

**Strategies to develop
beginner teachers' self-
directedness through
induction and mentoring**

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DECLARATION

I, THABANG DONALD MOKOENA, solemnly declare that this work is original and the result of my own labour. It has never, on any previous occasion, been presented in part or whole to any institution or board for the awarding of any degree.

I further declare that all information used and quoted has been duly acknowledged by complete reference.

25/11/2022

SIGNATURE

DATE

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DEDICATION

This dissertation is dedicated to all the people who challenged, inspired and encouraged me to commence the study and supported me throughout the course of the study: especially my mother, Makgauta Mokoena and my grandmother, Tholakele Mokoena, who offered me love and support throughout the course of the study.

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ABSTRACT

The study did not aim to develop strategies to advance self-directedness but to determine the perceptions of beginner teachers about the contribution of induction and mentoring as strategies to develop self-directedness. Flowing from the perceptions of the students, recommendations about additional strategies to develop self-directedness are also made.

Self-directedness is conceptualised as taking responsibility and initiative for directing one's own learning and problem-solving, and its development is viewed from a social constructivist perspective that involves among others working in one's Zone of Proximal Development (ZPD), learning through scaffolding and in a social and collaborative manner. Self-directedness also includes the preparedness to deal with challenges during teaching and the ability to adjust classroom practices through guidance in a self-directed manner. Although self-directedness has assisted many experienced teachers in dealing with various challenges in the field, beginner teachers continue to struggle with self-directedness because they are not sufficiently exposed to induction and mentoring processes that would equip them to triumph over teaching challenges.

The execution of the study was framed within a positivist research paradigm. To this end the researcher employed quantitative non-experimental descriptive research to collect numerical data using a pre-determined and structured five-point Likert scale questionnaire that contained questions from a standardised questionnaire as well as questions structured by the researcher. The purpose of the questionnaire, aligned with the main aim of the study, namely, to determine what difference induction and mentoring processes make in the perceptions of beginner teachers concerning the nature of their self-directedness.

The target population for this research was all BEd honours students in South Africa. As it was impossible to do research with all these students, the sample only included part-time BEd honours students (n = 300) in the Faculty of Education at a South Africa University, which consists of three campuses. The researcher purposively focused on beginner teachers as newly qualified teachers with less than four years of service in primary and secondary schools. Convenience sampling was used as the researcher chose a particular university campus because it provided easy and convenient access to the institution. Beginner teachers were purposefully chosen because they have a few years of teaching experience which suited the aim of the study. The sample (n = 222) was homogeneous in terms of experience and heterogeneous regarding the type of school, school environment, age, and ethnic groups.

Descriptive statistics, more specific frequencies, means and standard deviations were used to summarise the perceptions of the beginner teachers. Additionally, inferential statistics were used to compare the perceptions of beginner teachers who were exposed to and not exposed to induction and mentoring opportunities. For this purpose, t-tests supplemented by the calculation of effect sizes for statistically significant differences between perceptions, were used.

The findings of the study alert one to the following important conclusions. Beginner teachers perceived to be capable of working in a self-directed manner only on a sometimes to usual basis, and they reported to lack preparedness in dealing with challenges. Induction processes seem to have no statistically significant effect on developing self-directedness (self-management, desire to learn, self-control). However, in terms of preparing beginner teachers to deal with teaching challenges, exposure to induction yielded statistically significant results. Exposure to mentoring processes seem to be more effective for developing self-directedness (self-management, desire to learn, self-control) compared to induction. Also, mentoring contributed significantly to the operational and instructional management challenges and teaching challenges of beginner teachers, compared to induction. Receiving guidance appears to be valuable for enabling beginner teachers to adjust in a self-directed manner to collaboration, planning lessons, using assessment for information, reflecting on instructional practice, and adjusting teaching to varying ethnic and socio economic backgrounds.

Keywords: self-directed learning; induction; beginner teachers; mentoring; teaching practice.

OPSOMMING

Die studie het nie ten doel gehad om strategieë te ontwikkel om selfgerigtheid te bevorder nie, maar om die persepsies van beginneronderwysers oor die bydrae van induksie en mentorskap as strategieë om selfgerigtheid te ontwikkel, te bepaal. Voortvloeiend uit die persepsies van die studente word aanbevelings oor bykomende strategieë om selfgerigtheid te ontwikkel ook gemaak.

Selfgerigtheid word gekonseptualiseer as die neem van verantwoordelikheid en inisiatief om jou eie leer en probleemoplossing te rig, en die ontwikkeling daarvan word beskou vanuit 'n sosiaal-konstruktivistiese perspektief wat onder andere behels dat jy in jou Sone van Proximale Ontwikkeling (ZPD) werk, leer deur steierwerk en in 'n sosiale en samewerkende wyse. Selfgerigtheid sluit ook die gereedheid in om uitdagings tydens onderrig te hanteer en die vermoë om klaskamerpraktyke deur leiding op 'n selfgerigte wyse aan te pas. Alhoewel selfgerigtheid baie ervare onderwysers gehelp het om verskeie uitdagings in die veld te hanteer, sukkel beginneronderwysers steeds met selfgerigtheid omdat hulle nie voldoende blootgestel is aan induksie- en mentorskapprosesse wat hulle sal toerus om oor onderwysuitdagings te seëvier nie.

Die uitvoering van die studie is binne 'n positivistiese navorsingsparadigma geraam. Vir hierdie doel het die navorser kwantitatiewe nie-eksperimentele beskrywende navorsing aangewend om numeriese data in te samel deur gebruik te maak van 'n voorafbepaalde en gestruktureerde vyfpunt Likert-skaalvraelys wat vrae uit 'n gestandaardiseerde vraelys bevat sowel as vrae wat deur die navorser gestruktureer is. Die doel van die vraelys, in lyn met die hoofdoel van die studie, naamlik om te bepaal watter verskil induksie- en mentorskapprosesse maak in die persepsies van beginneronderwysers oor die aard van hul selfgerigtheid.

Die teikenpopulasie vir hierdie navorsing was alle BEd-honneursstudente in Suid-Afrika. Aangesien dit onmoontlik was om navorsing met al hierdie studente te doen, het die steekproef slegs deelydse BEd-honneursstudente ($n = 300$) in die Fakulteit Opvoedkunde by 'n Suid-Afrikaanse Universiteit, wat uit drie kampusse bestaan, ingesluit. Die navorser het doelbewus gefokus op beginneronderwysers as nuutgekwalfiseerde onderwysers met minder as vier jaar diens in primêre en sekondêre skole. Gerieflikheidsteekproefneming is gebruik aangesien die navorser 'n spesifieke universiteitskampus gekies het omdat dit maklike en gerieflike toegang tot die instelling gebied het. Beginneronderwysers is doelgerig gekies omdat hulle 'n paar jaar onderwyservaring het wat by die doel van die studie gepas het. Die steekproef ($n = 222$) was homogeen in terme van ervaring en heterogeen ten opsigte van die tipe skool, skoolomgewing, ouderdom en etniese groepe.

Beskrywende statistiek, meer spesifieke frekwensies, gemiddeldes en standaardafwykings is gebruik om die persepsies van die beginneronderwysers op te som. Daarbenewens is afleidingsstatistieke gebruik om die persepsies van beginneronderwysers wat aan induksie- en mentorgeleenthede blootgestel is, te vergelyk. Vir hierdie doel is t-toetse aangevul deur die berekening van effekgroottes vir statisties beduidende verskille tussen persepsies, gebruik.

Die bevindinge van die studie waarsku 'n mens vir die volgende belangrike gevolgtrekkings. Beginneronderwysers het gesien dat hulle in staat is om slegs op 'n soms tot gewone basis op 'n selfgerigte manier te werk, en hulle het gerapporteer dat hulle 'n gebrek aan paraatheid het om uitdagings te hanteer. Induksieprosesse het blykbaar geen statisties beduidende effek op die ontwikkeling van selfgerigtheid nie (selfbestuur, begeerte om te leer, selfbeheersing). In terme van die voorbereiding van beginneronderwysers om onderriguitdagings te hanteer, het blootstelling aan induksie egter statisties beduidende resultate opgelewer. Blootstelling aan mentorskapprosesse blyk meer effektief te wees vir die ontwikkeling van selfgerigtheid (selfbestuur, begeerte om te leer, selfbeheersing) in vergelyking met induksie. Ook het mentorskap aansienlik bygedra tot die operasionele en onderrigbestuursuitdagings en onderriguitdagings van beginneronderwysers, in vergelyking met induksie. Die ontvangs van leiding blyk waardevol te wees om beginneronderwysers in staat te stel om op 'n selfgerigte wyse by samewerking aan te pas, lesse te beplan, assessering vir inligting te gebruik, te besin oor onderrigpraktyke en onderrig aan te pas by verskillende etniese en sosio-ekonomiese agtergronde.

Sleutelwoorde: selfgerigte leer; induksie; beginner onderwysers; mentorskap; onderwyspraktyk.

TABLE OF CONTENTS

DECLARATION	i
DEDICATION.....	ii
ACKNOWLEDGEMENTS	iii
ABSTRACT	iv
OPSOMMING	vi
TABLE OF CONTENTS.....	viii
LIST OF TABLES	xiv
LIST OF FIGURES.....	xvi
CHAPTER 1 INTRODUCTION AND MOTIVATION OF THE STUDY	1
1.1 INTRODUCTION AND CONCEPT CLARIFICATION.....	1
1.2 BACKGROUND TO AND RATIONALE FOR THE PROBLEM.....	5
1.3 PROBLEM STATEMENT.....	7
1.4 RESEARCH QUESTIONS	8
1.4.1 Primary research question.....	8
1.4.2 Secondary research questions	9
1.5 PURPOSE AND OBJECTIVES OF THE STUDY.....	10
1.6 THEORETICAL FRAMEWORK	10
1.7 RESEARCH METHODOLOGY	13
1.7.1 Research design.....	13
1.7.2 Research paradigm	14
1.7.3 Population and sampling methods.....	14
1.7.4 Data collection (methods, strategies and instruments).....	16
1.7.4.1 Data collection method	16
1.7.4.2 Data collection instruments.....	16
1.7.4.3 Data collection strategy	18

1.7.5 Quantitative: Data analysis	18
1.7.6 Validity (Quality criteria).....	19
1.7.6.1 Internal validity.....	20
1.7.6.2 External validity	20
1.8 ETHICAL CONSIDERATIONS.....	21
1.9 CHAPTER DIVISION	22
1.10 CONTRIBUTION OF THE STUDY	22
1.11 SUMMARY.....	23
CHAPTER 2 LITERATURE REVIEW.....	24
2.1 INTRODUCTION	24
2.2 SELF-DIRECTED LEARNING	24
2.2.1 Self-directed learning: A theoretical perspective	24
2.2.2 Conclusion.....	27
2.3 BEGINNER TEACHER	28
2.3.1 Introduction.....	28
2.3.2 Characteristics displayed by a self-directed beginner teacher.....	29
2.3.3 Challenges related to the roles and responsibilities of beginner teachers	32
2.3.4 Conclusion.....	35
2.4 INDUCTION	35
2.4.1 Introduction.....	35
2.4.2 Perceptions of induction	37
2.4.2.1 International perceptions of induction	37
2.4.2.2 South African perceptions of induction.....	38
2.4.3 Benefits of a successful induction programme	41
2.4.4 Conclusion.....	42
2.5 MENTORING	43
2.5.1 Introduction.....	43
2.5.2 Components of a beneficial mentoring programme.....	44
2.5.3 Mentor and mentee roles.....	45

2.5.4 Mentoring benefits	46
2.5.5 Challenges with induction and mentoring programmes	47
2.5.6 Perceived benefits of beginner teachers who are exposed to induction and mentoring	47
2.5.7 Conclusion.....	49
2.6 TEACHING AND CLASSROOM PRACTICE: CHALLENGES.....	49
2.6.1 Introduction.....	49
2.6.2 Adjusting classroom and teaching practice challenges	50
2.6.3 Challenges beginner teachers experience in their first years of teaching	51
2.6.4 Transition from university to a new work environment	52
2.6.5 Learner discipline and classroom management.....	53
2.6.6 Workload	54
2.6.7 Curriculum matters	55
2.6.8 Socialisation	55
2.6.9 Professional support.....	56
2.6.10 Loneliness and isolation	57
2.6.11 Conclusion.....	57
2.7 SUMMARY.....	57
CHAPTER 3 RESEARCH METHODOLOGY	60
3.1 INTRODUCTION	60
3.2 RESEARCH DESIGN.....	60
3.3 RESEARCH PARADIGM	61
3.4 RESEARCH APPROACH.....	61
3.5 POPULATION AND SAMPLING.....	62
3.5.1 Population	62
3.5.2 Sample	63
3.6 DATA COLLECTION STRATEGY, METHOD AND INSTRUMENT	64
3.6.1 Data collection strategy	64
3.6.2 Data collection method	65

3.6.3 Data collection instrument	65
3.7 DATA ANALYSIS AND INTERPRETATION.....	68
3.8 PILOT STUDY.....	69
3.9 ROLE OF THE RESEARCHER.....	70
3.10 QUALITY CRITERIA.....	71
3.10.1 Internal validity	71
3.10.2 External validity	72
3.10.3 Statistical conclusion validity.....	72
3.10.4 Face Validity	72
3.10.5 Content Validity	72
3.10.6 Construct Validity.....	73
3.11 ETHICAL CONSIDERATIONS.....	73
3.12 SUMMARY.....	74
CHAPTER 4 DATA ANALYSIS AND INTERPRETATION.....	76
4.1 INTRODUCTION	76
4.2 PROFILE OF RESPONDENTS.....	76
4.2.1 Type of school	77
4.2.2 School Environment	77
4.2.3 Age.....	79
4.2.4 Ethnic groups	79
4.2.5 Teaching experience	80
4.2.6 Campus.....	82
4.2.7 Geographic location.....	82
4.3 SELF-DIRECTED LEARNING	84
4.3.1 Introduction.....	84
4.3.2 Validity.....	88
4.3.3 Correlations	92
4.3.4 Reliability (Cronbach Alpha)	93
4.3.5 Descriptive statistics	94

4.4 FIRST YEAR OF TEACHING EXPERIENCE	94
4.4.1 Challenges related to beginner teachers' preparedness in their first year of teaching	94
4.4.2 Validity.....	98
4.4.3 Descriptive statistics for challenges related to the preparedness of beginner teachers in their first years of teaching	101
4.4.4 Reliability	101
4.5 INDUCTION	102
4.5.1 Introduction.....	102
4.5.2 The providers of teacher induction programmes for beginner teachers.....	104
4.5.3 Primary purpose of induction	105
4.6 THE MENTORING PROCESS	106
4.6.1 Do you have a mentor?	106
4.6.2 Position of mentor.....	107
Assigned mentor	108
Meetings with mentor	109
4.7 THE IMPACT OF INDUCTION AND MENTORING ON A BEGINNER TEACHER'S SELF-DIRECTEDNESS	120
4.7.1 Attending an induction programme and self-directed learning	120
4.7.2 Attending an induction programme and preparedness to deal with teaching challenges.....	121
4.7.3 Having a mentor and self-directed learning.....	121
4.7.4 Having a mentor and preparedness in relation to challenges beginner teachers teaching experience	122
4.7.5 Challenges related to classroom practice: Adjusting classroom practice on mentor's guidance	124
4.8 SUMMARY.....	126
CHAPTER 5 FINDINGS, RECOMMENDATIONS AND CONCLUSIONS.....	129
5.1 INTRODUCTION.....	129
5.2 SUMMARY OF THE STUDY.....	129
5.3 FINDINGS FROM THE RESEARCH.....	131

5.3.1 Findings related to the objectives of the research	131
5.4 RECOMMENDATIONS	134
5.5 LIMITATIONS OF THE STUDY.....	138
5.6 RECOMMENDATIONS FOR FURTHER RESEARCH	138
5.7 SUMMARY	138
REFERENCE LIST	140
ANNEXURES.....	164
ANNEXURE A PERMISSION GRANTED FROM THE NORTH-WEST UNIVERSITY RESEARCH DATA KEEPER COMMITTEE (NWU-RDGC)	165
ANNEXURE B PERMISSION GRANTED FROM THE NORTH-WEST UNIVERSITY EDUREC RESEARCH ETHICS COMMITTEE	166
ANNEXURE C INFORMED CONSENT	167
ANNEXURE D DATA COLLECTION INSTRUMENT: QUESTIONNAIRE	171
ANNEXURE E OFFICIAL CHANGE IN FUNCTIONARIES.....	216
ANNEXURE F DECLARATION OF LANGUAGE EDITING	217

LIST OF TABLES

Table 4.1:	Type of school	77
Table 4.2:	School environment.....	78
Table 4.3:	Age.....	79
Table 4.4:	Ethnic groups	80
Table 4.5:	Teaching experience	81
Table 4.6:	Campus.....	82
Table 4.7:	Province of origin.....	83
Table 4.8:	Frequency (percentages) distribution of the responses on the SDLRS 52 items questionnaire	84
Table 4.9:	The distribution of the 40 items into three factors.....	88
Table 4.10:	Regression Weights.....	90
Table 4.11:	Correlations between factors	92
Table 4.12:	SEM fit indexes (guidelines and reported values)	93
Table 4.13:	Cronbach Alpha values of the subscales	93
Table 4.14:	Descriptive statistics of three factors of Self-directed Learning scale	94
Table 4.15:	The level of preparedness of beginner teachers in relation to dealing with challenges in their beginning years of teaching.....	94
Table 4.16:	Kaiser-Meier-Olkin Measure	98
Table 4.17:	Total variance explained.....	99
Table 4.18:	Factor loadings of two extracted factors.....	100
Table 4.19:	Descriptive statistics of two factors of the challenges related to the preparedness of beginner teachers in their first years of teaching	101
Table 4.20:	Cronbach Alpha values and inter-item correlation of two factors of preparedness	101
Table 4.21:	Respondents who followed and who did not follow an induction	102
Table 4.22:	Programme provider	104
Table 4.23:	Primary purpose of induction	105
Table 4.24:	Do you have a mentor?	106
Table 4.25:	Position of mentor.....	107
Table 4.26:	Assigned mentor.....	108
Table 4.27a & b:	Time when the beginner teacher and the mentor meet (informal)	109
Table 4.28:	Frequency and length of meetings.....	110
Table 4.29:	The sufficient time for mentorship meetings.....	112
Table 4.30:	The scheduled time your mentor spent during the most recent full teaching week.....	113

Table 4.31:	The extent your mentor supports you during the most recent full teaching week.....	116
Table 4.32:	Differences in the constructs of SDL between those who attended induction and those who did not.....	120
Table 4.33:	Differences in the challenges related to preparedness between those who attended induction and those who did not.....	121
Table 4.34:	Differences in the constructs of SDL between those who had a mentor and those who did not	122
Table 4.35:	Differences in the constructs of preparedness in relation to challenges beginner teachers teaching experience	122
Table 4.36:	T-test comparison between mentoring guidance and adjustment of classroom practice.....	125

LIST OF FIGURES

Figure 2.1:	Developing self-directedness.....	58
Figure 3.1:	The Self-Directed Learning Readiness Scale (40 items).....	67
Figure 4.1:	Type of school	77
Figure 4.2:	School environment.....	78
Figure 4.3:	Ethnic group	80
Figure 4.4:	Teaching experience	81
Figure 4.5:	Geographic location.....	83
Figure 4.6:	SEM diagram of the theoretical model being tested	89
Figure 4.7:	Factor loadings of two extracted factors.....	99
Figure 4.8:	Participation in an induction process.....	103
Figure 4.9:	Induction programme provider	104
Figure 4.10:	Purpose of Induction.....	105
Figure 4.11:	Respondents with or without mentors	107
Figure 4.12:	Position of mentor.....	108
Figure 4.13:	Time when the beginner teacher and the mentor meet (informal)	110
Figure 4.14:	How often are the meetings and how long do they take?	111
Figure 4.15:	Extent of exposure to mentoring	117

CHAPTER 1

INTRODUCTION AND MOTIVATION OF THE STUDY

1.1 INTRODUCTION AND CONCEPT CLARIFICATION

Teaching in the 21st century is becoming more challenging. It requires teachers to be self-directed and thoroughly trained to develop skills and competencies such as constant growth, empathy, collaboration and problem-solving to receive professional support to enable them to cope and be strategic when dealing with teaching profession challenges (Tican & Deniz, 2019:183). According to Beach (2017:61), self-directed teachers assume the primary responsibility of taking charge of their own learning, constructing knowledge and being solution orientated. Although self-directedness has assisted many experienced teachers in dealing with various challenges in the field (Beach, 2017:69), the researcher believes that beginner teachers continue to struggle to implement this approach to learning. Beginner teachers do not take the effort to determine their learning requirements and actively design their own professional learning (Louws *et al.*, 2017:172), and therefore, according to the researcher, struggle to be self-directed and triumph over teaching challenges. In addition, Oppenheimer (2017:274) states that some beginner teachers experience hardships in the profession due to the absence of mentoring. As a result, Dean (2017:29) elucidates that professional support such as mentorship should be prioritised and offered upon employment in order to improve retention and promote a conducive working environment for beginner teachers.

