.
- Taft, L. (2023). 20 Behaviour Management Techniques for Challenging Behaviour

 Twinkl.co.za. https://www.twinkl.co.za/blog/20-behaviour-management-techniquesfor-challenging-behaviour
- Taherdoost, H. (2016). Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research. *International Journal of Academic Research in Management*, 5(2), 18-27. https://doi.org/10.2139/ssrn.3205035
- Taylor, S. J., Bogdan, R., & Devault, M. L. (2016). *Introduction to Qualitative Research methods: a Guidebook and Resource*. John Wiley & Sons, Cop.

- Teherani, A., Martimianakis, T., Stenfors-Hayes, T., Wadhwa, A., & Varpio, L. (2015). Choosing a Qualitative Research Approach. *Journal of graduate medical education*, 7(4), 669–670. https://doi.org/10.4300/JGME-D-15-00414.1
- Tenny, S., Brannan, J. M., & Brannan, G. D. (2022). *Qualitative Study*. PubMed; StatPearls Publishing. http://www.ncbi.nlm.nih.gov/pubmed/29262162
- Teppo. M, Soobard, R & Rannikmäe, M. (2021). Grade 6 & 9 Student and Teacher Perceptions of Teaching and Learning Approaches in Relation to Student Perceived Interest/Enjoyment Towards Science Learning. *Journal of Baltic Science Education*, 20(1), 119-133.
- Terada, Y. (2021,). How Novice and Expert Teachers Approach Classroom Management

 Differently. Edutopia.

 https://www.edutopia.org/article/how-novice-and-expert-teachers-approach-classroom-management-differently/
- Terre Blanche, M., Durrheim, K. and Kelly, K. (2006). First steps in qualitative data analysis. In Terre Blanche, M., Durrheim, K. and painter, d. (eds.). research in practice: applied methods for the social sciences. 2nd edition. Cape Town: University of Cape Town Press.
- Thanh, N. C., & Thanh, T. T. (2015). The interconnection between interpretivist paradigm and qualitative methods in education. *American journal of educational science*, 1(2), 24-27.
- Theys, S. (2017). Constructivism. In S. McGlinchey, R. Walters, & D. Gold (Eds.), *International relations theory* (pp. 36–41). E-international Relations Publishing.
- Thomas, A., Menon, A., Boruff, J., Rodriguez, A. M., & Ahmed, S. (2014). Applications of social constructivist learning theories in knowledge translation for healthcare professionals: a scoping review. *Implementation Science*, 9(1). https://doi.org/10.1186/1748-5908-9-54

- Thomas, D., & Brown, J. S. (2011). A new culture of learning: Cultivating the imagination for a world of constant change (Vol. 219). Lexington, KY: CreateSpace.
- Thomas, L., Tuytens, M., Moolenaar, N., Devos, G., Kelchtermans, G., & Vanderlinde, R. (2019). Teachers' first year in the profession: the power of high-quality support. Teachers and Teaching: Theory and Practice.
- Tirri, k. & Toom, A. (2019). The Moral Role of Pedagogy as the Science and Art of Teaching, Pedagogy in Basic and Higher Education. In *Current Developments and Challenges*.
- Traianou, A. (2014). The centrality of ethics in qualitative research. *The Oxford Handbook of Qualitative Research*, 61–78.

 https://doi.org/10.1093/oxfordhb/9780199811755.013.028
- Trent, A & Cho, J. (2014). *Interpretation Strategies: Appropriate Concepts*. New York: Oxford University Press.
- Tyagi, C., & Misra, P. K. (2021). Continuing Professional Development of Teacher Educators: Challenges and Initiatives. *Shanlax International Journal of Education*, 9(2), 117–126. https://doi.org/10.34293/education.v9i2.3634
- Ugwu, C. (2021). Research paradigms and methodological choices in the research process.
- UNESCO. (2010). Reaching the Marginalized EFA/Global Monitoring Report 2010. Paris: UNESCO.
- University of South Carolina (2020). New teacher support (Carolina TIP).