According to Darling-Hammond (2017:292), various institutions across the globe struggle with the effective implementation of the induction and mentoring process and have expectations that new employees will successfully carry out their duties the same way that experienced employees do. As a result of this expectation, Van Tonder and Fourie (2015a:67) explain that beginner teachers often feel overwhelmed by various teaching challenges, which include administrative workload, effective classroom management, fulfilling their roles as teachers by interpreting and designing learning programmes and materials, being lifelong learners, assessors and subject specialists. Moreover, others break down in depression and stress because they want to make a good first impression at work (Van Tonder & Fourie, 2015a:67). Based on these challenges, Paul (2017) explains that beginner teachers need to undergo an induction and mentoring process because it prepares beginner teachers to adapt to the teaching environment, cope with work pressure and be solution-orientated when they encounter challenges.

Self-directed learning (SDL) has for over 50 years been researched, theorised, and practised. Hiemstra and Brockett (2012) and Tough (1978) classified SDL as a personal attribute, where individuals can be self-directed and self-reliant in their learning or as a process for organising instruction. Individual predispositions toward this learning and engaging autonomously in the learning process are referred to as SDL personal attributes. SDL is a learning process that the learner controls. Knowles (1975:18) defines SDL as “a process in which individuals take the initiative, with or without the support of others, to identify their learning needs, formulate learning goals, identify human and material resources for learning, select and implement appropriate learning strategies, and assess learning outcomes”. For this reason, self-directedness (*cf.* 2.2) also included the preparedness of beginner teachers to deal with challenges and adjusting classroom practices in a self-directed manner (*cf.* 2.3, 2.6) in the study. The researcher believes that enabling beginner teachers to be prepared to deal with challenges and to adjust their practices would signal higher levels of self-directedness.

Knowles (1975:18) has suggested a six-step procedure that can serve as the basis of a learning arrangement between teachers and learners engaged in self-directed learning. The six steps are:

- (1) climate setting, that is, creating an atmosphere of mutual respect and support;
- (2) diagnosing learning needs;
- (3) formulating learning goals;
- (4) identifying human and material resources for learning;
- (5) choosing and implementing appropriate learning strategies; and
- (6) evaluating learning outcomes (Knowles, 1975:18).

Louws *et al.* (2017:173) explain that self-directed learning is associated with professional development (PD). A concern about the imbalance experienced in PD is that teachers are often seen as PD receivers rather than active participants who can clarify their learning objectives and have a say in their own learning. It also means adults want to be seen and considered as self-directed by others (Knowles *et al.*, 2015: 44). Viewing teachers as self-directed implies treating teachers as professionals, solving the central imbalance experienced in PD programmes, which teachers consider to be active participants in the creation of their own professional learning (Louws *et al.*, 2017:172).

A beginner teacher is a graduate teacher from a tertiary institution who has completed a qualification programme to teach (McIntyre & Hobson, 2015:2). In addition, a teacher who has less than four years of teaching experience is considered a beginner teacher and has to go through various professional development activities such as induction, workshops and mentoring to adjust to their work environment, comprehend their roles as teachers and perform to the level of expectation (Kozukoglu, 2017:91). To be regarded as self-directed, beginner teachers must show a high level of control when managing their own learning at work by exploring learning opportunities that will enable them to be active participants in learning, critical thinkers and problem-solvers of the 21st century teaching challenges.

Induction is a professional development programme which integrates mentoring and is structured to provide “support, guidance, and orientation for beginner teachers during the transition into their first teaching job” (Smith & Ingersoll, 2004:681). According to Pearce and Morrison (2014:47), it is a process of introducing a new employee to the company or an organisation. This introduction begins with acquainting new employees with the company's culture and processes and assisting them in being socially comfortable and aware of their professional duties. Leon (2013) denotes that the induction of new employees is guided by a comprehensive programme which should be established and sustained by the company until employees are considered equipped to conduct their duties to the best of their abilities. The South African Department of Basic Education (DBE) has published guidelines for beginner teacher induction (New Teacher Orientation Booklet, 2016:1-5). However, although there are criteria for teacher induction in South Africa, many unclear aspects exist, such as how long beginner teachers should be inducted. In order to provide beginner teachers with guidance, the South African Council for Educators (SACE: 2020) states that “newly qualified and provisionally registered teachers participate in a one-year mandatory induction programme provided by various employers”. In this study, 72.1% of respondents (*cf.* Table 4.21) indicated they followed an induction programme. The various stakeholders (district (DBE), principals, SGBs and universities) should ensure sustainable professional development through induction (*cf.* Table 4.22).

In addition, the South African Department of Education has detailed orientation programme guidelines for beginner teachers. The purpose of teacher orientation is stipulated in this document to “assist beginner teachers and principals in adjusting to and becoming familiar with the school at which they have been appointed” (Department of Education [DoE], 2009:1).

Suppose many companies, including schools, do not carry out the induction process or plan, they will experience many challenges, such as the inability to perform their job requirements to the level of expectation (Ingersoll & Strong, 2012:472). Ingersoll and Strong (2011:203)

classified teacher induction as “a variety of different types of activities for new teachers’ orientation sessions, collaborative faculty periods, meetings with supervisors, developmental workshops, extra classroom assistance, reduced workloads, and, especially, mentoring”.

In prior research, induction was characterised as a particular step or phase in a beginner teacher’s growth (Totterdell *et al.*, 2004:7), a period of transformation from pre-service teacher training to a qualified, operational teacher (Feiman-Nemser *et al.*, 1999:8; Serpell, 2000:9). Additionally, the induction programme might be classified as mentoring (Clandinin *et al.*, 2015:6; Hobson *et al.*, 2009:211).

Mentoring, according to Dağ and Sari (2017:115), refers to a learning partnership formed in the occupational context between a more experienced person and a less experienced person. A more experienced teacher will develop a professional relationship with a beginner teacher to promote learning and development. Callahan (2016:7) further states that mentoring is a human relationship that requires sharing ideas, constant interaction, meetings, time investment and shared understanding between a mentor and a mentee. A subject specialist who can express and demonstrate the discipline of teaching adults, a mentor is a skilled and knowledgeable teacher who supports the professional growth of a beginner teacher by sharing the expertise and experience they have accrued over time (Cobbold, 2014:7). Nevertheless, choosing a mentor does not guarantee that every senior teacher will be considered to be a perfect choice for a mentee. Instead, it is advisable that only highly qualified, competent, and skilled teachers who have demonstrated performance and self-direction over time would be designated mentors (Callahan, 2016:9). According to Schulleri (2020:322), mentoring is an essential approach to improving the turnover rates of beginner teachers in the field since it equips them with the knowledge and skills necessary to carry out their teaching responsibilities and offer learners high-quality services. Mentoring as part of induction is promoted as a meaningful way for beginner teachers to learn about their profession; it provides them with the required professional knowledge and skills needed to face the concerns associated with the complexity of practice (Hobson *et al.*, 2009:212).

Teaching practice is best described by Kiggundu and Nayimuli (2009:345) as an essential element of becoming a teacher. Further, the authors explain that it provides pre-service training for students on a wide range of teaching and learning experiences while studying for a tertiary qualification to teach. Teaching practice is also known as work-integrated learning (WIL), where the student-teacher encounters the intersection between theoretical and practical learning and engagement (Cooper *et al.*, 2010: xiii). During the teaching practice period, a student teacher is provided with a mentor teacher who will guide and advise them in terms of planning, subject matter, instructional techniques, behaviour management and

teaching skills (Toom *et al.*, 2015:322). Moreover, a mentor teacher not only shares their skills and knowledge with the pre-service teacher but also allows them to collaborate professionally with other stakeholders in the profession through real classroom experiences, interactive sessions and a chance in extra-curricular activities (Jansen & Van der Merwe, 2015:191). Therefore, it implies that tertiary institutions are doing their part to provide pre-service teachers with an opportunity to learn through practical experiences before they start teaching as qualified teachers.

Induction, mentoring, and orientation are concurrently used because these components are structured in training programmes and perform similar functions. According to Kutsyuruba and Tranguna (2014:4), the efficient implementation of these components in the initial years of teaching promotes the turnover rates of beginner teachers, a lower retention rate, enhanced learner performance, and the self-directedness of beginner teachers. Furthermore, these training programmes aim to provide development to beginner teachers on the management of classrooms and efficient teaching strategies to ensure a smooth transition and adaptation to the profession and promote professional human relations and support (Tartivita, 2014:3). Therefore, it implies that the collaborative use of these components can be referred to as training provided to beginner teachers in their first years of teaching.

1.2 BACKGROUND TO AND RATIONALE FOR THE PROBLEM

According to Beach (2017:62), teacher self-directedness involves dimensions of self-management, self-monitoring, motivation, resourcefulness and problem-solving competence. However, these dimensions are influenced by the implementation of professional development activities, which encourage teachers to be self-directed and apply pedagogical content knowledge in and outside the classroom. According to Louws *et al.* (2017:171), the concept of self-directed learning originates from adult learning theories, which state that teachers have to construct their own learning needs and subsequently direct their own learning. Therefore, the researcher focused on the adult learning theory. SDL implies that teachers who direct their own learning undertake work responsibilities confidently, take charge of their goals and comprehend the purpose of learning and, as a result, deliver successful teaching and learning in and outside the classroom (Louws *et al.*, 2017:171). Furthermore, self-direction portrays a teacher as a professional who is skilled in solving complex problems, knowledgeable to impart knowledge to learners and continues to learn to develop themselves professionally (Gencel & Saracaloglu, 2018:10).

Hursen (2016:74) believes that the teaching fraternity's first essential professional development activities are induction and initial teacher training programmes such as

workshops and mentoring. Induction is a process which aims at introducing beginner teachers to annual teaching plans of their subject methodologies, intervention strategies aiming at improving teaching and learning, and acknowledging the value of collaboration and self-management in the workplace (DBE, 2009:1). Darling-Hammond (2017:292) labels schools that encourage self-directed learning as “models of learning organisations” because their teachers are proactive and trained on how to always be on the lookout for new ideas and practices and refresh their own knowledge continuously in order to deliver meaningful, quality education relevant to a specific time.

Although models of learning organisation schools prioritise professional development activities and encourage learning aimed at teacher self-directedness (Darling-Hammond, 2017:292), the opposite also prevails. Some schools still believe a beginner teacher's tertiary-level teaching practice is adequate to reflect the same skills as a qualified and experienced professional and has the same responsibilities as an experienced teacher without undertaking an induction and mentoring programme (Fantilli & McDougall, 2009:814). As a result of this view, schools need to form a partnership with institutions of higher learning to understand the extent of the developmental role teaching practice has and the need for further development even after employment. According to Vikaraman *et al.* (2017:158), beginner teachers who often leave the profession within the first few years of employment are those who lack professional support and are expected to use knowledge from tertiary education and experience from teaching practice to deliver quality teaching and learning. Erawan (2019:116) asserts that a lack of professional support is the leading cause of teacher attrition among beginners. As a result, they frequently struggle to deal with learner behavioural problems, an enormous workload, and learners with diversified teaching needs. This expectation usually leaves beginner teachers with anxiety, depression and stress when they cannot perform to the level of expectation (Hobson, 2016:87).

Beginner teachers undergo an induction procedure to gain knowledge about their workplace, workplace culture, and work requirements (Paul, 2017). Teachers new to the profession should receive guidance from this process on how to carry out their responsibilities to the expected level, establish relationships with colleagues, develop the attributes of a self-directed teacher, and — most importantly — be solution-focused when faced with challenges in the classroom. Dinesha and Mokoena (2016:337) assert that “it is a documented fact that some schools are not structurally aligned in a way that facilitates induction; hence their teachers experience challenges in their first years of teaching”. Studies demonstrate that the lack of mentor allocation and induction execution relates to the high retention rate of beginner teachers (Kidd *et al.*, 2015:156). The studies assert that the absence of support and training

elements known as induction, orientation, and mentorship are to blame for the fast exit of beginner teachers from schools. Callahan (2016:7) adds that a teacher's effectiveness also affects the survival of beginner teachers. The efficiency of a systematic induction or mentoring programme is seriously questioned when beginner teachers enter the profession only to find themselves alone in their classroom, unprepared, unsupported and overwhelmed. These perceptions suggest that while schools with training programmes are more likely to boost beginner teachers' retention, schools without induction programmes are more likely to see attrition rates rise (Callahan, 2016:7). Inadequate induction has a negative effect since it frequently leads to attrition, stress, and administrative burdens and undermines the confidence of beginner teachers (Paul, 2017).

According to Richards and Farrell (2016:113), beginner teachers are unaware of the challenges they will face upon employment because they believe they will only apply the knowledge gained from tertiary education. In most cases, beginner teachers enter the profession with a teaching qualification and accept a full-time teaching position. The assumption is that they will successfully transition from a theory-focused teacher to a well-rounded, practice-based one during their first employment. The majority of beginner teachers, however, are knocked down instantly by the gap between theory and practice, resulting in a rapid onset of reality shock (Botha & Rens, 2018:1). In addition, beginner teachers find it challenging to fulfil their job responsibilities, such as disciplining learners, managing their classrooms, and dealing with the administrative demands and extra-curricular activities the teaching profession include (Van Tonder & Fourie 2018:1336). Others leave the teaching profession as a result of this pressure and challenges they cannot face.

1.3 PROBLEM STATEMENT

The initial years of beginner teachers' careers are crucial and challenging because they either reaffirm the teachers' idea that they will develop into self-directed teachers or cause them to resign due to strain (Richards & Farrell, 2016:112). In light of this perception, it is evident that the knowledge and experience gained through the practical teaching offered by various tertiary institutions are insufficient to enable beginner teachers to become entirely self-directed and self-sufficient teachers (Hine & Thai, 2019:65). In addition, the administrative burden and pressure in the teaching profession can cause severe mental breakdowns and stress for certain beginner teachers who do not go through an induction and mentorship process (Van Tonder & Fourie, 2015b:219). Nationally and internationally there appears to be a lack of professional support to beginner teachers due to ineffective induction initiatives that could result in beginner teachers leaving the profession early (Van Tonder, 2021:879).

According to Callahan (2016:7), the collaboration between tertiary institutions and schools in promoting practice teaching and mentoring enables the development of a certain extent of self-directedness in beginner teachers. However, these beginner teachers often possess and demonstrate limited skills and experience in self-directedness concerning effective classroom management, subject methodology and interpersonal relations with learners and teachers (Hine & Thai, 2018:392). Although schools are providing planned induction and mentoring strategies to their beginner teachers, some schools believe that support provided by a head of the department to a beginner teacher is also induction and mentoring process and will successfully develop a beginner teacher (Ampofo *et al.*, 2019:11). Due to this reason, according to Richards and Farrell (2016:112), many beginner teachers report their discontent with their workplace orientation and mentoring, with the absence of or inadequate support, and with how their performance is constantly compared to that of more experienced teachers. In contrast, they lack the same teaching-related abilities, knowledge, and experience. According to Du Plessis's study (2013:1), the South African education system is in trouble because of poor leadership, poor communication, and a lack of principal support and mentoring, all of which have a negative impact on practice and leave beginner teachers feeling discouraged and dissatisfied. Beginner teachers who receive little support or are ill-prepared are likely to quit teaching within the first five years (Sun, 2016:16). Therefore, more experienced teachers must be mentors (Bressman *et al.*, 2018:163; Choi *et al.*, 2019: 632; Ellis *et al.*, 2020:2; MacPhail *et al.*, 2019:853).

1.4 RESEARCH QUESTIONS

To address the cited problem of a lack of self-directedness and an ineffective induction and mentoring process among beginner teachers (Beach, 2017:69; Dean, 2017:29; Oppenheimer, 2017:274; Paul, 2017; Van Tonder & Fourie, 2015a:67), this study aims to make a contribute. The contribution of the study links to the comparison of perceptions of beginner teachers who were exposed to and not exposed to induction and mentoring regarding the nature of their self-directedness, from which recommendations will be made to argue for stronger and increased induction and mentoring initiatives that promote self-directedness among beginner teachers to enable greater workplace orientation and ultimately elevated work performance.

1.4.1 Primary research question

The following question guided the proposed study:

What difference does an induction and mentoring process make in the perceptions of beginner teachers concerning the nature of their self-directedness?

1.4.2 Secondary research questions

The following sub-questions have been identified:

- What is the overall perceived nature of the self-directedness of beginner teachers?

This question reports on descriptive data regarding the nature of self-directedness of the entire group of respondents (*cf.* Table 4.8).

- What is the overall perceived preparedness level of preparedness of beginner teachers in dealing with challenges in their first years of teaching?

This question reports on the descriptive data regarding the overall perceived preparedness level of the entire group of respondents (*cf.* Table 4.15).

- What are the differences in perceptions of beginner teachers who are exposed to and not exposed to induction and mentoring processes regarding the nature of their self-directedness?

This question reports on a comparison between beginner teachers exposed to and not exposed to induction (*cf.* Table 4.32) and mentoring (*cf.* Table 4.34) regarding the nature of their self-directedness.

- What are the differences in perceptions of beginner teachers who are exposed to and not exposed to induction and mentoring processes about their preparedness level to deal with challenges during their first years of teaching?

This question reports on a comparison between beginner teachers exposed to and not exposed to induction (*cf.* Table 4.33) and mentoring (*cf.* Table 4.35) regarding their preparedness level to deal with challenges during their first years of teaching.

- To what extent have beginner teachers adjusted their classroom practices in response to the advice from their mentors?

This question reports on a comparison between exposure to guidance and the effect thereof on adjusting classroom practices (*cf.* Table 4.36).

1.5 PURPOSE AND OBJECTIVES OF THE STUDY

The aim of this research study is:

To determine what difference does an induction and mentoring process make in the perceptions of beginner teachers concerning the nature of their self-directedness.

The following research objectives are therefore identified:

- To determine the overall perceived nature of the self-directedness of beginner teachers.
- To establish the overall perceived preparedness level of beginner teachers in dealing with challenges in their first years of teaching.
- To identify the differences in perceptions of beginner teachers who are exposed to and not exposed to induction and mentoring processes regarding the nature of their self-directedness.
- To identify the differences in perceptions of beginner teachers who are exposed to and not exposed to induction and mentoring processes about their preparedness level to deal with challenges during their first years of teaching.
- To discover to what extent beginner teachers have adjusted their classroom practices in response to the advice from their mentors.

1.6 THEORETICAL FRAMEWORK

One fundamental aspect of the research process is a theoretical framework because it provides a guide on how the study is structured and supported. The theoretical framework is built by using an established and intelligible explanation of certain relationships between selected theory or theories and phenomena of what is known under the study and how the researcher understands and plans to research the topic (Grant & Osanloo, 2016:16). In this study, developing self-directedness is seen as a core component of adult learning theory (Manning, 2007:107). Knowles (1975:15) describes the adult learning theory as “a natural psychological and cognitive development that takes place as human beings mature intellectually” and further elucidates that self-directed learning is a pivotal approach to adult learning theory. According to Colman (2019), six different adult learning theories frame

learning among adults., of which self-directed learning, the focus of the study, is one such theory. To ensure completeness, the six adult theories mentioned by Colman (2019) are only briefly elucidated below. In this study the focus was on self-directed learning.

- **Andragogy**

Malcolm Knowles developed this theory in 1968, comparing how adults and child learners learn.

- **Transformational Learning**

This idea, which was developed by Jack Mezirow (1991:167), contends that every learner constructs a meaningful environment for him or herself using a variety of interpretations, expectations, and beliefs.

- **Experiential Learning**

David Kolb developed this adult theory in the 1970s. “Experiential learning requires the process whereby knowledge is created through the transformation of experience” (Kolb, 1984:41).

- **Project-based Learning (PBL)**

The project-based learning theory, which John Dewey developed in 1933, asserts that learners improve deeper knowledge via active analysis of issues from everyday life. An individual must therefore be faced with difficulty for reflective thinking to take place (Dewey, 1933:15).

- **Action Learning**

Reg Revans based his theories of action learning over the past 30 years. The process of problem-solving through action and reflection on the outcomes is known as action learning (Revans, 2017:2).

- **Self-directed Learning (SDL)**

The Self-Directed Learning Readiness Scale (SDLRS) developed by Fisher *et al.* (2001:523) was applied to establish the level of self-directedness of the research participants. When coming to self-directed learning, Louws *et al.* (2017:172), view it as a cognitive learning process that takes place when adult learners assume a primary responsibility of taking charge of their own learning to develop personally and professionally. Therefore, self-directed learning implies that beginner teachers should be considered adult learners who should take ownership of their learning to grow professionally and become self-directed teachers. Doing

so, the researcher argues that they will become excellent, knowledgeable teachers who are solution-orientated and prepared to deal with challenges and adjust to problems they encounter on a personal and professional basis. However, self-direction does not imply that learning is personalised or that an adult learner should work independently (Brookfield, 2009:2615).

According to the researcher, the development of self-directedness resonates well with social constructivist learning theory. The relationship between self-directedness and social constructivist learning theory, is elucidated below.

- **Social constructivist learning theory**

Self-directed learning aligns with Vygotsky's (1978:86) approach to social constructivist theory that emphasises the significance of principles such as collaborative learning and social interaction, the Zone of Proximal Development (ZPD) and scaffolding, which were considered as important during the induction and the development of beginner teachers' self-directedness. Becoming self-directed necessitates the need for the social constructivist theory, which speaks to collaborative learning and social interaction to intensify self-directedness (Geduld, 2014:15). According to Bozkurk (2017:211), the theory of social constructivism is a philosophical approach that implies that social interaction and the formation of individual meanings play an essential role in learning. As a result of social interactions and collaborative learning, individuals construct knowledge, and higher-order cognitive levels develop. The social constructivist theory implies that beginner teachers' self-directedness relies on their participation in several joint professional development activities such as induction and mentoring. Vygotsky's approach to social constructivist theory explains that more skilled peers or adults should guide these activities (Rogoff, 1999:72). It means that more skilled teachers like departmental or subject heads (Bozkurk, 2017:212) should facilitate the induction process. According to Shabani *et al.* (2010:241), "the cognitive constructivism of Piaget views learners as active constructors of their worldview and discoverers of knowledge, while Vygotsky's social constructivism, built on Piaget's ideas of active learners, focuses on social interaction in learning and development". Therefore, peer-beginner teachers' quality of interaction is crucial in this study.

Vygotsky (1978:86) defines the Zone of Proximal Development (ZPD) as "the distance between the actual development level as determined by independent problem-solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with a more capable peer". According to Guvesa and Solomonovich (2017:776), ZPD means a range of challenging tasks that individuals cannot master alone but can be mastered with the support of more skilled peers or adults. Beginner teachers are often

faced with a range of demanding tasks during their first years of teaching. Most of them experience expressed pressure because they are expected to perform these tasks alone using the experience and skills obtained during their practice teaching (Richards & Farrell, 2016:113). Therefore, the ZPD is a fundamental approach to be considered because it will guide how beginner teachers should be trained and supported by peers who are more capable as teachers to successfully complete teaching tasks and be self-directed.

Another concept aimed at improving beginner teachers' self-directedness is the social constructivist approach of scaffolding. The collaboration between the more skilled peer and the beginner teacher in constructing knowledge and skill is essential. Heilmann (2018:2) explains the theory behind scaffolding as cognitive learning that occurs when there is a collaboration between a learner and a skilled adult or peer. This concept means that schools with an induction process should provide beginner teachers with mentors to encourage self-directed and cognitive learning through collaboration. The pre-determined questionnaire of Glazerman *et al.* (2006:73) on induction and mentoring will support the social constructivist learning theory. In sum, the researcher relied on self-directed learning theory to conceptualise the nature of self-directedness, and on social cognitive learning theory for anchoring the development of self-directedness through induction and mentoring.

1.7 RESEARCH METHODOLOGY

1.7.1 Research design

A research design is an approach emanating from the study's underlying philosophical assumptions to outline the methods of data collecting and analysis (Nieuwenhuis, 2020:80) which can be quantitative, qualitative or mixed in nature (Creswell, 2009:22). In addition, Creswell (2014:32) stipulates that the data collected philosophically assumes an objective social study that can be controlled explicitly.

Quantitative research is a form of scientific research in which the researcher decides what to investigate, asks specific, focused questions, collects numerical data from respondents, uses statistics to analyse these numbers and performs the investigation in an unbiased, objective manner. According to Jones and Kottler (2006:86), quantitative studies concentrate more on numerical data as opposed to narrative data. They also explain that in quantitative studies, respondents are typically chosen with the expectation that findings from their responses can be generalised to a larger population. Therefore, the researcher's quantitative research design allowed pre-determined and structured data collection measurement. The advantages of using

a quantitative design are that it is faster and more cost-effective to execute than a qualitative design (Saunders *et al.*, 2016:406).

The emphasis on numerical and statistical analysis when measuring the collected data from the questionnaire made quantitative research the appropriate design for this study.

1.7.2 Research paradigm

The research paradigm is a framework referring to the beliefs a researcher holds about how data will be collected during the research (Nieuwenhuis, 2020:57). Positivism framed the execution of the research. In agreement with Dudovskiy (2016), within a positivist paradigm, “the role of the researcher is limited to data collection and interpretation through an objective approach, and the research findings are usually observable and quantifiable”. Quantitative research concentrates on determining social reality. The researcher sees the world as a reality that can be objectively evaluated in the process of gathering and analysing data. The quantitative interpretation concerns the research paradigm and positivism. According to Sukamolson (2007:3), “the reality is out there”, and the researcher’s task is to use unbiased research methods to discover that truth. It means the researcher must be detached from the research, using techniques that maximise objectivity and minimise the researcher’s influence in the research.

The researcher in positivist studies is autonomous of the research and within the study. Dudovskiy (2016) informs that a “deductive approach” is usually assumed in positivist studies and that emphasis is placed on facts. If a positivist approach is adopted, the researcher is entirely “objective” and “independent” of the research and maintains minimal interaction with the research respondents (Sukamolson, 2015:7).

The researcher used this paradigm to explain the situation of concern by collecting and interpreting numerical data in the form of quantitative research. One data collection instrument, which included two different structured questionnaires with pre-determined questions, was sent via a link through Google Forms for respondents to complete (*cf.* 1.7.4.2). The researcher was isolated from the data collection, responses were anonymous to avoid bias, so the findings could be considered objective.

1.7.3 Population and sampling methods

The target population for this research was all BEd honours students in South Africa. As it was impossible to do research with all these students, the sample for this research only included part-time BEd honours students in the Faculty of Education at a South Africa University, which

consists of all three campuses. According to Maree and Pietersen (2020c:219), convenience sampling refers to “situations where population elements are selected because they are easily and conveniently available”. This South Africa University was chosen because it was convenient for the researcher to access the institution in close proximity. As it was impossible to do research with all the beginner teachers in the target population and due to time and logistical constraints, a non-probability purposive sample was used to recruit the beginner teachers (Leedy & Ormrod, 2019:206). Non-probability sampling is a technique that collects the samples in a process that does not give everyone in the population equal opportunities to be chosen (Tardherdoost, 2016:22).

Purposive sampling is carried out with a particular aim in mind (Maree & Pietersen, 2020c:220). In this study, the researcher purposefully focused on part-time BEd honours students as newly qualified teachers with less than four years of service. Therefore, beginner teachers within this particular South Africa University were invited to participate in the research. Beginner teachers were chosen because they have a few years of teaching experience and suit the aim of the study to determine the perceptions about the influence of an induction and mentoring process on the self-directedness of beginner teachers. Other factors were the potential shortcomings and weaknesses in their capacity for the development of self-directed learning that might become apparent during their studies at the higher education level. Therefore, it is possible to implement action plans to address the deficiencies and weaknesses to build their careers as teachers.

A sample of 300 ($n=300$) beginner teachers aimed for were part-time BEd honours students situated at both primary and secondary schools. The sample size was determined based on Pietersen and Maree's (2020:267) recommendation that one should consider the size of a sample for employing certain statistical analysis procedures. As factor analyses were envisaged, Field's (2018:926) recommendation of a sample size of at least 300 was considered. The researcher aimed to get the responses of at least 300 willing participants. Had the researcher not succeeded in this, EFAs per theoretical construct would have been conducted instead. In this case, Field (2018:926) recommends at least 10-15 respondents per variable. Therefore, since the highest number of variables within one theoretical construct is 21, at least 210 respondents were needed to conduct a EFA per construct. Hence, the minimum sample size that was aimed for was 210 respondents.

The final sample ($n = 222$) was homogeneous in terms of experience. In addition, the sample was heterogeneous in the type of school, school environment, gender, age, and ethnic groups. The researcher acknowledged that non-probability sampling has a few limitations. Firstly, the sample was not going to be representative of the target population, as one was not going to

know how representative the sample of the district as a whole was going to be, as the sample was based on the voluntary participation of the invited participants and thus could contain some bias.

Secondly, the findings cannot be generalised but will provide the research with initial findings that could be followed up with comparative research.

1.7.4 Data collection (methods, strategies and instruments)

1.7.4.1 Data collection method

Maree (2020:44) explained that quantitative research focuses on collecting and generalising numerical data across groups of individuals. In this study, the quantitative survey method was used to enable the researcher to assess the opinions and attitudes of various role-players related to education (McMillian & Schumacher, 2010:21). From this research's perspective, it means roles players' (in terms of beginner teachers with different levels of experience) opinions and attitudes were assessed. Furthermore, this method is advantageous because it is designed to gather data from a large population from a sample that consists of a small number of people (McMillian & Schumacher, 2010:22).

1.7.4.2 Data collection instruments

The researcher's collection instrument for collecting data in this study is one instrument that included two different structured, pre-determined questionnaires. The one questionnaire measured the self-directed ability of beginner teachers by using the original 52-item Self-Directed Learning Readiness Scale (SDLRS) developed by Fisher *et al.* (2001:523) (used in Section B of the questionnaire). The other questionnaire was modified to suit this study, developed by Glazerman *et al.* (2006:73) from a previous study, "Design of an Impact Evaluation of Teacher Induction Programs", focusing on induction and mentoring in the first years of teaching experience of beginner teachers (used in Section D of the questionnaire).

According to McMillian and Schumacher (2010:195), a questionnaire is financially viable and objective as it allows the researcher to construct it to serve the research purpose. The questionnaire was made available to the respondents via a link through Google Forms. The questionnaire had an embedded consent form where the respondents were indicated to take part voluntarily and could discontinue this survey at any time by simply closing their browsers. Anonymity and confidentiality were ensured without penalty at any stage. The questionnaire was made available in English. The researcher claims that all respondents will have proficient knowledge and understanding of English because beginner teachers' tertiary training was at institutions where English was the language of teaching and learning. It took approximately

50 minutes for the respondents to complete and submit the questionnaire. From the sample (n=300), the researcher received (n=222) responses at almost every question asked because most Likert scale questions were compulsory to get valid data necessary for this research. However, section D of the questionnaire related to mentoring was not compulsory. The number of responses is visible and reported in Chapter 4 of the dissertation.

The questionnaire the researcher used has four sections. Section A was about the biographical information of the respondents. In Section B the researcher used the standardised SDLRS recently developed by Fisher *et al.* (2001:523) to measure beginner teachers' self-directed learning readiness as defined by Wiley (1983:182), as "the degree the individual possesses the attitudes, abilities and personality characteristics necessary for self-directed learning". Section C of the questionnaire focused on beginner teachers' first years of teaching experience, and D on the induction and mentoring process (Glazerman *et al.*, 2006:73).

Questionnaire completion will involve the following:

Section A: Biographical information: To be completed by all respondents.

Section B: Self-directed learning: All respondents completed this section.

Section C: First-year experience: All respondents completed this section.

Section D: Induction and mentoring: Only respondents who completed an induction or mentoring process completed this section.

The researcher piloted the entire questionnaire before using it in a full-scale survey to identify any misunderstandings that needed to be corrected (Bertram & Christiansen, 2020:56). In particular, Sections C and D were taken from a previous questionnaire and adapted to fit into this study. Section B is a standardised questionnaire that was used in totality and required no modifications.

The researcher evaluated the questionnaire by requesting 20 beginner teachers from primary (n=10) and secondary (n=10) schools in the Sedibeng East District (D7) of the Gauteng Province who was not part of the primary research but shared the same qualities with the respondents to complete the questionnaire. The feedback provided by these 20 individuals was then used to improve the quality of the questionnaire. A questionnaire was best suited for this study, as the respondents' responses were anonymous to avoid bias.

1.7.4.3 Data collection strategy

Grosser *et al.* (2018:19) state that a research strategy is a specific approach that a researcher applies to collect data. In quantitative research, there are two types of strategies: experimental and non-experimental.

In experimental research, one must manipulate variables in both the pre-and post-conditions. The method of research known as non-experimental research does not entail the manipulation of variables, but rather describes events that have already taken place, and presents a summary of features and investigating the nature of the circumstances that now exist (Maree, 2020:40). In addition, the non-experimental strategy can be inclusive of strategies such as descriptive research study, comparative research, correlational research and descriptive observational study.

In this research, a non-experimental, descriptive research strategy was used because the researcher did not intend to manipulate variables but aimed to describe, examine, and compare the nature of existing conditions. This research explored perceptions related to the influence or lack of influence of induction and mentoring on the self-directedness of beginner teachers during their first years of teaching. A descriptive survey was used, which informs the use of a structured and pre-determined questionnaire. The independent person assisted the researcher in administering the questionnaire. The independent person had only access to the link and the site where the data were generated, giving the students access to the questionnaire via a link on Google Forms. For internal validity, the researcher was assisted by the independent person who gave beginner teachers access to the questionnaire on Google Forms via a link to ensure anonymity and to avoid bias, so the findings could be considered objective.

1.7.5 Quantitative: Data analysis

Data were captured and analysed by a qualified and independent statistician from the North-West (NWU) university with the use of the IBM® Statistical Package for the Social Sciences (SPSS®) Version 26 software. Descriptive statistics, more specific frequencies, means and standard deviations were used to summarise the data. Where applicable, the data were also represented graphically.

Section C of the questionnaire (teaching experience in year 1 – 3) was developed by the researcher, and an exploratory factor analysis (EFA) was suggested by the independent statistician to condense the large number of variables to a smaller number of factors (*cf.* 4.4.2). The Kaiser-Meier- Olkin (KMO) test was used to measure if the data were appropriate for

factor analysis. In other words, it measures if the sample size is adequate. The test determines sampling adequacy for each variable in the model as well as for the entire model (Shrestha, 2021:6). The Principle Axis Factoring was used as an extraction method, and Direct Oblimin was used as a rotation method to extract the factors (Field, 2018:926). The use of a confirmatory factor analysis (CFA) (*cf.* 4.3.2) verified the factor structure of the set of observed variables in the data set for self-regulated learning used in the study.

In order to determine whether or not the derived criteria could be relied upon, Cronbach's Alpha coefficients were calculated. After this, factor scores were produced based on the average scores of the questions contained within each factor. Reliable factors were determined to be those that had a Cronbach's Alpha coefficient of 0.7 or above, but a threshold of at least 0.5 was also required.

Inferential statistics, supplemented by effect sizes, were used to determine to what extent the perceptions of beginner teachers who were exposed to and not exposed to induction and mentoring processes differed regarding the nature of their self-directedness (*cf.* 4.3.1), preparedness level to deal with challenges (*cf.* 4.4.1) and the effect of guidance on adjusting classroom practice (*cf.* 4.7.5). For this purpose, t-tests and Cohen's d effect size were used. According to McMillan and Schumacher (2008:299), the t-test is the most common statistical procedure for determining the significance level when comparing two means. In addition, Cohen's d was determined to assess if variations have any effect in practice. According to Steyn (2005:20), "Cohen's d can be interpreted as follows:

- ≈ 0.2 reports a small effect or insignificant difference in practice.
- ≈ 0.5 reports a medium effect or visible difference in practice.
- ≈ 0.8 reports a large effect or practical significance in practice".

The biographical data, for example, type of school, school environment, gender, age, and ethnic group were summarised with descriptive statistics. An independent statistician from the North-West University (NWU) who conducted the data analyses on behalf of the researcher also assisted with the interpretation.

1.7.6 Validity (Quality criteria)

A quantifying instrument's validity reflects the degree to which the instrument is suitable for measuring what it is intended for (Leedy & Ormrod, 2019:272). According to Creswell (2014:70), reliability is the control of influence to which the research results are compatible if the study is simulated. This implies that if this research study is replicated by other

researchers, using the same paradigm, designs, strategy of inquiry, population and sampling method, data collection method, data analysis and interpretation methods must be the same.

The following criteria were adhered to for validation in this quantitative study.

1.7.6.1 Internal validity

Leedy and Ormrod (2019:92) clarify that the degree to which the design and data create internal validity enables the researcher to draw objective conclusions about the impact of action and reaction and other relationships within the data. This is the control of variables' influence on the research findings.

1.7.6.2 External validity

According to Frambach *et al.* (2013:552), external validity is “the degree to which the findings can be generalised from the research sample to the population”. This study used non-probability sampling, and the findings could be generalised. The research took place in a real-life situation, increasing the likelihood of applying the findings to real-life environments.

1.7.6.3 Statistical conclusion validity

To analyse the results, the researcher used suitable statistical tests. The North-West University Statistical Consultation Services was consulted for this task. Therefore, the researcher was persuaded that the statistical methods used in this analysis would be sufficient for practical analyses of the results.

The researcher ensured the following criteria for the questionnaire's validity.

1.7.6.4 Face validity

According to Pietersen and Maree (2020:262), “face validity implies that a data collection instrument should measure what it is supposed to measure”. The questionnaire that was used determined the influence of an induction and mentoring process on the self-directedness of beginner teachers and to discover what challenges beginner teachers experience in their first years of teaching. This type of validity cannot be quantified or tested, but this instrument for this study has been scrutinised by an expert statistician of the Statistical Consultant Services of the NWU to ensure a high degree of face validity. The pilot study (*cf.* 1.7.4.2) results also confirmed the face validity of the questionnaire (Leedy & Ormrod, 2019:92). The feedback provided by these 20 individuals was used to evaluate the face validity and reliability of the questionnaire.

1.7.6.5 Content validity

According to Pietersen and Maree (2020:262), “content validity refers to what extent the instrument covers the entire content that the researcher wants to measure”. The questionnaires reflected all the various parts of the content domain, namely the influence of induction and mentoring process on the self-directedness of beginner teachers and to discover what challenges beginner teachers experience in their first years of teaching.