 https://www.sc.edu/study/colleges_schools/education/my_coe/gamecock_edquarters/carolinatip/index.php. University Press.
- Uusiautti, S., Harjula, S., Pennanen, T., & Määttä, K. (2014). Novice Teachers' Well-Being at Work. *Journal of Educational and Social Research*, *4*(3), 177. Retrieved from https://www.richtmann.org/journal/index.php/jesr/article/view/2711

- Vaishali & Misra, P. K. (2020). Implications of Constructivist Approaches in the Classrooms: The Role of the Teachers. *Asian Journal of Education and Social Studies*, 7(4), 17-25. https://doi.org/10.9734/ajess/2020/v7i430205
- van Laar, E., van Deursen, A. J. A. M., van Dijk, J. A. G. M., & de Haan, J. (2017). The relation between 21st-century skills and digital skills: A systematic literature review. *Computers in Human Behavior*, 72(72), 577–588. https://doi.org/10.1016/j.chb.2017.03.010
- Vangrieken, K., Dochy, F., Raes, E., & Kyndt, E. (2015). Teacher collaboration: A systematic review. *Educational Research Review*, *15*, 17-40. https://doi.org/10.1016/j.edurev.2015.04.002
- Veenman, S. (1984). Perceived problems of beginning teachers. *Review of educational research*, 5(2), 143-178.
- Venter, E. and Swanepoel, J. 2008. A partnership model within a school-based approach to teacher training in South Africa. *Acta Academica*, 40(4), 224-241.
- Vermette, P., & Foote, C. (2001). Constructivist Philosophy and Cooperative Learning

 Practice: Toward Integration and Reconciliation in Secondary Classrooms. *American*Secondary Education, 30(1), 26–37. http://www.jstor.org/stable/41057825
- Vikaraman, S. S., Mansor, A. N., & Hamzah, M. I. M. (2017). Mentoring and Coaching Practices for Beginner Teachers—A Need for Mentor Coaching Skills Training and Principal's Support. *Creative Education*, 8(1), 156–169.

 https://doi.org/10.4236/ce.2017.81013
- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.
- Wallendorf, M., & Belk, R. W. (1989). Assessing trustworthiness in naturalistic consumer research. *ACR special volumes*.

- Wanjala, G. (2017). Level Of Teachers' Efficiency in Work Performance in Public Secondary Schools in Wajir North District, Kenya. *International Journal of Scientific Research and Innovative Technology*, 4(4).
- Wasonga, C.O., Wanzare, Z.O., & Dawo, J.I. (2015). Mentoring beginning teachers: Bridging the gap between pre-service training and in-practice realities. *Journal of International Education and Leadership*, 5(2), 1–10.
- Weinbaum, C., Landree, E., Blumenthal, M. S., Piquado, T., & Gutierrez, C. I. (2018). *Ethics in scientific research: An examination of ethical principles and emerging topics*.
- Weldon, P. (2018). Early career teacher attrition in Australia: evidence, definition, classification and measurement. *Australian Journal of Education*, 62(1), 61–78. https://doi.org/10.1177/0004944117752478
- Whalen, C., Majocha, E., & van Nuland, S. (2019). Novice teacher challenges and promoting novice teacher retention in Canada. *European Journal of Teacher Education*, 42(5), 591–607. https://doi.org/10.1080/02619768.2019.1652906
- Whipp, R. (2018). Qualitative Methods. *Researching the world of work: Strategies and methods in studying industrial relations*, 51.

 https://www.jstor.org/stable/10.7591/j.ctv1nhj7j
- Wiles, R. (2013). *What are qualitative research ethics?* Bloomsbury Academic.

 https://library.oapen.org/viewer/web/viewer.html?file=/bitstream/handle/20.500.12657

 /58724/9781849666534.pdf?sequence=1&isAllowed=y
- Williams, G. (2019). *Applied Qualitative Research Design*. Google Books. Retrieved

 December 7, 2022, from

 https://books.google.com/books/about/Applied_Qualitative_Research_Design.html?id

 =ueLEDwAAQBAJ
- Williams, M., & Burden, R. (1997). *Psychology for language teachers: A social constructivist approach*. Cambridge: Cambridge University Press.