1.7.6.6 Construct validity

According to Bertram and Christiansen (2020:203), construct validity is needed for standardisation and the extent to which the data collection methods and the instrument actually measure the construct the researcher intends to measure. Both the questionnaires used in this study were previously used in past research (O'Shea, 2003:66; Fooladvand & Nadi, 2019:266; Bei *et al.*, 2020:137; Glazerman *et al.*, 2006:73), and even in those studies, the construct was found to be valid and reliable, so this was true for this study too. In addition, the questionnaire was made available in English as in the previous research. The researcher claims that all respondents had proficient knowledge and understanding of English because beginner teachers' tertiary training was at institutions where English was the language of teaching and learning.

1.8 ETHICAL CONSIDERATIONS

In this study, the researcher always complied with the ethical standards of academic research. Before the empirical study started, the research respondents gave their consent. Of key importance was the design of an informed consent form for respondents to sign before taking part in the research (Creswell & Plano Clark, 2018:174). As the respondents were 18 years and older, obtaining consent from their parents was not necessary.

The independent person added an eFundi announcement to recruit respondents and notified them of the study's purpose to ensure that respondents did not get confused or misinterpret their role in the research. In this way, no academic time was used for recruitment. The informed consent indicated how and why the respondents were selected, the study's potential risks and benefits, and their type of involvement. After the independent person finalised the recruitment process, the consent form indicated that their participation in this study was voluntary, and that anonymity and confidentiality were ensured. The consent form provided the researcher's contact details, and the supervisors should any questions arise. The informed consent also indicated that no one was being forced to participate in this study, and their identities were protected. Respondents were also notified they could withdraw from the study without any

penalty by simply closing their browsers. The researcher may use the findings to make suggestions to the Department of Basic Education (DBE) concerning the self-directedness of beginner teachers during their first years of teaching. Conflict of interest was minimised as the researcher did not know the respondents. The North-West University EduREC Research Ethics Committee pursued authorisation to commence research. Permission was also sought from the North-West University Research Data Keeper Committee (NWU-RDGC). Confidentiality was guaranteed because only the researcher, the supervisors and the statistical consultant had access to the data collected. The researcher and the independent person signed a confidentiality agreement at the onset of the study. All statistical data were stored on a password-protected computer in the supervisor's office, which will be for five years, and after the five years, destroyed by deleting the files on the computer. The supervisors were responsible for storage.

1.9 CHAPTER DIVISION

Chapter 1: Introduction and motivation of the study

Chapter 2: Literature study

Chapter 3: Research methodology

Chapter 4: Data analysis and interpretation

Chapter 5: Findings, recommendations and conclusions

1.10 CONTRIBUTION OF THE STUDY

This research is meaningful as it highlights issues pertaining to self-directed learning, an essential outcome in South African education, as it will include findings and recommendations that can lead to planning, practical decisions and the development of policy, which are aimed at induction, mentoring and self-directedness of beginner teachers during their first years of teaching. In addition, the researchers may use the findings to make recommendations to the Department of Basic Education regarding the difference an induction and mentoring process makes in the perceptions of self-directedness of beginner teachers.

This study is the first research on the perceptions of the influence of induction and mentoring on the self-directedness of beginner teachers at the Research Entity: Self-Directed Learning.

1.11 SUMMARY

This chapter provided a brief overview of the study. An introduction and concept clarification outline, background and rationale, problem statement, primary and secondary research questions, and objectives were delineated. In addition, an overview of the theoretical framework and research methodology, tentative chapter division, time frame, and the contribution of the study were provided.

The next chapter will review the relevant literature and confer the theoretical framework that supports this study through an in-depth examination of the key elements of the research.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

In the previous chapter, the researcher outlined the introduction, clarification, background, rationale, problem statement, primary and secondary research questions, and study objectives. Furthermore, a theoretical framework and research methodology, chapter division, and the significance of the study were detailed. In this chapter, the researcher aims to connect the social constructivist framework to developing beginner teachers' self-directedness, which include their preparedness to deal with and adjust to teaching and classroom practice challenges during their first years of teaching. Additionally, the benefits of induction and mentoring for developing self-directedness and preparing beginner teachers to deal with and adjust to teaching and classroom practice challenges are discussed. The role of social constructivism as theoretical framework for developing self-directedness through induction and mentoring will also be elucidated during the discussion.

- Self-directed learning
- A beginner teacher
- Induction
- Mentoring
- Teaching and classroom practice: Challenges

2.2 SELF-DIRECTED LEARNING

2.2.1 Self-directed learning: A theoretical perspective

According to the International Society for Self-Directed Learning (ISSDL) (2020), “Self-directed learning is an intentional learning process that is created and evaluated by the learner”. Self-evaluation of learning in the workplace is mainly influenced by typical workplace learning activities such as self-managed observation, learning from mistakes, observation, and interaction with colleagues, resulting in a learner's self-directedness (Lemmetty & Collin, 2020:50). Burkšaitienė *et al.* (2021:4) outline the concept of self-directedness as an outcome of self-directed learning. A learner has developed a self-regulated learning approach and has acquired skills to establish their own learning needs and distinct learning goals. They can use

appropriate methods and resources to achieve their goals. For beginner teachers as adult learners to achieve self-directedness, according to Burkšaitienė *et al.* (2021:4), they must accomplish the following objectives;

- Direct their own learning and be accountable
- Construct meaning and cognitively monitor their own learning process
- Accumulate knowledge, develop skills and complete tasks during the learning period
- Develop approaches and techniques that can be used to provide self-development at any convenient time
- Develop the ability to exercise control over personal and educational decisions

Therefore, according to Curran *et al.* (2019:75), these objectives necessitate self-directed learning as a fundamental theory for beginner teachers as life-long learners. In addition, Curran *et al.* (2019:75) state that beginner teachers, as adult learners and professionals, need to continuously engage in professional learning activities that will enhance their skills, knowledge and competency in teaching and their self-directedness. In this concept of self-directed learning, the researcher will explain the theoretical perspective of self-directed learning and how it contributes and correlates with other theories in ensuring the development of beginner teachers' self-directedness during their first years of teaching.

In the modern world, where contextual professional circumstances in the curriculum are changing, self-directed learning is considered an essential competence for beginner teachers as adult learners (Morris, 2019:635). During the first three years of teaching, beginner teachers undergo the learning process, which includes pursuing teaching responsibilities to achieve professional and personal development goals (Morris, 2019:636). Self-directed learning, which correlates with constructivist theory, which is a fundamental learning process aimed at developing professional and social competence in three dimensions: professional learning, which entails task management; learner personality characteristics, which entails self-efficacy and task execution; and finally, factors that influence the likelihood of a beginner teacher pursuing self-directed learning (Sawatsky *et al.*, 2017:2). As a result, beginner teachers' competence as adult learners is dependent on self-directed learning, which they build during their first years as teachers through various learning and interaction programmes such as induction and mentoring.

The development of self-directedness is rooted in Vygotsky's theory of social constructivism, where beginner teachers construct new knowledge through engagement in various activities and interaction with their colleagues and mentor teachers. In addition, it includes humanism,

a paradigm that focuses on human freedom that enables an individual to exercise their full potential (Mukhalati & Taylor, 2019:8). According to Mukhalati and Taylor (2019:3), humanism recognises learning as self-directed when beginner teachers can exercise their full potential by planning, managing, and evaluating their own learning to achieve independence, self-efficacy, and self-actualisation fulfilment in their profession as teachers. Therefore, self-directed learning as an adult learning theory works even better when used with other theories like social constructivism and humanism. Moreover, it creates a learning opportunity for beginner teachers to develop self-directedness through opportunities presented to them and those they develop themselves.

Cadorin *et al.* (2013:1512) believe beginner teachers as adult learners can use a Self-directed Learning Readiness Scale (SDLRS; Guglielmino, 1977) to measure their self-directedness (*cf.* 1.7.4.2). Numerous studies have used the SDLRS questionnaire to evaluate the levels of SDL students across many countries and find the self-directed learning readiness scale (SDLRS) is a validated questionnaire (Abraham *et al.*, 2011: 394; Cadorin *et al.*, 2017:228; El-Gilany & Abusaad, 2013:1042; Kumar *et al.*, 2021:3; Mohoaduba, 2018:22), so the researcher decided the scale was deemed suitable for this study.

Since Fisher and King (2010:46) reduced the 52 items of the SDLRS to 40 items, the researcher decided to keep the 52 items of the SDLRS as part of the data collection tool. The 40 items were categorised into three factors, and for statistical purposes, the 40 items from the 52 items of the SDLRS were reported in Chapter 4.

The three factors mentioned by Fisher and King (2010:46) are categorised as follows:

- **Self-Management**

Peek *et al.* (2016:128) perceive self-management as a lifelong task that comprises day-to-day individual tasks and how an individual strives to achieve them. As a result, it means that self-directed learning is not a one-day task; instead, it is a daily task that an individual must maintain for a long time as long as they still have the desire to learn. As a subscale of self-directed learning preparedness, self-management focuses on student study and learning skills consisting of the capacity to remain organised and logical and the self-discipline to prioritise studies. This involves the ability to engage in metacognition, in which students engage in in-depth inquiry about what they need to learn to satisfy their learning needs (Qamata-Mtshali, 2012:25). The desire for learning subscale includes questions relating to one's motivation and attitudes toward studying (Laine *et al.*, 2021:327).

- **Desire to Learn**

According to Sumuer (2018:31), the desire to learn is frequently confirmed when knowledge becomes sustainable, and learning is continuous. As a result, adult learners must be interested in learning to acquire and retain knowledge. The desire to learn emphasises students' personal characteristics as self-directed learners who can construct information actively (Mohoaduba, 2018:22). The self-management subscale includes questions associated with a person's development of appropriate external conditions and skills for the learning process, such as time management and resource handling (Laine *et al.*, 2021:327).

- **Self-control**

Duckworth *et al.* (2020:374) define self-control as a life process in which individuals personally regulate their own thoughts, feelings, emotions and behaviour when confronted with a situation of any nature. For an adult learner, it is, therefore, imperative to acquire the skill of self-control in learning to develop a sustainable interest in learning that will promote personal development. A beginner teacher who can apply this self-rating scale will be able to advance their own learning needs and goals to develop self-directedness. Relevant self-control skills include the student's motivation and capacity for goal setting, seeking and utilising appropriate resources to satisfy learning needs, and accepting responsibility for decision-making and evaluating learning (Mohoaduba, 2018:22). The self-control subscale includes questions about a person's ability to set goals and evaluate their own learning (Laine *et al.*, 2021:327).

The researcher is of the opinion that the DBE should promote and encourage self-directed learning from national to local schools in their planning to enhance and promote self-management, desire to learn, and self-control among beginner and experienced teachers, as well as other education officials. The researcher is of the opinion that beginner teachers can be identified by their mentor teachers as self-directed adult learners who possess characteristics such as problem-solving, time management, effective communication skills, direct their own learning, and assertiveness, which will be discussed in more detail in the following concept of a beginner teacher.

2.2.2 Conclusion

Self-directed learning is an essential process for learning, in particular for adults. Hence it is reckoned as one of the six adult learning theories. In addition, it alerts readers that learning,

and development become even better for a beginner teacher when used with other theories like social constructivist theory and humanism, which will be discussed in the next concept.

2.3 BEGINNER TEACHER

2.3.1 Introduction

In the quest to provide self-directed learning for beginner teachers to acquire development in their early years of teaching, Ngwira and Potokri (2019:744) identify and define a beginner teacher as a qualified individual with three years or less experience as a teacher who is participating in the initial teacher preparation and work readiness programmes. Harmsen *et al.* (2018:626) bring forth the teaching profession as the most stressful profession in European countries because beginner teachers experience high burnout symptoms and high workloads. Additionally, a study conducted in the United States defined beginner teachers as individuals who enter the workforce as vulnerable, lack experience, and encounter stressful teaching experiences, all of which have a negative effect on their well-being to the point of leaving the profession within the first year of teaching (Harmsen *et al.*, 2018:626). Although teaching practice is in place in South Africa and serves its intended purpose of training, there are so many challenges that beginner teachers experience as they enter the profession as full-time teachers (Nkambule & Murekeledzi, 2017:2). Real-world shock is a direct threat to new teachers because it is an experience they did not expect to have while teaching (Botha & Rens, 2018:3).

Curry *et al.* (2016:45 citing Moir, 1999) argue that the experiences that beginner teachers face during their first years of teaching shape who they will become in the future. A beginner teacher can be better understood by going through the following phases:

- **Anticipation phase**

The anticipation phase begins during the teacher preparation stage. It continues to the first few weeks of teaching, in which beginner teachers view teaching as a less challenging career and demonstrate a high level of enthusiasm and commitment to the profession.

- **Survival phase**

The survival phase begins in the middle of the first term when the workload and amount spent on curriculum and planning escalate. During this phase, beginner teachers start to feel the pressure of the profession and require as much support and guidance as possible.

- **Disillusionment phase**

During the disillusionment phase, beginner teachers often experience high stress if not provided support. During this phase, beginner teachers will receive progress reports on their subject performance, engage with some not cooperative parents, and discipline issues with learners.

- **Rejuvenation phase**

The rejuvenation phase often occurs after the first two recessions of the year have passed. During this phase, beginner teachers become more aware of the roles and responsibilities they need to perform independently and tasks requiring them to collaborate with their peers or mentor teachers.

- **Reflection phase**

During the reflection phase, beginner teachers positively reflect on their past teaching challenges and develop strategies that will help improve their teaching and also the performance of learners. This reflection basically refers to applying the SWOT analysis, where beginner teachers will assess their strengths, weaknesses, opportunities, and threats.

The next section explores the characteristics of self-directed beginner teachers and the roles and responsibilities of beginner teachers for which self-directed action is required.

Through the various phases of a beginner teacher's professional development, social constructivism is most likely to be retained in the profession through collaborative efforts. Morris (2019:636) asserts that while beginner teachers can make discoveries and grow on their own when they collaborate with mentor teachers who are more experienced and eager to learn, they are more likely to develop the following characteristics of beginner teachers, which were briefly mentioned in the concept of "self-directed learning".

2.3.2 Characteristics displayed by a self-directed beginner teacher

According to Knowles (1975:18), a self-directed adult learner takes responsibility for developing their learning goals, putting strategies into place, and assessing the results of those strategies, whether or not they get assistance from others. This meaning suggests that a beginner teacher as an adult learner in the education fraternity can demonstrate self-directedness through initiatives they undertake with or without the help of a mentor teacher or the head of the department at the school where they are teaching. A beginner teacher's self-directedness can be seen through the following characteristics (Fisher *et al.*, 2001:517).

- **Problem-solving ability**

According to Masitoh and Bachri (2017:258), an individual's ability to apply critical thinking to find solutions to daily challenges is an essential self-skill that demonstrates problem-solving ability. Among other areas, teaching is challenging and requires teachers who can think critically to find solutions to problems they face in their personal and professional lives. According to Shakespear *et al.* (2018:2), beginner teachers are often faced with learner discipline and poor learner performance. Although beginner teachers demonstrate some extent of self-directedness in terms of implementing solutions to improve learner performance and introducing classroom rules to alleviate learner discipline, some find these challenges overwhelming; hence, they struggle to implement this skill.

- **Time management**

Problem-solving ability requires time management skills. Huda *et al.* (2017:3) define time management as the effective use of time to complete tasks or achieve a specific goal. Given this definition, beginner teachers who execute their teaching duty and administrative work and manage their personal commitments within a time frame are considered self-directed. Skaalvik (2015:184) denotes that most beginner teachers have expressed the individual pressure they experience due to the amount of work in the teaching profession. In addition, beginner teachers are expected to execute many teaching and administrative tasks quickly (Manuel *et al.*, 2018:9). These perceptions necessitate the Zone of Proximal Development (ZPD), which considers what a teacher can do alone and how they can master time management with the help of various stakeholders within the education fraternity.

- **Good management skills**

According to the Department of Education (2000:13), a teacher has to possess good management and leadership skills. These skills include managing classroom learning activities, effectively handling administrative tasks, and organising. However, management and leadership are stressful aspects that beginner teachers struggle to master because it triggers a lot of anxiety and a sense of incompetence, especially when experienced teachers execute them with a high level of confidence and self-directedness (Perlshtein, 2015:138). Therefore, this view means that many beginner teachers still find management skills challenging and can do better with the support of experienced teachers who execute these skills well.

- **Direct own learning**

Knowles (1975:18) states that the process of learning by an adult learner means being responsible enough to set own goals, partake in learning opportunities for personal and professional development and ask for assistance when needed. Omebe (2014:27) denotes that the DBE provides regular workshops facilitated by experienced personnel and aims to ensure the development of all teachers. In addition, Perlshtein (2015:138) expounds that these workshops are for personal growth and learning and are intended to provide a teacher with tools for managing various classroom issues, including correct utilisation of subject policy documents and annual teaching plans and media for teaching and learning. These views imply that professional development provided by the DBE could assist in empowering beginner teachers with skills and knowledge to overcome the challenges they will experience in the education profession.

- **Assertiveness**

According to Du Toit-Brits and Van Zyl (2017:122), a self-directed learner portrays qualities of assertiveness, which include self-determination, a high level of confidence, self-discipline, high personal standards and decisiveness to learn what they recognise as imperative for personal, academic and professional lives. However, due to a lack of assertiveness in some beginner teachers, Nyongesa (2015:28) states that learners develop a negative attitude towards content taught by the teacher, and this thus affects learning performance in the particular subject methodology. This view implies that a positive teaching attitude portrayed by a beginner teacher can influence learner performance in their subject and result in excellent academic results.

Bishara (2021:21) denotes that the characteristics mentioned above of an adult learner are fundamental in a modern-day classroom where a learner is encouraged to be an independent thinker and is allowed to learn in their own way and pace, establish personal and academic goals based on their learning abilities and styles. As a result, a beginner teacher as an adult learner must positively engage in induction and mentoring programmes to develop independent thinking skills and achieve personal and academic goals. During this self-directed learning process, Bishara (2021:22) adds that a beginner teacher will fulfil roles and responsibilities as stipulated in the Personnel Administrative Measures (PAM) with guidance from an experienced teacher who is considered a mentor. The roles of a teacher, which bind a beginner teacher, are explained in detail below.

2.3.3 Challenges related to the roles and responsibilities of beginner teachers

Despite the provision of work readiness programmes and initial teacher programmes for beginner teachers, the Department of Basic Education (DBE) has put in place Personnel Administrative Measures (PAM) legislative framework, which stipulates everyday responsibilities and equal workload of teachers in the same post level (DBE, 2016:27-29). In this document, provincial departments have a legal responsibility to ensure that intent and norms of this document are implemented as stipulated (DBE, 2016:17). Mediation and implementation of this document imply that a beginner teacher, like any other post-level-one teacher, has a legal responsibility to adhere to their core roles and responsibilities of effectively engaging in-class teaching, including academic, administrative, educational and disciplinary facets and organising extra and co-curricular activities as stated in the contracting of their job description (DBE, 2016:18).

Rogayan and Dantic (2021:3) provide perceptions on the roles and responsibilities of beginner teachers internationally, which relate to the roles stipulated in the Personnel Administrative Measures (PAM) document of the DBE in South Africa. These roles are: being a content communicator, critical thinker, innovator, a knowledge creator and future reader teacher (Rogayan & Dantic, 2021:3). As beginner teachers globally learn and apply these roles, the following job description may be considered comprehensive and clear to what the teaching profession requires.

The job description of a beginner teacher, as guided by PAM, can be summarised as follows (DBE, 2016:27-29):

- Class teaching will promote a meaningful progression in learning areas, subject programmes, and grades.
- To teach a class.
- Prepare classes, including innovative approaches, techniques, evaluation, and field aids.
- Take a leadership role in the subject, learning area, or phase.
- Responsible for evaluating and reporting on learners' academic achievement.
- Be prepared to apply diverse strategies to meet the curriculum's outcomes.
- Create a classroom environment that promotes positive learning and actively engages learners.
- Engage in extra and co-curricular activities.

- In charge of all academic activities for each subject taught.
- Assist in non-teaching administrative activities such as general staff or subject meetings.
- Attend departmental committee meetings, seminars, and courses to update professional views/standards.
- Retain connections with sports and social clubs.
- To represent the principal in public.

As lengthy as the above job description is, a beginner teacher is expected to perform these duties like any other teacher, regardless of their experience level. In addition, beginner teachers will be expected to execute their responsibilities while observing, implementing and adhering to the norms and standards for educators as stipulated in the National Education Policy act 26 of 1996. This policy outlines seven key roles of a teacher as essential norms and standards that every teacher must be acquainted with to successfully execute their job description (Department of Education [DoE], 2000:13).

As a result, according to the DoE (cited by Van Tonder & Fourie, 2015:220) requires a beginner teacher, as a qualified teacher like any other teacher, to fulfil the responsibilities of being;

- **A learning mediator**

A beginner teacher must create a positive learning environment accommodating learners with various educational needs. In addition, demonstrate sufficient pedagogical content knowledge and multiple teaching aids and learning resources to ensure effective learning.

- **Leader, administrator and a manager**

As a leader in the classroom, a beginner teacher must demonstrate various leadership styles to stimulate positive learning and teaching. In addition, they perform administrative duties assigned to their job description, which include being a class teacher. Management begins at the classroom level, where a teacher will be expected to manage their classroom in the best possible way.

- **Assessor**

A beginner teacher must understand that assessment is a crucial and policy-regulated teaching and learning process. As a result, the beginner teacher must demonstrate understanding and accurate application of various assessment forms, including formative, summative, continuous, and baseline assessments. Regarding the post-assessment of

learners, a teacher, must have detailed records and assessments to provide feedback on learner performance.

- **Scholar, researcher and a lifelong learner**

A beginner teacher may enrol at a tertiary institution to further pursue their studies and improve their knowledge, skills, and qualifications. In addition, continuously learn as developments and changes to the curriculum within the education field surface.

- **Community, citizenship and pastoral role**

A beginner teacher is expected to uphold and promote democratic values in education while being a role model, advisor and mentor to learning in various communities, including disadvantaged communities.

- **Learning area, subject and phase specialist**

A beginner teacher will develop specific skills, knowledge, methods and values related to their subject. In addition, a beginner teacher must understand and apply various teaching methods and approaches to improve learning performance, quality teaching and learning.

- **Interpreter and designer of learning programmes and materials**

A beginner teacher must completely understand various learning programmes, visual or textual. In addition, beginner teachers incorporate these learning programmes into their daily teaching to enhance their understanding of subject content and learning. These learning programmes give teachers information about the delivered competencies, a profile of the learners and their needs, and guidelines for assessment strategies. Teachers can develop these learning programmes to enhance their learners' content knowledge.

Although tertiary education provides theoretical knowledge about these roles, beginner teachers have expressed a widespread perception in the literature that effective implementation of teacher responsibilities both inside and outside the classroom is challenging because they lack the necessary capacity and experience (Ahmed, 2021:3). However, despite this challenge, the DoE (2000) expects a beginner teacher, like any other teacher, to deliver a curriculum and adhere to the mentioned legislative frameworks that guide teaching and learning.

Although the National Education Policy Act 26 of 1996 established seven roles that bind a beginner to perform, Mohammed *et al.* (2020:91) define adult learning as lifelong learning and classify a beginner teacher as an adult learner in education. According to Vygotsky's social constructivist theory, beginner teachers learn better as adult learners with the assistance of

mentors, who through scaffolding move them through the ZPD and equip them for challenges that the roles and responsibilities they must fulfil to become self-directed, present.

As a result of the substantial theoretical knowledge in teaching and minimal practical classroom experience a beginner teacher possesses, self-directed learning, as one of the adult learning theories, implies that the construction of knowledge will not commence from scratch. It will be based on knowledge and experience obtained from tertiary education and practice teaching (Mohammed *et al.*, 2020:92). Therefore, the researcher believes, the development of self-directed learning necessitates social interaction, which is a fundamental attribute of induction and mentoring processes, to aid the construction on knowledge that would prepare beginner teachers to cope with challenges and adjust to the teaching environment. Beginner teachers will build on knowledge and experience through collaborative activities with their colleagues by observing and interacting with various stakeholders within the profession who can assist them in acquiring new knowledge and navigating the profession's growth (Ahmed, 2021:4).

2.3.4 Conclusion

In order to enable beginner teachers to be prepared to deal with the challenges that the roles and characteristics of a beginner teacher present, the researcher argues that induction and mentoring processes grounded in social constructivist theory are essential to ensure the professional growth of beginner teachers towards self-directedness. In the following section, the researcher will explain the role of induction in the context of social constructivist theory.

2.4 INDUCTION

2.4.1 Introduction

Kearney (2017:785) denotes that, over the last two decades, induction has been reckoned one of the most effective practices in the educational space that promote professional learning, growth and retention of beginner teachers. Furthermore, Kearney (2017:787) conceptualises induction as a primary phase in beginner teachers' careers. They will be fully integrated into the community of practice and learn to advance their personal and professional goals. The induction process, which often takes place for the duration of the first three years a beginner teacher is employed, is facilitated by a mentor teacher, who is defined as a more experienced and knowledgeable individual who will provide assistance, support and guidance to a beginner teacher throughout the induction period (Ensign & Woods, 2017:89). Costa *et al.* (2019:58) underscores the social constructivist nature of induction by defining it as a socialisation process during which beginner teachers will teach, learn to teach, gain knowledge, and

develop skills under the guidance and supervision of more experienced teachers and the principal. Moreover, Costa *et al.* (2019:59) perceive induction as a consensual support system in which beginner teachers are provided with assistance in successfully transitioning well into full-time teaching responsibilities and preventing them from leaving the profession due to psychological symptoms such as stress, burnout, and depression. Therefore, it means that induction is an effective mechanism that schools can adopt to alleviate challenges beginner teachers are experiencing in their first years of teaching and promote professional development that will lead to improved self-directedness.

Brown *et al.* (2020:208) signify the induction process as a crucial period in the teacher's career. Furthermore, Brown *et al.* (2020:208) state that if a beginner teacher develops negative experiences during this period, their professional growth is most likely limited and lacks productivity. In contrast, when they are engaged in effective professional learning opportunities, their productivity in terms of teaching will increasingly demonstrate professional growth and self-directed practice (Brown *et al.*, 2020:209). Engaging beginner teachers in professional learning activities to triumph over challenges experienced in their first year of teaching, the researcher, therefore, signifies Vygotsky's theory of learning and scaffolding as essential for developing beginner teachers' self-directedness (Brown *et al.*, 2020:209).

Effective induction is rooted in the social constructivist principle of the Zone of Proximal Development (ZPD) (Vygotsky, 1978:86) (*cf.* 1.6). According to Vygotsky's (1978:86) this implies that a more experienced individual assists a less experienced individual in completing a challenging activity by providing various types of assistance. According to Taghizadeh and Saadatju (2020:6), Vygotsky's theory also includes the social constructivist principle of scaffolding (*cf.* 1.6). Scaffolding during induction implies that a more experienced teacher or a mentor provides guidance and support to a beginner teacher. Scaffolding also encourages beginner teachers to engage in the social constructivist action of cooperative and social learning (*cf.* 1.6) that helps them develop problem-solving skills, strengthen their capacity for critical thinking, and equip them with the knowledge that enables them to perform their duties assertively (Xi & Lantolf, 2021:31). Taghizadeh and Saadatju (2020:7) identify adequate sources of scaffolding that can be applied during the induction process, which include:

- help or support from the expert;
- collaborative activities;
- a more capable person; and
- working alone.

In addition, Taghizadeh and Saadatju (2020:8) identified five strategies of scaffolding that are applicable to the induction of beginner teachers, and those strategies are:

- Modelling – a beginner teacher is shown practical examples or routines so that they can imitate.
- Bridging – activating beginner teachers' experiences and background knowledge for learning.
- Contextualising - providing the subject matter in a rich context.
- Schema building – beginner teachers are making a connection between new knowledge and existing knowledge.
- Developing metacognition – introduce strategies to help beginner teachers manage their own thinking.

2.4.2 Perceptions of induction

Although social constructivist principles such as the Zone of Proximal Development and scaffolding are well featured and effective in the successful induction process, beginner teachers internationally and even in South Africa have common and diverse perceptions of induction, which are emphasised below.

2.4.2.1 International perceptions of induction

Kutsyuruba *et al.* (2019:86) indicate that, internationally, the first three to four years of teaching after the teacher's initial training are the most significant in determining the decision of the teacher to remain and grow in the profession or leave the profession with dissatisfaction and regret.

Researchers and policymakers across the globe are raising a great concern that the high attrition rate has been found to span international boundaries, despite significant investment to establish teaching careers, including in the United Kingdom, Japan, Australia and many other countries (Kutsyuruba *et al.*, 2019:86). In addition, Costa *et al.* (2019:58) elucidate that although an induction programme is considered a crucial element of beginner teacher retention and professional development, only half of the European Union countries provide a comprehensive and systematic induction programme to support beginner teachers. As a result, this practice has indicated disregard and the need for the European Commission to implement practical documentation that will guide schools on how to develop their own induction programmes to provide necessary support and development to beginner teachers while consequently reducing the attrition rate (Costa *et al.*, 2019:59).

Induction has, across the globe, attempted to address one among many challenges that have led to an increased attrition rate in teaching, which Harmsen *et al.* (2019:259) identify as stress. However, despite international research on interventions for stress, beginner teachers remain the group that is vulnerable to the pressures of the profession. As a result, their work performance deteriorates, and their well-being is negatively affected, especially in areas lacking minimal professional support (Harmsen *et al.*, 2019:261). März and Kelchtermans (2020:1) denote that globally, professional support that comes in the form of induction and mentoring is fundamental in supporting beginner teachers to build professional relationships with their mentor teachers and colleagues, construct knowledge and skills from the learning opportunities provided and acquire advice and values that contribute to their professional growth.

2.4.2.2 South African perceptions of induction

Similarly, to international concerns on challenges beginner teachers encounter in their early years of teaching (Van Tonder, 2021:879), in South Africa, the lack of professional support results from ineffective and non-implementation of induction, which are the reasons beginner teachers exit the profession early. However, beginner teachers are provided with the opportunity to do work-integrated learning (WIL) [same as teaching practice]. Van Tonder (2021:881) raises a concern that the experience of teaching practice is not enough to assist beginner teachers in being fully competent and self-directed in executing the complex and vast responsibilities of the teaching profession. Du Plessis and Letshwene (2020:78) denote that in South African schools, teachers, including beginner teachers, are faced with overwhelming challenges, which among many, are:

- Overcrowded classrooms because the teacher-to-learner ratio in public schools exceeds 40:1 in secondary schools.
- Learners do not understand the instruction medium, especially in township schools.
- Workload results from Curriculum Assessment Policy Statement (CAPS) being dense and insufficient time allocation to teach.
- Poor content subject foundation results from learners lacking basic skills in the subject.
- Poor learner performance.
- Little time to teach and more administrative workload.

Induction programmes as a vital form of development are provided worldwide to alleviate the challenges faced by beginner teachers both internationally and nationally. Some of these programmes are covered below.

2.4.2.3 Different induction programmes

Research on induction has been reported in different countries worldwide. The most comprehensive induction programme for beginner teachers is offered in Singapore, where mentor teachers with a specific mission to support beginner teachers during their first two years of employment are trained by the National Institute of Education and recognised and compensated according to the country's career ladder. Beginners are given various resources, such as coaching, in-service instruction, and a buddy system (Darling-Hammond, 2017:301). Beginner teachers have a lowered teaching load (about two-thirds that of an experienced teacher) and attend courses on assessment, counseling, classroom management, and reflective practices that the National Institute and the Ministry administer. In addition, beginner teachers are given a buddy, a peer teacher who teaches the same subject, and the department head, in addition to their mentor teacher, to assist them in learning and progress (Darling-Hammond, 2017:301).

Beginner teachers are inducted in Finland as part of a collaborative self-development process. Through their unions, the Ministry of Education, university lecturers, and the profession agreed on this format for the induction of beginner teachers (Korhonen *et al.*, 2017: 154). The induction of beginner teachers is not the principal's or the teacher's responsibility. However, the Finnish Peer-Group Mentoring (PGM) model was designed to guide, support, and assist beginner teachers in developing professional growth (Geeraets *et al.*, 2015:359). PGM should take responsibility and be established into groups of five to ten members, comprising more experienced teachers and beginner teachers from different schools in the education district. Through PGM, guided by a trained mentor who is paid for this purpose, formal, informal, and non-formal learning will take place where the group of teachers will meet regularly, once a month, to plan, organise, and implement their own programme of professional development (Geeraets *et al.*, 2015:360). The PGM model is gaining momentum and international interest due to the effectiveness of its professional development programmes.

Beginner teachers in Romania should undergo a two-year probationary period after completing their training, during which they are granted similar powers as current teachers. The induction process is overseen by mentor teachers, who plan and organise every element of the induction process (Valentic & Marentic, 2014:198). The performance of the beginner teachers is then assessed internally to establish their professional abilities. Before beginner teachers are observed in the classroom, they must pass both oral and written examinations. However, beginner teachers have criticised this process as being burdensome.

In Germany, beginner teacher induction is mandatory; however, teachers are expected to fulfil their obligations to beginner teachers entirely, as neither the school nor the relevant educational authority prescribes it in detail. (Terhart, 2007:164). Terhart (2007:165) emphasises the importance of professional support and in-service training based on models of continuous professional development. In Germany, once beginner teachers gain a position as a teacher, they are left alone to adapt to professional competence and develop experience by observing their colleagues.

In Nigerian schools, the majority of initial interactions between mentors and beginner teachers are unstructured and informal (Aladejana *et al.*, 2006:27). There is no uniformity in standards if there are no norms or standards that instruct mentors on how to execute induction. Lesotho's induction is informal and unstructured, claim Lefoka and Sebatane (2003:105). Beginner teachers are poorly supported by Botswana's educational system or school administrators. A teacher is appointed by the teaching department and assigned to a school that has a vacant position. Macheng (2016:18) posits that one cause of inadequate school leadership is that principals have no input in appointing their staff. School management is essential to enhance teachers' development and ensure quality education.

Aspfors and Fransson (2015) maintain that beginner teachers in developing countries are frequently expected to work for free during their induction phase. These demoralising issues must be addressed to create a more appealing teaching environment (Nghaamwa, 2017:36).

Although the implementation of induction appears practical and effective in other countries, in South Africa, this concept predominantly appears in legislative frameworks and the National Policy framework for teacher education and is less practical in person (Kadenge, 2019:1). Therefore, it implies that regulations in this policy are laws and are evident enough in terms of implementation. Although the DBE (2005:10) condemns "the practice of launching novice teachers into employment without explicit on-site induction", Kadenge (2019:2) states that this legislative framework has been, over the years, a rhetorical commitment that lacks practicality because most beginner teachers in South Africa hardly receive professional support upon appointment. As a result, beginner teachers are expected to experience teaching and overcome its challenges through their own self-directedness. Based on the complaints and challenges identified by various policymakers and researchers regarding the ineffective implementation of induction in South Africa, the Centre for Development Enterprise [CDE] (2017) deliberates that, as of recent, there are current systems in place that addresses the implementation of induction activities in schools and at the district level, which include training workshops for beginner teachers.

The South African Department of Basic Education (DBE) has published guidelines for beginner teacher induction (New Teacher Orientation Booklet, 2016:1-5). However, although there are criteria for teacher induction in South Africa, there are many unclear aspects, such as how long beginner teachers should be inducted. Additionally, the DBE contradicts itself when it states that schools must develop their own programmes (New Teacher Orientation Booklet, 2016:2).

2.4.3 Benefits of a successful induction programme

An induction programme is a teacher development strategy used across the globe by different countries and institutions to achieve personal and professional development (Jin *et al.*, 2021:741). This programme provides beginner teachers with benefits which will be explained in detail below, such as improved self-efficacy, teacher collaboration, professional learning, cognitive pedagogical competency and comprehension of various legislative frameworks of the department of education.

- **Improved self-efficacy**

According to Podolsky *et al.* (2019:8), a structured preparation programme that will improve beginner teachers' self-efficacy is a key factor contributing to beginner teachers' likelihood of remaining in the teaching profession. Self-efficacy is a way of thinking in which individuals judge their personal abilities and self-regulation process (Chen, 2020:244). Associated with social cognitive theory, Black *et al.* (2019:104) state that beginner teachers improve their self-efficacy through models applied by their colleagues when executing challenging tasks and acquiring optimistic results. As a result, beginner teachers are then able to challenge and reckon themselves capable of facing and completing challenging tasks with an expectation to achieve their desired goals.

- **Promotes teacher collaboration**

Improving beginner teachers' self-efficacy is associated with collaboration, which Craig (2020:28) signifies as a foundational principle presented during the induction of beginner teachers. According to Jong *et al.* (2019:1), teacher collaboration is a critical aspect of teachers' professional lives because it occurs when experienced and less experienced teachers collaborate to share knowledge, critically reflect on teaching practices, collectively develop strategies for resolving challenges and design teaching methods that are appropriate for their work context. Craig (2021:28) proceeds to indicate that during the induction period, a beginner teacher acquires an opportunity to be coached and observed by their mentor in a non-evaluative way with the aim to give feedback, share ideas and

suggest team-teaching lessons to improve the quality of teaching and learning while simultaneously motivating and boosting beginner teachers' self-efficacy.

- **Professional learning**

According to Macphail *et al.* (2019:849), teaching and learning quality is mainly influenced by the quality of teacher education provided in the early years of their career. In teacher education, beginner teachers' identity, skills, and knowledge are guided toward a principle of professional development that will ensure success in executing complex roles in teaching (Macphail *et al.*, 2019:850). Therefore, during the induction process, beginner teachers will, amongst many other professional learning opportunities, engage in the following:

- ✓ **Cognitive pedagogical mastery**

Learning to master the pedagogical content knowledge is associated with beginner teachers' ability to learn through observation and the ability to develop self-efficacy (Fariyani *et al.*, 2020:100). During this learning process, a beginner teacher will be acquainted with effective teaching methods and strategies, content knowledge, lesson planning, and co-curricular and extra-curricular activities (Fariyani *et al.*, 2020:100).

- ✓ **Understanding of various legislative frameworks of the Department of Education**

A legislative framework, according to Basson and Mestry (2019:3), refers to rules and regulations established by the organisation to guide functions, employers and employees on the vision and mission of the organisation. In the teaching context, there are various policies that teachers need to be familiar with to adhere to without contravening them fully. Those policies, according to Basson and Mestry (2019:3) are:

- South African Schools Act
- Employment of Educators' Act
- Basic Conditions of Employment Act

These policies are fundamental laws in the teaching profession that guide professional conduct, and the teachers' rights and responsibilities regarding their employment.

2.4.4 Conclusion

Induction grounded in social constructivist principles of ZPD, scaffolding and social and collaborative learning (*cf.* 2.4.1) will play a significant role in beginner teachers' development

of self-directedness. It is also clear that induction should be complemented with mentoring, which will be explored in the next section.

2.5 MENTORING

2.5.1 Introduction

Mentoring and induction are used concurrently mainly because they serve the same purpose of personal and professional development (Ensign & Woods, 2017:89). According to Nopriyeni and Sulaiman (2022:2617), mentoring refers to an educational model of learning in which more experienced teachers supervise, nurture and guide beginner teachers on the roles and responsibilities they need to fulfil to reach expected pedagogical competence. Mentoring provides beginner teachers with an understanding of social, cognitive and development learning theories and how to apply them in the classroom (Nopriyeni & Sulaiman, 2022:2617). In addition, interpersonal and professional relationships between a mentor, a more experienced teacher and a mentee, a beginner teacher, intensified through collaborative classroom activities, planning lessons, sharing teaching strategies and methods, and assisting each other in addressing challenges (Nopriyeni & Sulaiman, 2022:2617).