- Williams, S. P. (2021). *Promoting Trustworthiness in Qualitative Research*. Seattle: Precision Consulting.
- Williamson, R. & Blackburn. B. R. (2022). Motivating Teachers in Challenging Times.
- Wong L. (2008). Data analysis in qualitative research: a brief guide to using nvivo. *Malaysian family physician: the official journal of the Academy of Family Physicians of Malaysia*, 3(1), 14–20.
- Worthy, J. (2005). "It Didn't Have to Be so Hard": The First Years of Teaching in an Urban School. *International Journal of Qualitative Studies in Education*, 18(3), 379-398.
- Xu, A., Baysari, M. T., Stocker, S. L., Leow, L. J., Day, R. O., & Carland, J. E.
 (2020). Researchers' views on, and experiences with, the requirement to obtain informed consent in research involving human participants: a qualitative study. *BMC Medical Ethics*, 21(1), 1-11. [93]. https://doi.org/10.1186/s12910-020-00538-7
- Yee, T.Y & Hassan, Z.B. (2019). Problems and Challenges Met by Novice Teachers in Johor. *International Journal of Recent Technology and Engineering*, 8(3S2), 689–694.

 https://doi.org/10.35940/ijrte.c1221.1083s219
- Yilmaz, K. (2013). Comparison of quantitative and qualitative research traditions: epistemological, theoretical, and methodological differences. *European Journal of Education*, 48(2), 311–311. https://doi.org/10.1111/ejed.12014
- Yin, R. K. (2003). Applications of case study research (2nd ed). Thousand Oaks, CA: Sage.
- Zhou, M., & Brown, D. (2015). Educational Learning Theories: 2nd Edition. *Education Open Textbooks*. http://oer.galileo.usg.edu/education-textbooks/1
- Zhukova, O. (2018). Novice Teachers' Concerns, Early Professional Experiences and Development: Implications for Theory and Practice. *Discourse and Communication for Sustainable Education*, 9(1), 100–114. https://doi.org/10.2478/dcse-2018-0008

Žukauskas, P., Vveinhardt, J., & Andriukaitienė, R. (2018). Philosophy and paradigm of Scientific Research. *Management Culture and Corporate Social Responsibility*. https://doi.org/10.5772/intechopen.70628

APPENDICES

APPENDIX A: REQUEST FOR PERMISSION FROM KWA ZULU- NATAL DEPARTMENT OF EDUCATION TO CONDUCT RESEARCH IN THE CETSHWAYO DISTRICT.



Title: Strategies to develop more efficient novice primary school teachers in the KwaZulu-Natal Province of South Africa

Dear Sir

I, Sagree Padayachie, am doing research under supervision of Professor RJ Botha, a professor in the Department of Education Leadership and Management towards a D Ed at the University of South Africa. We are inviting you to participate in a study entitled: Strategies to develop more efficient novice primary school teachers in the KwaZulu-Natal Province of South Africa.

The aim of the study is to develop strategies that would assist novice teachers to become effective teachers in primary schools.

Your department have been selected because I am familiar with primary schools in the Cetshwayo District of KwaZulu-Natal.

The study will entail a qualitative approach. The study will gather qualitative data to explore the challenges and experiences of novice teachers. Qualitative methods such as semi-structured interviews and questionnaire will be used for the purpose of this study.

The benefits of this study will provide novice teachers strategies to overcome their challenges and to become effective teachers.

There are no potential risks to any educator. There will be no reimbursement or any incentives for participation in the research. The feedback procedure will entail novice teachers, experienced teachers, department heads and senior management.

Yours sincerely	
	Mrs S. Padayachie
	UNISA student number: 713491

APPENDIX B: REQUEST FOR PERMISSION FROM SCHOOL PRINCIPALS IN THE CETSHWAYO DISTRICT TO CONDUCT RESEARCH.



Title: Strategies to develop more efficient novice primary school teachers in the KwaZulu-Natal Province of South Africa

Dear Sir

I, Sagree Padayachie, am doing research under supervision of Professor RJ Botha, a professor in the Department of Education Leadership and Management towards a D Ed at the University of South Africa. We are inviting you to participate in a study entitled: Strategies to develop more efficient novice primary school teachers in the KwaZulu-Natal Province of South Africa.

The aim of the study is to develop strategies that would assist novice teachers to become effective teachers in primary schools.