Callan (2016:69) explains that the principal, as the first accounting official at school, is responsible for creating a positive teaching and learning environment and fostering sustainable and positive relationships between a mentor teacher and a beginner teacher by establishing a culture that supports mentoring. Implementation of this practice promotes the development of a professional relationship. Furthermore, a culture that supports mentoring helps to facilitate a successful teaching practice because it creates a platform for mentor teachers to adopt personal attributes that will allow beginner teachers to reflect on their practice towards teaching and learner performance (Hudson, 2016:35). However, the quality of a mentoring programme is of paramount importance over ordinary participation in the programme (Wiens *et al.*, 2019:103).

Mentoring beginner teachers is aligned with constructivism based on a philosophical perspective that knowledge is built on prior knowledge teachers obtained during their training before they become qualified teachers (Neutzling *et al.*, 2019:757). Beginner teachers' mentors provide beginner teachers with learning opportunities to think creatively by constructing meaning and exploring teaching (Neutzling *et al.*, 2019:757). Enabling self-directedness through mentoring occurs through collaborative efforts guided by a social constructivist approach. A beginner teacher may experience the following benefits that contribute to their becoming more self-directed as discussed below.

2.5.2 Components of a beneficial mentoring programme

White and Mason (2006:191) state that a good mentoring programme includes providing positive reinforcement, facilitating two-way communication, and collecting and reacting to feedback. These are discussed in more detail below.

Encouragement and support

Schuck *et al.* (2018:213) emphasise the importance of supporting and encouraging beginner teachers as a significant step toward improving retention. Schuck *et al.* (2018:214) add those beginner teachers who participate in a mentoring preparation programme benefit from receiving not only pedagogical support but also emotional support, which enables them to survive the inevitable challenges of the teaching profession. Encouragement of beginner teachers while executing tasks alongside their mentors and independently leads to improved self-efficacy, development of professional identity, independence and confidence (Walker & Kutsyuruba, 2019:3).

Open communication

Personal and professional relationships established through mentoring promotes a component of open communication which Barret *et al.* (2019:534) explain as a direct benefit to both a mentor and a mentee. A mentor teacher who is reckoned as an experienced teacher is allowed to establish face-to-face meetings and virtual meetings with a beginner teacher where they will network, share ideas and knowledge and collaborate on curriculum developments. Mentors will be evaluated by the beginner teacher at the end of the term, year or duration of the mentoring programme on their mentoring skills. A beginner teacher benefits from mentoring through a positive working relationship with a mentor teacher that will allow them to raise their frustrations and share their achievements on the tasks provided (Craig, 2021:25). In addition, beginner teachers are also allowed to confide and seek advice from their mentors even with personal issues, especially when it negatively impacts their work (Barret *et al.*, 2019:535). Therefore, frequent and open communication between a mentor teacher and a beginner teacher is essential in promoting a healthy professional relationship free from communication breakdowns and misunderstandings.

Feedback

Wexler (2020a:168) explains feedback as essential information that a mentor teacher provides to a mentee who is a beginner teacher, intending to provide professional development to improve their work performance. Although feedback can be formal or informal, written or

verbal, Wexler (2020a:168) denotes that any formal or informal feedback provided to a beginner teacher must be focused, progressive and constructive enough to address professional development goals during the mentoring period. Jones *et al.* (2019:3) elucidate that formal feedback, often in writing, is provided to a beginner teacher after a scheduled formal lesson observation and structured feedback from the mentor teacher to a beginner teacher, aimed to assess the quality of teaching and learning. Not only was the quality of teaching and learning assessed, but areas of improvement and strategies were identified to improve performance. According to Jones *et al.* (2019:4), informal feedback refers to regular communication between a beginner and a mentor teacher, in which they informally converse and evaluate performance together to improve their self-directedness. As a result, formal and informal feedback can be considered essential in beginner teachers' professional development and in strengthening professional relationships between colleagues.

The mentoring programme components discussed above are often featured in the roles of a mentor and a mentee. These roles of a mentor and a mentee are discussed below.

2.5.3 Mentor and mentee roles

Many experienced teachers accept mentoring responsibility because they see the need to contribute positively to the profession. In contrast, others see mentoring as a learning opportunity for personal and professional growth (Ambrosetti, 2014:32). Although some mentors assume this role formally, others consider this informally without being assigned to the position by the programme leader. According to Shillingstad *et al.* (2014:4), it does not matter whether a mentor teacher was formally or informally assigned to the mentoring role; their roles shape their mentees' skills, knowledge, and disposition to promote the school culture. In addition, Shillingstad *et al.* (2014:5) further state that mentors are considered instructional and curriculum specialists, resource providers, coaches and leaders to beginner teachers.

During the induction period, a beginner teacher as a mentee has a role in demonstrating commitment and a high level of interest in learning skills, knowledge and instructional techniques by participating in collaborative activities and engaging socially with a mentor to establish a sustainable and positive professional relationship (Izadinia, 2015:2). Engaging in a positive professional relationship requires a beginner teacher to regularly communicate, share ideas, have a mutual understanding and build trust with their mentors (Hadi & Rudiyanto, 2017:2).

In addition, a beginner teacher's professional growth and self-directedness will be influenced by one-on-one meetings that provide constructive feedback, observation of lesson presentations, lesson planning, and sharing of resources (Mukeredzi & Manwa, 2019:3). Therefore, these mentor and mentee roles provide not only the school with a successful mentoring programme but afford beginner teachers to experience mentoring benefits that are embedded in social constructivist principles that support social and collaborative learning.

2.5.4 Mentoring benefits

According to Gholam (2018:2), mentoring is an essential method of support featured during the induction period, aimed at providing professional support, and sustainable working relationships, promoting collaboration between peer teachers and experienced teachers, and developing skills and knowledge that lead to improved teaching strategies and self-directedness. Pogrud and Cowan (2013:352) further explain that mentoring has been identified and used as an effective strategy to enhance the retention of beginner teachers and address the escalating teaching challenges beginner teachers experience when they do not go through mentoring. Furthermore, in addressing the first years of teaching challenges, Gholam (2018:4) states that the mentor and mentee relationship addresses survival skills such as behaviour management, school policies and procedures, curriculum and communication with parents and various school community stakeholders and leaders.

During the mentoring period, a beginner teacher and a mentor teacher establish a working relationship in which they will collaboratively participate in activities that will improve learner performance while developing themselves. Through structured planning, a beginner teacher can share instructional techniques, team-teach, ideas and knowledge with a mentor teacher (Misra & Tyagi, 2019:67). The activities that will emerge will be a solid working connection that will develop a degree of trust and companionship that will allow beginner teachers to express their frustrations and concerns and seek guidance on personal and work difficulties that negatively influence their lives (Misra & Tyagi, 2019:67). As a result, it implies that beginner teachers who benefit from the mentoring programme are most likely to be self-directed due to the level of support and regular developmental activities to improve their work performance.

Although mentoring has benefits that contribute to beginner teachers' development and self-directedness, some challenges emerge from both induction and mentoring programmes that become a stumbling block to the development of beginner teachers.

2.5.5 Challenges with induction and mentoring programmes

The social constructivist nature of induction and mentoring programmes are reckoned the most effective tools that promote self-regulation, self-directedness, support and encouragement, professional working relationships and professional development. However, there is still a challenge of attrition rate of beginner teachers occurring post-implementation of induction and mentoring (Hagenauer *et al.*, 2021:2). A lack of a quality working relationship between a mentor teacher and a mentee can negatively impact the process of induction and mentoring, as the quality of work performance will not improve. Hagenauer *et al.* (2021:3) explain that some beginner teachers are not cooperative in task execution. Others do not take constructive criticism very well and develop a negative attitude toward mentor teachers. Some mentors are appointed to provide the necessary support and guide beginner teachers through induction but are ineffective in executing this role, thus leading to a lack of improvement in work performance and the implementation of problem-solving skills independently (Wexler, 2020b:214). As a result, it implies that beginner teachers who survive these challenges possess self-directedness to a certain extent. Furthermore, it is crucial that schools regularly monitor their induction and mentoring programmes to identify areas of concern where there are challenges and implement strategies that will assist the process of mentoring and induction in promoting the self-directedness of beginners' teachers effectively.

2.5.6 Perceived benefits of beginner teachers who are exposed to induction and mentoring

According to Fadia *et al.* (2016:16), induction is a critical phase of a teacher's career. It eases a beginner teacher's entry shock into the education system and creates a platform for continuous professional development. Moreover, Ingersoll and Strong (2011:204) state that implementing various induction components such as mentoring, orientation, training workshops, and seminars has positively impacted beginner teachers' retention. In addition, through continuous learning in formal inductions, beginner teachers demonstrate optimised socialisation and effective implementation of instructional teaching techniques, resulting in self-directedness (Fadia *et al.*, 2016:17).

Unlike in the past, when induction was perceived only as the process of advising, supporting and guiding beginner teachers, current studies perceive it as a reciprocal learning process that is co-constructual, promotes collaborative learning opportunities and focuses on the self-directedness of beginner teachers in applying best teaching practices in the workplace (Arnold, 2017:9). Moreover, Kang and Berliner (2012:272) state that induction creates a platform for beginner teachers to reflect on their practices through their feedback from their

mentor teachers when evaluating their teaching practices. This evaluation is informed by collaborative interactions between a mentor and a beginner teacher, regular observations by a mentor teacher and support and guidance for professional development.

Although there are various perceived effects of induction on beginner teachers across the globe, Çobanoğlu and Ayvaz-Tuncel (2018:99) believe that effective implementation of the induction process promotes the self-directedness of beginner teachers. This self-directedness is advanced by providing individual, social and professional support. A mentor teacher usually provides individual support during induction. The purpose is to develop beginner teachers' confidence, independence, motivation, and enthusiasm to remain in the profession despite the challenges. Social support means beginner teachers are provided with learning opportunities to engage and collaborate with more experienced teachers, participate in cooperative teaching and engage with stakeholders like subject advisors. Through social support, beginner teachers will develop socialisation skills, allowing them to be resourceful and self-directed, and understand professional networking (Barton *et al.*, 2015:156). Professional support adds to beginners' continuous learning because a mentor teacher will provide learning opportunities for a beginner teacher to understand effective methods of teaching and learning, instructional techniques, classroom management and professionalism (Çobanoğlu & Ayvaz-Tuncel, 2018:100).

Zhang *et al.* (2019:72) further elucidate professional support and emphasise the principal's role in ensuring the effective implementation of induction. Principals are perceived as crucial professionals in implementing the induction process because they are responsible for recruiting new teachers, creating a conducive teaching environment and facilitating school mentoring programmes. Facilitating means that the principal, as the accounting officer, ensures that the mentor and beginner teacher's relationship is positive. As a result, the induction process is effective, and the beginner teacher shows improvement (Zhang *et al.*, 2019:73).

Beginner teachers expressed their views on their welcome at the school and stated that their personal interaction with their principals results in a high level of motivation, confidence, and hard work. The principal's integral role in their induction allows them to develop some sense of belonging, self-direction, and professional identity (Machado & Chung, 2015:45). Furthermore, the principal's crucial role in ensuring effective implementation of induction proves that induction results from a collaborative effort to develop a beginner teacher's self-directedness.

The benefits of collaborative efforts of induction do not only lead to reduced attrition rate and increased retention rate but promote self-efficacy, which is best defined as “an individual’s belief in his or her capacity to organise and execute the appropriate actions to produce the desired result” (Bacon, 2020:17). Through induction, beginner teachers develop self-efficacy, which allows them to influence learner performance, execute tasks and handle workload positively. In addition, this self-directedness trait develops a spirit of hard work, eagerness to participate in learning opportunities and confidence in a beginner teacher to interact with various stakeholders in education without feeling insecure and intimidated (Bacon, 2020:18).

2.5.7 Conclusion

The process of mentoring beginner teachers is aligned with constructivist principles based on the philosophical premise that new knowledge is constructed from prior knowledge, and acquired by teachers during their training prior to becoming qualified teachers. Mentoring enables self-direction through joint efforts guided by a social constructivist approach. A good mentoring programme involves delivering positive reinforcement, fostering two-way communication, and collecting and reacting to feedback. Induction allows beginner teachers to evaluate their teaching practices in light of the feedback they receive from their mentor teachers. This evaluation is based on collaborative interactions between a mentor and a beginner teacher, regular observations by a mentor teacher, and support and guidance for professional development. With induction, beginner teachers gain self-efficacy, which enables them to positively affect learner performance, execute tasks, and manage workload.

2.6 TEACHING AND CLASSROOM PRACTICE: CHALLENGES

2.6.1 Introduction

Teaching practice, as defined by Zhan and Xu (2021:3), after exploring its meaning in different countries such as China, the United Kingdom and the United States of America, is commonly referred to as practice experience provided to a pre-service teacher by the university during their study of a teaching qualification and its intended purpose is to provide training that prepares pre-service teachers for the workplace and develop the ability to apply theoretical knowledge taught to them in a workplace. Nkambule and Murekeledzi (2017:2) reiterate that teaching practice is globally rooted in providing training to pre-service teachers by introducing them to diverse schools, learners, teachers and different contexts in the teaching field. In their early years of teaching, they use the good practices they learned from their mentor teachers during teaching practice as coping strategies (Nkambule & Murekeledzi, 2017:2).

Furthermore, they should collaborate with teachers at the school where they work to better cope with the challenges of teaching.

Teaching practice explained as a practical experience by Zhan and Xu (2021:3) is rooted in the theory of social constructivism. In support of social and collaborative learning, a more experienced teacher who then becomes a mentor teacher works closely with a pre-service teacher who is less experienced in training by developing them to become ready for the workplace (Gholam, 2018: 2). In addition, Makafane (2020:147) alludes to teaching practice to self-directed learning theory when stating that during this intensive period of learning, pre-service teachers are provided with an opportunity to appreciate the progress of learning and also reflect on what they have learnt during their teaching practice period.

According to Makafane (2020:147), teaching practice is a compulsory support programme carried out by different universities and countries internationally, including Lesotho and South Africa. Furthermore, teaching practice is designed in a way that enhances collaborative efforts and learning for future development, such as team teaching with pre-service teachers, exploring models of teaching those pre-service teachers will independently employ in the future and also building on existing theoretical knowledge that pre-service teachers have gained at the university (Makafane, 2020:147).

2.6.2 Adjusting classroom and teaching practice challenges

Although pre-service teachers receive support from their mentor teacher during the teaching practice period, Makafane (2020:152) has explored pre-service teachers' perceptions of the challenges they experience during their teaching practice which becomes a stumbling block during their first year of teaching. These challenges are:

- **Stage fright**

Stage fright is one of the most significant challenges pre-service teachers discover during their first-time lesson presentations to the audience. This stage fright has been seen through anxiety attacks, intense shaking and lack of focus when presenting a lesson.

- **Spoken English language**

Pre-service teachers experiencing a challenge of articulating themselves well in the English language during lesson presentation often find teaching difficult, and such a challenge may result in one losing confidence in themselves.

Brevik *et al.* (2019:1) add to the teaching practice above with the following:

- Pre-service teachers use optimal Information Communication Technology (ICT) for teaching and learning. Pre-service teachers who are only exposed to traditional chalkboard and textbook teaching methods often experience challenges during teaching practice in ICT schools using ICT resources.

Mahmood and Iqbal (2018:116) list the following practice teaching challenges:

- Lack of resources, increased paperwork as they are assisting mentor teachers, large classroom sizes, which contribute to classroom management and discipline problems, feeling of isolation when there is minimal interaction with their mentor teachers, learners' attitudes and behaviours towards lessons presented by pre-service teachers.

Although pre-service teachers experience these mentioned challenges during their teaching practice, Samu (2020:603) alludes that tertiary institutions across the globe need to ensure that they carry out teaching practice for pre-service teachers to achieve the following objectives:

- Know how to plan lessons taking into cognisance learners' diverse needs and competencies
- Interpret and analyse methodologies and teaching techniques rational to learners' different learning needs
- Develop the ability to reflect and improve on their own methodological practices by learning those of their mentor and other teachers
- Develop classroom management skills
- Comprehend and apply assessment techniques as guided by subject policy

Once pre-service teachers accomplish the objectives intended with teaching practice, complete a teaching qualification and get ready for the workplace, it does not mean that entering the workplace as a beginner teacher will not be a challenge. From teaching practice challenges as a pre-service teacher to the first year of teaching as a beginner teacher, the literature reviewed indicates that beginner teachers experience the following challenges in their first years of teaching.

2.6.3 Challenges beginner teachers experience in their first years of teaching

Although universities collaborate with schools to ensure that teaching practice serves its intended purpose, challenges experienced in the first years of teaching often result in beginner teachers experiencing reality shock (Botha & Rens, 2018:1). In addition, some beginner

teachers perceive that the tertiary institutions have not trained them enough to handle the emotional realities of transitioning to the responsibilities of teaching full time (Botha & Rens, 2018:6). Beginner teachers find it difficult to understand the emotional and physical demands of learners. Unfortunately, few tertiary institutions did not prepare beginner teachers to manage the emotional and physical challenges of the learners (Schonert-Reichl *et al.*, 2017:7). According to Kozikoglu (2017:91), variables that make the first year of teaching challenging include career transition with new duties and responsibilities, learner, parent, and colleague expectations, and alterations in interpersonal connections. Furthermore, beginner teachers find it challenging to transition from being a student to a teacher since they must adjust to many new conditions in the workplace (Kiru, 2020:43). A significant number of beginner teachers leave the teaching profession within a short time, mainly because they experience difficulties, they find hard to manage (Kiru, 2020:43). Challenges that affect beginner teachers' self-directedness include difficulties in transitioning from university to a work environment, classroom management and learner discipline, curriculum matters, workload and fulfilling essential roles of a teacher, socialisation, professional support, loneliness and isolation (Reitman & Karge, 2019:9).

2.6.4 Transition from university to a new work environment

Kozikoglu (2017:102) states that beginner teachers usually find their first year of teaching stressful and emotional, as they must adapt to a new work environment, society and the profession. When beginner teachers work far from home and their families, they face loneliness and stress and, as a result, struggle to adapt. Obadire and Sinthimule (2019:1) report that even before beginner teachers adapt to a new work environment, they come across issues like violence, cultural diversity and changes in teaching methods which makes it even more difficult for them to adapt to their new work environment, especially when the school does not give them sufficient support. When professional support and induction are provided, beginner teachers easily adapt to the work environment, and when they encounter challenges, they can consult for assistance (Yirci, 2017:38).

The school environment consisted of learners and parents from different cultures, backgrounds, and values. For beginner teachers to understand the school culture, backgrounds, and learner values, constant engagement with various stakeholders, including the school governing body, colleagues, and learners, is vital (Yirci, 2017:38). According to Du Plessis and Mestry (2019:1), adaptation is more difficult in rural areas than in urban areas because rural schools are under resourced and isolated. In contrast, beginner teachers can thrive in urban areas by utilising readily available professional networks. This report suggests that the school's physical infrastructure and facilities contribute to beginner teachers'

adaptation process. If the infrastructure and facilities are in good condition and accessible, beginner teachers will quickly adapt and will not struggle to access the educational resources required for self-directedness (Msomi *et al.*, 2014:799).

2.6.5 Learner discipline and classroom management

Learner discipline is a challenge across South African schools (Obadire & Sinthimule, 2021:1). According to Shakespear *et al.* (2018:2), teachers must be self-directed to explore sources and develop strategies that will help them reduce learner violence in schools and disruptive behaviour that learners have in classes and towards their teachers. This saying implies that handling learner discipline issues for a beginner teacher could be more challenging because even experienced teachers struggle with learner discipline; hence, they are still developing strategies to reduce learner violence in schools (Shakespear *et al.*, 2018:2). One of the most challenging tasks beginner teachers faces is to preserve good discipline in the classroom. Over the past few decades, this task has become more complex as learners' attitudes to those in authority roles have shifted drastically (Van Tonder & Fourie, 2018:1335).