Your department have been selected because I am familiar with primary schools in the Cetshwayo District of KwaZulu-Natal.

The study will entail a qualitative approach. The study will gather qualitative data to explore the challenges and experiences of novice teachers. Qualitative methods such as semi-structured interviews and questionnaire will be used for the purpose of this study.

The benefits of this study will provide novice teachers strategies to overcome their challenges and to become effective teachers.

There are no potential risks to any educator. There will be no reimbursement or any incentives for participation in the research. The feedback procedure will entail novice teachers, experienced teachers, department heads and senior management.

Yours sincerely	
	Mrs S. Padayachie
	UNISA student number: 713491

APPENDIX C: ADULT PARTICIPANT INFORMATION SHEET AND CONSENT FORM



Title: Strategies to develop more efficient novice primary school teachers in the KwaZulu-Natal Province of South Africa.

DEAR PROSPECTIVE PARTICIPANT

I, Sagree Padayachie, am doing research under supervision of Professor RJ Botha, a professor in the Department of Education Leadership and Management towards a D Ed at the University of South Africa. We are inviting you to participate in a study entitled: Strategies to develop more efficient novice primary school teachers in the KwaZulu-Natal Province of South Africa.

This study is expected to generate vital information, providing novice teachers with strategies to overcome challenges during the initial years and to become effective teachers in primary school.

You are invited because of your valuable experiences during the initial years of your teaching career. I obtained your contact details from the school administration. A total number of 35 participants will be interviewed.

The study involves questionnaires and semi-structured interviews. Open ended questions will be asked to attain rich data to help develop strategies to assist novice teachers. The interview will be approximately 30 minutes in duration and may be conducted at school. The questionnaires may be completed by the participant and may take approximately 25 minutes to complete.

Participating in this study is voluntary and you are under no obligation to consent to participation. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form. You are free to withdraw at any time and without giving a reason. The questionnaire will be anonymously completed.

A voice recorder will be used during the interview in to collect the information as accurately as possible. The participants' names will be coded to protect the identity of participants.

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

If you would like to be informed of the final research findings, please contact Sagree Padayachie on 0813193882 or email sagree1703@gmail.com. The findings are accessible for a year.

Should you require any further information or want to contact the researcher about any aspect of this study, please contact.

Should you have concerns about the way in which the research has been conducted, you may contact Professor R.J Botha on 0824116361, fax 0866344060 or Web: www.unisa.ac.za/ced

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

Sagree Padayachie

CONSENT TO PARTICIPATE IN THIS STUDY (Return slip)

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

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

I have had sufficient opportunities to ask ques	tions and am prepared to participate in the study.
I understand that my participation is volunta without penalty (if applicable).	ary and that I am free to withdraw at any time
	vill be processed into a research report, journal out that my participation will be kept confidential
I agree to the recording of the interview.	
I have received a signed copy of the informed	consent agreement.
Participant Name & Surname (please print)	
Participant Signature	Date
Researcher's Name & Surname (please print)	
Researcher's signature	Date

APPENDIX D: SEMI STRUCTURED INTERVIEW SCHEDULE FOR NOVICE TEACHERS



Title: Strategies to develop more efficient novice primary school teachers in the Kwa-Zulu Natal Province of South Africa.

- 1. Which year did you start your teaching career?
- 2. What motivated you to become a teacher?
- 3. Describe the first few days of your teaching career.
- 4. Briefly describe the training or orientation you received.
- 5. Did the school have an induction program encompassing orientation, mentorship and professional development? Elaborate.
- 6. Describe the workload you receive. Did it increase your stress?
- 7. Did you receive any support or guidelines to assist with your workload?
- 8. Were you attached to a mentor? What assistance did you receive from your mentor?
- 9. Which areas challenged you?
- 10. Did you struggle with classroom management issues? What support or assistance did you receive?
- 11. Was the guidance and resources you received adequate for lesson planning and presentation?

- 12. What kind of support did you receive from the school management team?
- 13. What strategies should the school management team adopt to assist novice teachers in transitioning from tertiary to in-service training?
- 14. How did you cope with stress and feelings of isolation? Expand?
- 15. Is there anything you wish to share regarding support from school personnel?