According to Jinot and Madhuree (2020:841), beginner teachers who often leave the teaching profession within three years are challenged with learner discipline issues and have not been given any support by their seniors to better their discipline methods and classroom management strategies. Wolff *et al.* (2015:70) indicate that classroom management refers to practical knowledge and the development of teaching experience in dealing with disciplinary and managerial problems. However, Wolff *et al.* (2015:70) further state that it is also characterised as a stumbling block for beginner teachers because they often manage their classrooms in the kindest and friendliest way, but they struggle to control the disruptive behaviour of learners. Eisenman *et al.* (2015:1) state that learning how to manage a classroom is difficult for beginner teachers because it is not given sufficient attention during the induction and mentoring process. As a result, this challenge implies that induction and mentoring programmes designed for beginner teachers should be based more on classroom management to intensify beginner teachers' self-directedness and alleviate the challenges they encounter in and outside the classroom.

According to Meier and West (2021:3), overcrowding of classrooms in South African public schools is a severe concern that negatively impacts teaching and learning and, at the same time, contravenes the teacher-to-learner ratio per guidelines of the DoE. According to The National Admission Policy of 1998, which emanates from The National Education Act 27 of 1996, the maximum learner-to-teacher ratio in secondary schools is outlined as 35:1 and in primary schools as 40:1 (DBE, 2016:22). However, South African public schools' classrooms

accommodate learners above the mentioned ratios. Therefore, it becomes an overwhelming experience for beginner teachers if they are not exposed to overcrowded classrooms during their first years of training and are not self-directed enough to put strategies in place to manage overcrowding and promote quality teaching and learning despite the challenge at hand (Meier & West, 2021:3).

2.6.6 Workload

According to Van Tonder and Fourie (2015:220), one of the various teacher's roles comprises administrative and professional duties. For example, a teacher as a classroom administrator is responsible for compiling work reports, checking learner marks, drawing up class budgets, and planning lessons. As a result of this administrative burden, teachers spend more time performing administrative tasks than actual teaching.

They must conduct tasks and assess learners while attending staff meetings, workshops, and lesson preparations. Furthermore, beginner teachers are also expected to schedule appointments with parents of struggling learners, refer such learners to the school-based support team, and develop and implement intervention strategies for such learners to perform well.

According to Skaalvik (2015:184), most beginner teachers feel pressured by the amount of work they have to do in a short period. Squillaci (2020:2083) classifies workload in the teaching profession into two factors, namely, qualitative and quantitative factors. According to Squillaci (2020:2083), the qualitative factor refers to the workload a beginner teacher will experience in the workplace, which will include the location where the school is based, the distance that one will need to travel to get to the workplace on time and psychological issues such as tiredness, isolation and loneliness that will result from the work pressure.

The quantitative factor refers to the teaching workload, which includes overload in administrative duties such as lesson preparations, overcrowded classrooms with heterogeneous learners, extra-mural and extra-curricular activities, and time management in terms of submissions and backlogs. According to Türkoglu and Cansoy (2020:177), perceptions of the workload of beginner teachers can be subjective or objective. A subjective workload is perceived as an extent of work difficulty that beginner teachers must be guided through because they struggle to manage their work. In contrast, objective workload refers to the amount of work provided to teachers of the same post level to perform, which becomes challenging for all of them. The factors and perceptions of workload mentioned mean that every teacher experiences challenges in dealing with workload. However, beginner teachers

must be guided and supported in managing their workload during induction and mentoring until they develop some extent of self-directedness, which will allow them to cope with and manage the pressure of the teaching profession.

2.6.7 Curriculum matters

Jabbarova (2020:3) defines curriculum as subjects taught in schools. The curriculum provision in South African schools aims to express knowledge, skills, and values worth teaching and learning. Beginner teachers often assess their performance of curriculum provision through learners' performance, which impacts the beginner teachers' motivation to stay or leave the profession. When beginner teachers' teaching methods and strategies do not improve learners' performance at school, they become stressed. According to Reitman and Karge (2019:8), training related to curriculum or teaching methodologies should be given to beginner teachers by a mentor teacher and the subject advisor to ensure successful teaching and learning. This implies that professional development is essential to beginner teachers as it will help them be progressive in teaching and self-directedness and improve learners' results.

According to Perlshtein (2015:138), the first year of teaching triggers anxiety, a sense of incompetence and stress for beginner teachers when they do not meet the standard of performance set for the grades they are teaching. Due to the challenges beginner teachers experience when they enter the profession, Dvir (2021:3) states that the DoE has assistance programmes such as workshops that are in place to assist beginner teachers in various subjects they are teaching. A workshop is defined as a group for personal growth and learning intended to provide a teacher with tools for handling various classroom issues, including correct utilisation of subject policy documents, annual teaching plans and media for teaching and learning (Perlshtein, 2015:139). It, therefore, means that although workshops are in place, beginner teachers have to be assigned to a mentor who will guide them through the implementation of skills, methods and strategies necessary to address their first years of teaching challenges, develop self-directedness and become competent even when the mentor teacher is no longer present.

2.6.8 Socialisation

Köybasi and Ugurlu (2019:213) define socialisation as learning new values, norms, skills, knowledge, organisational culture and behaviour necessary to assume roles assigned in the organisation. In education, socialisation is a key principle that promotes teamwork, professional identity, improved performance of beginner teachers and positive professional relationships (Köybasi & Ugurlu, 2019:214). However, beginner teachers have difficulty

establishing professional relationships with experienced teachers because they are frequently left to perform their teaching roles without adequate training, induction, or mentoring. As a result, they find it difficult to understand and learn the school culture, norms, and values on their own. (Romar & Frisk, 2017:91). Tahir *et al.* (2018:231) define socialisation in education as a subjective and ongoing process in which beginner teachers strive to adapt to the new working environment while growing professionally through various development programmes such as induction and mentoring.

According to Tahir *et al.* (2018:233), a beginner teacher should be familiar with three important elements of socialisation. First is professional socialisation, in which beginner teachers are assisted in completing the learning process of developing their professional identity, values, skills, and knowledge. Anticipatory socialisation as an informal process of enculturation to the teacher post that the beginner teacher is occupying is the second element of socialisation. A beginner teacher actively engages with experienced teachers and mentors teachers during this socialisation process to strengthen their self-efficacy, self-regulation, and improved level of independence to assume the teaching roles and expectations after the induction period. Finally, organisational socialisation involves beginner teachers in organisational activities that promote understanding and acceptance of the school's culture, norms, and routines to achieve the school's vision and mission (Tahir *et al.*, 2018:234). Therefore, the mentioned elements imply that a beginner teacher who is not guided and supported by professional, anticipatory and organisational socialisation is most likely to experience their first years of teaching as a daunting task, especially when they are not self-directed and resume these independently.

2.6.9 Professional support

Khalid and Huslin (2019:195) denote professional support as a key principle of professional development. During the initial teaching stage of a beginner teacher, numerous challenges related to the classroom, subject content, diverse learners, collaboration and discipline arise. As a result, it negatively impacts beginner teachers' efficiency and commitment (Khalid & Huslin, 2019:195). Unlike experienced teachers with manageable challenges like backlogs on existing lesson plans, subject files and previous assessment tasks, a beginner teacher must start everything new when professional support is not provided (Chaney *et al.*, 2020:110). According to Chaney *et al.* (2020:111), the teaching profession has numerous challenges that even experienced teachers encounter. However, due to collaboration, and professional support from the DoE in the form of training programmes, there is evidence of an improved retention rate and reduced attrition rate of beginner teachers (Khalid & Huslin, 2019:195). As a result, professional support should be considered an essential tool for creating a positive working relationship for a beginner teacher (Ngwira & Potokri, 2019:775).

2.6.10 Loneliness and isolation

According to Ahmed *et al.* (2020:405), professional isolation and loneliness are contributing factors to the continuous increase in the attrition rate of beginner teachers during the initial years of teaching. Isolation and loneliness that beginner teachers experience are often caused by poor or lack of socialisation process within the school, lack of induction and mentoring aimed at promoting positive working relationships, inadequate or lack of collaborative professional activities and workload resulting from non-support provision (Ahmed *et al.*, 2020:405). Lalani (2020:58) adds that the feeling of loneliness and isolation during the initial years of employment is often caused by the struggle to maintain the balance between social life and professional life. Therefore, beginners often feel that their personal lives are greatly affected during this transition process. As a result, they realise they must invest more time learning and executing their professional teaching duties.

Based on the identified challenges, Ngwira and Potokri (2019:775) emphasise the essential need for the induction of beginner teachers in South African schools for the reason that, upon entry into the profession, beginner teachers are assigned similar and equal responsibilities to those of experienced teachers, despite their limited knowledge and skills. In addition, Ngwira and Potokri (2019:775) have evidently proven that beginner teachers who left the profession early had no choice but to succumb to the challenges they experienced and leave the profession because of a lack of professional support. When beginner teachers are provided with support that includes induction and mentoring, they can acquire cultural, social, and practical knowledge connected with the school community (Ngwira & Potokri, 2019:775).

2.6.11 Conclusion

The discussed literature based on teaching practice indicates that practical experience provided to beginner teachers during years in the tertiary institution serves as a build-up technique that will help them cope better during their first years of teaching.

2.7 SUMMARY

This chapter expanded on the conceptual and theoretical framework presented in Chapter 1, that addresses the development of the self-directedness of beginner teachers. The challenges beginner teachers experience during their first years of teaching, the perceived status of self-directedness of beginner teachers who are exposed and those who are not exposed to induction and mentoring, as well as the benefits of induction and mentoring towards attaining self-directedness were discussed.

The literature has revealed that beginner teachers' first years of teaching are challenging. As a result, those teachers who lack self-directedness and do not receive professional support may leave the profession in their early years. The researcher believes that there is a need to develop beginner teachers' self-directedness through induction and mentoring. Induction and mentoring programmes that centre on social constructivist learning principles such as ZPD, scaffolding and social and collaborative learning, prove to be meaningful in developing self-directed attributes. To conclude the chapter, and flowing from the preceding discussion, a visual layout presented in Figure 2.1, synthesises the interrelationships between the concepts that stood central to the study.

Developing self-directedness

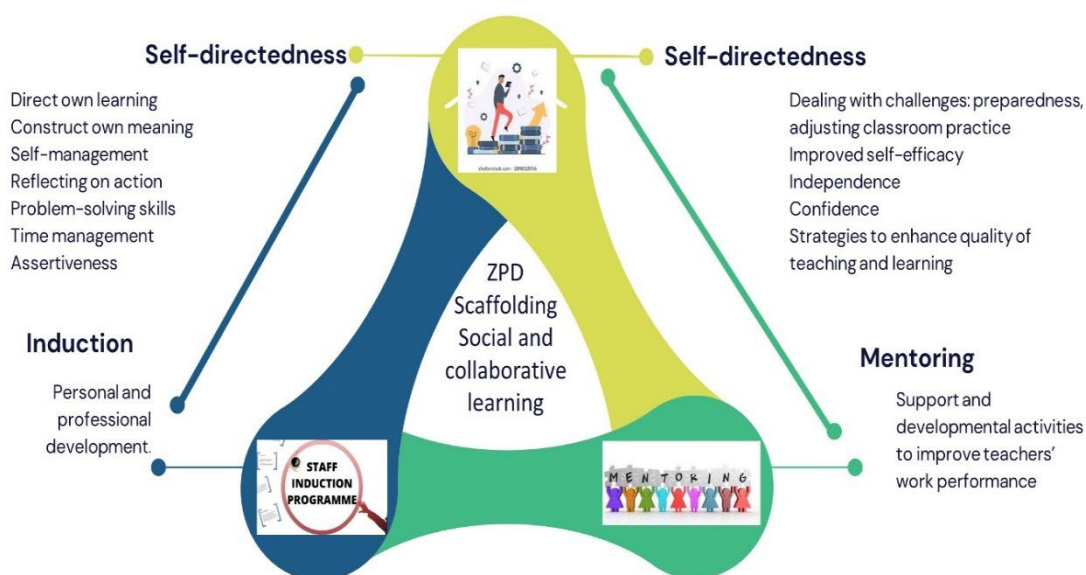


Figure 2.1: Developing self-directedness

According to Figure 2.1, the development of self-directedness that forms part of adult learning theory can be advanced by employing induction and mentoring programmes that are rooted in social constructivist principles such as ZPD, scaffolding and social and collaborative learning. Collaboratively and also in separate ways, induction and mentoring could enable beginner teachers to acquire attributes of self-directedness related to personal and professional development, dealing with challenges and making adjustments to classroom practice in an independent and self-directed manner, as well as through exposure to support and developmental activities to improve work performance.

In the next chapter, the research methodology will be presented, with a conceptual framework, research paradigm, research design, research methodology, research instruments, data collection strategies and data analysis

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

In the previous chapter, the researcher provided a comprehensive literature review by discussing different conceptual and theoretical frameworks about the self-directedness of beginner teachers and their experiences during their first year of teaching.

Research involves an in-depth investigation of a problem or situation using scientific methodologies. According to Babbie (2020:18), research is a systematic inquiry into empirical phenomena to describe, analyse, anticipate, and regulate these phenomena. It employs both inductive and deductive methodology. The research study intended to determine the difference that an induction and mentoring process makes in beginner teachers' perceptions of self-directedness.

Creswell and Creswell (2018:61) describe research methodology as data collection techniques, analysis, and interpretations envisaged by researchers for their research studies. This chapter outlines the research methodology that will most effectively address the main research question: What difference do the induction and mentoring process make in the perceptions of self-directedness of beginner teachers?

This chapter intends to provide a detailed overview of and motivation for the research methodology utilised during the study by elaborating on the brief explanation in Chapter 1. The following aspects are discussed in this chapter: the research design, research paradigm, methodology, data collection method, research instrument, data analysis and pilot study. At the conclusion of this chapter, a reflection on the quality criteria and ethical guidelines has been pursued.

3.2 RESEARCH DESIGN

According to Cohen *et al.* (2018:38), a research design is a conceptual framework that outlines the approach, theory (ies), methodology (ies), and data types to be used in approaching, operationalising and addressing a research problem or issue. Furthermore, how data were collected (instrumentation), analysed, interpreted, and reported depends on whom it was collected from (the population and/or sample). Additionally, the design justified the findings and transparency regarding the validity and reliability of each research component and its

sequence. Furthermore, Plano *et al.* (2010:166) explain research design as a set of procedures used to collect, analyse, and report data in a research study. Finally, in agreement with the given definitions, Mumba and Alici (2021:4) state that research design is a planning blueprint and underlying philosophical assumptions used to examine the question of interest, specifying data collection techniques and analysis to be made.

3.3 RESEARCH PARADIGM

According to Kamal (2019:1388), the term paradigm is widely perceived in research as a way of viewing the world that influences a researcher's thoughts on the topic. As a result, a researcher develops a set of beliefs about existing problems and pursues research to investigate such problems. According to Khaldi (2017:18), the research paradigm serves as a lens or organising principle through which reality is interpreted, and it consists of philosophical assumptions, accepted traditions, theories, a framework for understanding and observation, and a basic set of beliefs that direct action and guide the phenomenon under investigation.

This quantitative study was based on a positivist paradigm. A positivist paradigm assumes that tangible reality exists and can be identified, measured and understood (Park *et al.*, 2020:691). Additionally, Collins (2010:38) notes that the researcher's participation in the positivist paradigm is confined to data gathering and analysis through unbiased observation and that the subsequent research findings are quantifiable. The researcher views the world in isolation and observes how events and elements interact regularly. Crowther and Lancaster (2008:40) state that the researcher in the positivist paradigm assumes a deductive approach and focuses on facts, unlike the interpretivist paradigm, where a researcher will assume and focus on meaning.

The positivist paradigm was chosen for this study because it was well-matched for the undertaken research, as the researcher wished to explain the situation of concern by collecting and interpreting numerical data in quantitative research.

3.4 RESEARCH APPROACH

A research approach or design as indicated by Creswell (2009:22) is a system for planning and conducting research that includes a series of steps ranging from broad assumptions to specific methodologies for data collection, analysis, and interpretation (Mishra & Alok, 2022:6). A research approach promotes a thorough, comprehensive understanding of a challenging research topic in its realistic contexts (Crowe *et al.*, 2011:1). Pandey and Pandey (2021:65) distinguish three types of research approaches: qualitative, quantitative, and mixed methods research. In addition, it adds that researchers often select quantitative research because it

deals with numerical data. In contrast, others choose qualitative because it deals with textual data. Finally, a mixed method is preferred when the researcher sees the need to use both numerical and textual data (Pandey & Pandey, 2021:65).

According to Maree and Pietersen (2020a:184), a quantitative research approach is a systematic and objective process of collecting data from a large number of respondents using instruments and predetermined questions to relate variables using statistical analysis. Unlike in qualitative research, the researcher can never be objective because they are specifically interested in the search being replicated. However, quantitative research enables the researcher to have a core interest in proving that their findings are applicable outside the study's location. Additionally, quantitative studies mainly include questions such as “how many?” and “how often?”

Bell (2022:60) defines quantitative research as “collecting numerical data and demonstrating a deductive perspective of the relationship between theory and research and an objectivist vision of social reality”. In other words, quantitative studies apply statistical tools to analyse relationships between numerically measured variables.

In this study, a quantitative research design (Creswell, 2009:22) was chosen because it is objective in nature, and the data collected through this design is unbiased and can be counted. Other reasons included:

- It seeks solutions and assumptions that will generate for other people and places, especially when large quantities of data need to be collected.
- To establish and confirm relationships and develop generalisations that contribute to the study's theoretical framework.
- To acquire findings which are predictive, confirming and explanatory.
- It allows seeing changes over time and helps develop a human quantitative indication.

3.5 POPULATION AND SAMPLING

3.5.1 Population

Van Zyl (2014:95) contends that a research population “is a group of potential participants to whom the researcher wants to generalise the study results”. Babbie (2020:115) defines the research population as the constituents from which the sample will be gathered. According to Graziano and Raulin (2013:201), a population is a group of individuals with similar qualities and characteristics. In this quantitative study, the population was all BEd honours students in

South Africa, staying at various geographical locations, who were beginner teachers who taught for not more than three years.

3.5.2 Sample

According to Creswell (2014a:160), a sample is a smaller group of individuals from the target population that the researcher plans to study. Moreover, a sample has to provide a sufficient representation of the population. Therefore, when researchers sampled, they studied the features of a subset of the population to understand the wider group's characteristics better. Typically, a sample is substantially smaller than a population.

According to Bell (2022:187), sampling consists of probability and non-probability sampling. In addition, Bell explains that in probability sampling, each element from the population has a known, non-zero probability of being selected. In other words, a random selection of participants occurs, and there is an equal chance of being selected, but in non-probability sampling, human judgement may affect the choice of individuals. In this study, the researcher decided on non-probability sampling that does not require random selection (Maree & Petersen, 2020c:219). Due to time and logistical constraints, research with all beginner teachers in the target population is impossible, and convenience sampling was selected because the sample was easily and readily available (Leedy & Ormrod, 2019:164). Therefore, the present researcher identified part-time BEd honours students enrolled at the Faculty of Education from the three campuses of a South Africa University and taught in primary and secondary schools.

The independent individual approached the Faculty of Education's administrative assistant and requested that the recruitment letter be sent via bulk email to all part-time BEd students inviting them to participate in the study. A Google Forms link was included with the recruitment letter, and an informed consent letter was included if the student volunteered to participate in the study. If the student consented, he or she would click the "agree" button, which would direct the respondent to the questionnaire. If the student "disagreed," he or she was directed to the questionnaire's final page, which indicated exit.

Based on this population, the researcher was then able to establish a sample group of individuals from which it was selected. It had a good size to warrant statistical analysis. In this study, the sample group of 300 beginner teachers ($n=300$) was recruited by an independent individual using purposive sampling because the researcher had a specific purpose in mind. The specific aim was to determine the difference an induction and mentoring process makes on beginner teachers' perceptions of self-directedness.

A sample size of at least 300 respondents is required for exploratory factor analysis (EFA) (Field, 2018:926). However, since the highest number of variables within one theoretical construct was 21, at least 210 respondents were needed to conduct the EFA as per construct (cf.1.7.3). Hence, the minimum sample size that was aimed for was 210 respondents. Of the 300 beginner teachers, 222 responded to the online questionnaire.