APPENDIX E: SEMI-STRUCTURED INTERVIEW SCHEDULE FOR MENTORS AND SCHOOL MANAGEMENT TEAM



Title: Strategies to develop more efficient novice primary school teachers in the Kwa-Zulu Natal Province of South Africa.

- 1. What part of education do you like the most?
- 2. What is your vision for novice teachers? What essential characteristics and skills do you cultivate in novice teachers?
- 3. How do you make your expectations clear to novice teachers? What policies and procedures do you have in place?
- 4. Describe the induction programme you have for novice teachers at your school. Are novice teachers susceptible to the program? Elaborate
- 5. Novice teachers face several challenges during their initial years at school. What are the causes of these challenges?
- 6. What challenges do novices face with curriculum delivery, specifically lesson planning and presentation?
- 7. What support systems do you have in place for the novice teacher? Was support provided in classroom management, discipline, assessments and curriculum delivery? Elaborate
- 8. Is classroom management and discipline hampering novice teachers' performance and growth? Explain.

- 9. How do you handle a situation when novice teachers are not doing their jobs effectively? What strategies do you adopt?
- 10. How are mentors assigned? Describe the support novice teachers receive from mentors. Which are the common support areas?
- 11. What workshops have you organised to assist novice teachers in the classroom?
- 12. What was your role in diminishing factors contributing to teachers wanting to leave the profession? How do you boost morale and decrease stress in novice teachers?
- 13. How do you help retain new teachers? Do you shift your schedule to make novice teachers more of a priority?
- 14. What measures do you take to prevent new teacher isolation?
- 15. It is crucial to start novice teachers on the right track. What advice do you give teachers in the first year of their careers?
- 16. Is the Department of Education involved in providing professional development?

 Discuss
- 17. Describe your vision of an effective school.

APPENDIX F: PERMISSION GRANTED FROM KWAZULU-NATAL DEPARTMENT OF EDUCATION TO CONDUCT RESEARCH IN THE CETSHWAYO DISTRICT.



OFFICE OF THE HEAD OF DEPARTMENT

Private Bag X9137, PIETERMARITZBURG, 3200 Anton Lembede Building, 247 Burger Street, Pietermaritzburg, 3201 Tel: 033 392 1063

Email: Phindile.duma@kzndoe.gov.za

Ref.:2/4/8/41160

Mrs S Padayachie Box 2225 EMPANGENI 3880

Dear Mrs Padayachie

Enguiries: Phindile Duma

PERMISSION TO CONDUCT RESEARCH IN THE KZN DoE INSTITUTIONS

Your application to conduct research entitled: "EXPLORING STRATEGIES FOR DEVELOPING THE EFFICIENCY OF NOVICE TEACHERS IN KWAZULU-NATAL PRIMARY SCHOOLS", in the KwaZulu-Natal Department of Education Institutions has been approved. The conditions of the approval are as follows:

- The researcher will make all the arrangements concerning the research and interviews.
- The researcher must ensure that Educator and learning programmes are not interrupted.
- Interviews are not conducted during the time of writing examinations in schools.
- 4. Learners, Educators, Schools and Institutions are not identifiable in any way from the results of the research.
- A copy of this letter is submitted to District Managers, Principals and Heads of Institutions where the Intended research and interviews are to be conducted.
- 6. The period of investigation is limited to the period from 08 November 2022 to 31 October 2025.
- Your research and interviews will be limited to the schools you have proposed and approved by the Head of Department. Please note that Principals, Educators, Departmental Officials and Learners are under no obligation to participate or assist you in your investigation.
- Should you wish to extend the period of your survey at the school(s), please contact Miss Phindile Duma at the contact numbers above.
- Upon completion of the research, a brief summary of the findings, recommendations or a full report/dissertation/thesis must be submitted to the research office of the Department. Please address it to The Office of the HOD, Private Bag X9137, Pietermanitzburg, 3200.
- Please note that your research and interviews will be limited to schools and institutions in KwaZulu-Natal Department of Education.

KING CETSHWAYO DISTRICT

Mr GN Ngcobo

Head of Department: Education Date: 08 November 2022

GROWING KWAZULU-NATAL TOGETHER