As Section C of the questionnaire (Teaching experience) was self-created, an exploratory factor analysis (EFA) was used to measure the validity of the sample size. The Kaiser-Meyer-Olkin (KMO) measure indicated an inadequate sample size for exploratory factor analyses to be performed (KMO was lower than 0.7) (Field, 2018:926), therefore an EFA per theoretical construct was conducted instead. The Kaiser-Meier-Olkin (KMO) measures sampling adequacy according to the following scale:

- < 0.5: not acceptable
- 0.5 –0.7: medium
- 0.7 –0.8: good
- 0.8 –0.9: very good
- >0.9: superb (Field, 2018:926).

3.6 DATA COLLECTION STRATEGY, METHOD AND INSTRUMENT

3.6.1 Data collection strategy

According to Creswell (2009:11), a data collection strategy provides a specific direction for procedures and contributes to the overall research approach. Quantitative research designs, comprise can employ two types of strategies, namely, experimental and non-experimental strategies. Experimental strategies the respondents to acquire experimental treatment over time, while non-experimental research strategies rely on researcher- dependent interpretations and observations to reach conclusions. Moreover, the researcher cannot alter or manipulate variables or respondents (Johnson & Christensen, 2019:124).

For this study, the researcher has chosen a non-experimental strategy. According to McMillan and Schumacher (2010:30), the non-experimental strategy permits the researcher to receive information about a large number of people that could be inferred from the responses obtained from the sample. Moreover, the researcher employed this strategy to describe the respondents' attitudes, opinions, and beliefs.

Using a non-experimental research strategy, the researcher chose descriptive survey research as research strategy using a questionnaire. Using a questionnaire in this descriptive

study was suitable because the researcher acquired information about how self-directed beginner teachers were during their first years of teaching, with or without induction and mentoring. In addition, the researcher used the data obtained to generalise findings numerally and statistically. The link and the site where the data were generated were only accessible to the independent person administering the questionnaires.

Once all the responses were recorded on Google Forms, the researcher presented the data collected in graphs and charts and then analysed the beginner teachers' responses concerning the conceptual and theoretical framework of the study.

3.6.2 Data collection method

The term “data collection method” refers to the approach used by the researcher to acquire empirical data to address the research problem (Brink *et al.*, 2018:133). According to McMillian and Schumacher (2010:21), the role of the researcher in a quantitative study when using a research survey is to assess the attitudes and opinions of various role players involved in the study. For the purpose of this study, the researcher used a survey as a data collection method and a questionnaire as a data collection instrument. Using this method for the researcher was essential because data for a large population of BEd honours students in South Africa had to be collected from a possible sample of maximum 300 respondents.

3.6.3 Data collection instrument

A data collection instrument is a tool a researcher uses to collect in the research process. The typical research instrument tools are questionnaires, interviews, documentary analysis and observations (Pandey & Pandey, 2021:31). A questionnaire has been chosen as a data collection instrument for this quantitative study. A “questionnaire” implies a series of questions, and a standard questionnaire frequently contains more statements than questions. Often, researchers intend to ascertain how respondents share a particular viewpoint or attitude. If the researchers can summarise the viewpoint in a relatively brief statement, they can present it to respondents and ask them to agree or disagree (Babbie, 2020:252).

According to Creswell (2014a:28), a questionnaire is an instrument used to measure, observe, and document quantitative data. Cohen *et al.* (2018:25) argue that questionnaires are beneficial since they are reasonably inexpensive, include identical questions for all respondents, and ensure anonymity. Moreover, it continues to be a popular instrument for gathering survey information and generating structured and numeric data.

When considering a questionnaire as an instrument tool to collect data, the researcher has the responsibility to ensure that the questionnaire has these guidelines stated by White (2003: 66) which are:

- Biased items are not included
- Clear items
- Relevant questions
- Negative items not included

The researcher's decision to use a questionnaire to gather information provides the below benefits (Maree & Petersen, 2020b:205; Wilkinson & Birmingham, 2003:39).

- Processing a questionnaire is easy when it is well constructed.
- It contributes to the advancement of numerous areas of educational research and uncovers vast knowledge that could possibly be lost.
- It is quicker and easier for respondents to answer.
- Answers are easier to analyse statistically.
- Replication is easy.
- The questionnaire is phrased similarly for everyone, allowing for cohesiveness and generating more distinctive data.
- It is economical and cost-effective.
- The questionnaire can be answered promptly by several respondents.

The researcher employed a closed-ended questionnaire in this study. According to Babbie (2020:252), closed-ended questions ask respondents to choose an answer from a list provided by the researcher. Closed-ended questions are prevalent in survey research because they generate more consistent responses and are relatively easier to process than open-ended questions.

The researcher used the original 52 items Self-Directed Learning Readiness Scale (SDLRS) (*cf.* Annexure D) closed-ended questionnaire developed by Fisher *et al.* (2001:523) to acquire sampled beginner teachers' responses. Fisher and King (2010:46) reduced the 52 items of the SDLRS to 40 items, and the 40 items were the focus of the present research. The researcher decided to administer the 52 items of the SDLRS in its totality and not in a fragmented form, but only categorised the 40 items on which the research focussed into three factors. The Self-Directed Learning (SDL) Readiness Scale (SDLRS) tool is divided into three

sections: self-management (SM) (13 items), desire for learning (DfL) (12 items), and self-control (SC) (15 items) (*cf.* Section, B; Annexure D). The subscale components enable the student and lecturer to identify specific areas that require further attention.

The items were scored using a Likert-style scale with five points, one representing strong disagreement and five representing strong agreement. In addition, four of the items are worded negatively, and their scores were inverted for the purpose of data analysis.

Figure 3.1 confirms the three sections of SDLRS (*cf.* 2.2.1): self-management (13 items), learning desire (12 items), and self-control (15 items).

SELF-MANAGEMENT (13 items)		DESIRE FOR LEARNING (12 items)		SELF-CONTROL (15 items)	
1	I solve problems using a plan	13	I need to know why	11	I am able to focus on a problem
2	I prioritize my work	14	I critically evaluate new ideas	15	I prefer to set my own learning goals
4	I manage my time well	19	I learn from my mistakes	24	I am responsible
5	I have good management skills	22	I am open to new ideas	26	I have high personal expectations
6	I set strict time frames	23	When presented with a problem I cannot resolve, I will ask for assistance	27	I have high personal standards
7	I prefer to plan my own learning			28	I have high beliefs in my abilities
10	I am systematic in my learning	25	I like to evaluate what I do	29	I am aware of my own limitations
31	I am confident in my ability to search out information	32	I enjoy studying	41	I am logical
37	I set specific times for my study	33	I have a need to learn	43	I evaluate my own performance
38	I am self disciplined	34	I enjoy a challenge	44	I prefer to set my own criteria on which to evaluate my performance
40	I am organized	35	I want to learn new information	45	I am responsible for my own decisions/ actions
42	I am methodical	36	I enjoy learning new information		
46	I can be trusted to pursue my own learning	39	I like to gather the facts before I make a decision	47	I can find out information for myself
				49	I like to make decisions for myself
				50	I prefer to set my own goals
				51	I am in control of my life

Figure 3.1: The Self-Directed Learning Readiness Scale (40 items)

The modified questionnaire from Glazerman *et al.* (2006:73) concentrated on beginner teachers' experience in teaching and their experiences with induction and mentoring during this period.

This data collection tool used in the study consisted of four sections, and it took the respondents approximately 50 minutes to complete (*cf.* Annexure D). Questionnaire completion involved the following sections:

Section A: Biographical information completed by all respondents

Section B: Self-directed learning (three constructs) completed by all respondents

Section C: Teaching practice first year experience: Completed by all respondents

Section D: Induction and mentoring: Completed only by respondents who were exposed to induction and mentoring.

The researcher piloted this questionnaire in Sedibeng East District (D7) of the Gauteng Province to diagnose and correct misunderstandings before distributing the collection tool to the sample respondents.

3.7 DATA ANALYSIS AND INTERPRETATION

Statistical procedures were used for the analysis of the close-ended questionnaire responses. The Statistical Consultancy Services at the North-West University were consulted to capture, analyse, and interpret the data collected. Descriptive statistics were used to describe and show data in various ways, for example, through summary frequencies. These statistics offered no assumptions or predictions; they merely summarised what had been discovered through various methods. Cohen *et al.* (2018:752) stipulate frequencies, standard deviation, and measures of central tendency were all included in descriptive statistics (means, modes, medians). Much emphasis was placed on visual strategies for data display in descriptive statistics. As a result, frequency distributions, percentages, and various forms of graphical depiction were frequently utilised (*cf.* 1.7.5).

Descriptive statistics were used to present the biographic data, the overall perceived nature of the self-directedness of the beginner teachers (*cf.* Table 4.8) and the overall perceptions of the preparedness level of beginner teachers in dealing with challenges in their first years of teaching (*cf.* Table 4.15).

Inferential statistics, supplemented by effect sizes (where statistical significant differences occurred), were used to determine to what extent the perceptions of beginner teachers who are exposed to and those not exposed to induction and mentoring process differ regarding their self-directedness and their preparedness level to deal with challenges (*cf.* Table 4.32 (Induction – self-directedness), Table 4.34 (Mentoring – self-directedness, Table 4.33 (Induction – challenges), Table 4.35 (Mentoring – challenges). For this purpose, t-tests were used to determine whether the difference between the means of the two groups is statistically significant (Johnson & Christensen, 2019:1390) and Cohen's d effect size. T-tests were also

used to establish the influence of guidance received by a mentor on adjustment of classroom practices in the absence of guidance (thus after having received guidance received from a mentor).

Cohen's effect size, a standardised measure of the effect, was used to evaluate the effect size. This Cohen's *d* test was considered to determine the effect size of the self-directedness of beginner teachers' extent of self-directedness. The effect size was evaluated as "Cohen's *d* 0.2 reported a small size effect, 0.5 reported a medium size effect, 0.8 reported a large size effect" (Cohen, 1988:12).

Correlations are used in the context of a linear relationship between two continuous variables and expressed as Pearson product-moment correlation (Schober *et al.*, 2018:1763). The Pearson correlation coefficient is typically used for jointly normally distributed data. Correlation coefficients are scaled such that they range from -1 to $+1$, where 0 indicates no linear association. "The relationship gets stronger and ultimately approaches a straight line as the coefficient approaches an absolute value of 1" (Wackerly *et al.*, 2008:225). Correlation coefficients were scaled " ~ 0.1 , small, no practical significant relationship, ~ 0.3 , medium, practical visible relationship, ~ 0.5 , large, practical significant relationship" to determine the relationship between 2 continuous variables (Wackerly *et al.*, 2008:225). Correlations were used to establish associations between constructs identified for the research.

Section C of the questionnaire (teaching experience in year 1 – 3) was developed by the researcher, and an exploratory factor analysis (EFA) was suggested by the independent statistician to condense the large number of variables to a smaller number of factors (*cf.* 4.4.2). The use of a confirmatory factor analysis (CFA) (*cf.* 4.3.2) verified the factor structure of the set of observed variables in the data set for self-regulated learning (self-management, desire to learn, and self-control) used in the study.

3.8 PILOT STUDY

According to Creswell (2014a:9), A pilot study is a method the researcher employs to modify the data collection instrument in response to suggestions from a limited sample of participants who completed and evaluated the instrument. Leedy and Ormrod (2019:110) further add that a pilot study is a brief investigation that the researcher makes to measure the instrument and analysis methods to establish the viability of the study.

Conducting a pilot study is essential because it will assist the researcher (Strydom, 2005:207) as follows:

- Determine the practicality and appropriateness of the data collection instrument.
- Determine if the questionnaire is clear and understandable.
- Determine if the time allocation is sufficient for the completion of the questionnaire.
- Determine if the questions asked do not cause any discomfort to the participants.

In this study, a pilot study was conducted to ensure the validity and reliability of the research study. The researcher evaluated the questionnaire by requesting 20 beginner teachers from primary (n=10) and secondary (n=10) schools in the Sedibeng East District (D7) of the Gauteng Province who was not part of the primary research but shared the same qualities with the respondents to complete the questionnaire. The pilot study revealed reliable Cronbach alpha coefficients between 0.93 and 0.96 for the three constructs on which the research focussed (*cf.* Table 4.13).

3.9 ROLE OF THE RESEARCHER

A quantitative study researcher must be objective when collecting and interpreting data. Furthermore, the researcher has no human interest in the study; thus, they become independent (Collins, 2010:38). If there is a personal connection to the research site, the researcher can also influence trustworthiness. Concerning the sampled respondents, none were known to the researcher. Additionally, an independent individual recruited all respondents to avoid potential conflicts of interest and bias. Thus, the researcher eliminated the possibility that respondents would act in a way that pleased the researcher, which would make their answers unreliable.

The researcher followed the guidelines stipulated by Maree and Van der Westhuizen (2013:41) to structure the research process. The guidelines were as follows:

- Obtain permission from authorities to conduct research.
- Establish a literature review that is relevant to the study.
- Use an objective view through a research study.
- Compile the questionnaire.
- Conduct a pilot study.
- Recruit respondents.
- Distribute the questionnaire.
- Data collecting, analysing and interpreting data.

- Report findings and make recommendations.

For the purpose of this study, the researcher was able to use the interpretation of data in a value-free manner and did not allow his perceptions as a beginner teacher to influence the collection and analysis of data from the sample group. Throughout the study, an objective approach was maintained to collect quantifiable and observable data.

3.10 QUALITY CRITERIA

Reliability and validity are the most important criteria for the quality of a quantitative research study (Maree, 2016:169-170). Pietersen and Maree (2020:260) define reliability as “the measuring instrument's repeatability and dependability. Cronbach Alpha was used to ensure the reliability of the resulting factors (Pietersen & Maree, 2020:267). Cronbach Alpha, which is typically used as a reliability indicator, showed that tests and scales created or used for research are appropriate for their intended use (Barbera *et al.*, 2020: 257; Taber, 2018:1273).

According to Pietersen and Maree (2020:267), guidelines for the interpretation of Cronbach's alpha coefficient have been suggested, and the following seem generally accepted by researchers:

- 0.90 – high reliability
- 0.80 – moderate reliability
- 0.70 – low reliability

At the same time, validity is based on the meaningfulness and usefulness of specific inferences a researcher makes regarding the data they collect (Fraenkel *et al.*, 2012:148). The researcher in this study has ensured validity by exploring internal and external validity, face validity, statistical conclusion validity, face validity, content validity, and also construct validity as follows:

3.10.1 Internal validity

Internal validity refers to the accuracy of the study results (Kalkbrenner, 2021:269). The results of this study were internally valid because the researcher was assisted by an independent person who gave beginner teachers, who are honours students at a South Africa University, access to the questionnaire on Google Forms via a link. In addition, only an independent person has access to the link and the site where data were generated.

3.10.2 External validity

External validity refers to the accuracy of generalising the results of the sample to the population at large (McDermott, 2011:31). The researcher sampled NWU honours students who are beginner teachers conveniently but discovered the self-directedness of beginner teachers who are exposed and those who are not exposed to induction and mentoring in South Africa. Therefore, results from the sampled group will be generalised across the population of beginner teachers in South Africa.

3.10.3 Statistical conclusion validity

According to Kirschner (2015:235), statistical conclusion validity means that the statistical methods used are met in line with the intended purpose and the assumptions of those statistical tests. Therefore, the North-West University statistical services have evaluated the questionnaire measures for the intended purpose. In addition, assistance was provided to determine Cohens' effect size and t-tests to ensure a valid statistical conclusion.

3.10.4 Face Validity

The data collection instrument must measure what is supposed to measure to ensure face validity (Yusoff, 2019:55). Therefore, the researcher has consulted with the North-West University statistical services, which scrutinised and evaluated the instrument tool to ensure a high degree of face validity which assured that the questionnaire measures the intended purpose. Furthermore, a pilot study was conducted to ensure face validity by requesting 20 beginner teachers from the Sedibeng West district of Gauteng province who did not form part of the initial research. The findings from these responses assist in using this instrument's tool to measure what measures were supposed to measure.

3.10.5 Content Validity

The data collection instrument must ensure that it adequately measures what it is intended to measure (Beck, 2020:3). The data collection instrument attempted to ensure content validity by adequately addressing the topic under investigation by including the following sections in the questionnaire.

- Section A: Biographical information of the respondents
- Section B: Self-directed learning
- Section C: First year experience

- Section D: Induction and mentoring

3.10.6 Construct Validity

Construct validity in the form of validity that determines the scores on the test collectively measures the intended purpose, and aspects such as skills and proficiency are essential (Kalkbrenner, 2021: 268). In the context of this research study, the test scores collectively measure the intended purpose, which was achieved through proficiency. Respondents fully understood the language used in the questionnaire, English, because English is the medium of instruction and is also used as the Language of teaching and learning at tertiary institutions. The use of the English language has enabled the researcher to respond to the questionnaire with comprehension; as a result, this validates the quality of responses obtained on the data collected.

3.11 ETHICAL CONSIDERATIONS

Ethical concerns are a collection of principles that govern the design and conduct of research, including informed consent, voluntary involvement, confidentiality, privacy, and anonymity (Maree & Van der Westhuizen, 2013:37). The researcher adhered to ethical standards throughout the research.

According to Leedy and Ormrod (2019:101), all stakeholders and respondents were fully aware of the research aim, process, and benefits or any risks they could be exposed to in this study. In this study, respondents were asked for informed consent (*cf.* Annexure C), which informed them that participation is voluntary and has no direct benefits. They can withdraw anytime without getting a penalty. The indirect benefit of participating in the survey is that respondents will provide information that the researcher can suggest to the Department of Basic Education and guide the development of policy, planning, and practice decisions to support beginner teachers with strategies to develop self-directedness in their first years of teaching.

The study's possible risks and rewards, the type of involvement, voluntary participation, and the methods used to assure anonymity and confidentiality were all described in the consent form. The form also offered the researcher's contact information in case there were any questions and guaranteed that participants could withdraw at any moment.

The North-West University EduREC Research Ethics Committee sought permission to continue the research, and clearance was granted on 11 August 2020 (*cf.* Annexure B).

Permission was also sought from the North-West University Research Data Keeper Committee (NWU-RDGC), which was also granted (*cf.* Annexure A).

All statistical data will be stored on a password-protected computer in the supervisor's office for five years and will be destroyed by deleting the files on the computer. The supervisors will be responsible for storage.

3.12 SUMMARY

This chapter began by identifying the research design adopted by the current study (*cf.* 3.2). The Positivist worldview was selected as the paradigm because it was well matched for the undertaken research. Furthermore, its nature enabled the researcher to collect data through observation and, subsequently, have quantifiable research findings (*cf.* 3.3).

A quantitative research design was employed in the study (*cf.* 3.4). Among many other reasons, this research design was chosen because of its objective nature, and the data collected through this design is unbiased and can be statistically concluded.

In this quantitative study, the population selected to participate in the research were all honours students in South Africa who are working as beginner teachers and have three years or less in teaching (*cf.* 3.5.1) and the sample the researcher selected based on convenience was 300 South Africa University part-time honours students who are currently working as beginner teachers in primary and secondary schools. Therefore, the intended number of responses the research needed for data analysis was at least 210 respondents, and only 222 beginner teachers responded (12 responses more than what was required) (Field, 2018:926).

Using a non-experimental research strategy, the researcher chose to use a descriptive survey strategy with a questionnaire to obtain data from respondents (*cf.* 3.6.1). The link and site where data were generated were accessible to an independent person who provided respondents with the link to the questionnaire.

A questionnaire as a data collection method was used because data obtained from the sampled group was inferred from the research population, all honours students in South Africa who are working as beginner teachers and have three years of teaching experience or less (*cf.* 3.6.2). The researcher used a closed-ended questionnaire to acquire beginner teachers' responses about their self-directedness using SDLRS developed by Fisher and a questionnaire modified from Glazeman about beginner teachers' experience and their experience of induction and mentorship (*cf.* 3.6.3).

Statistical procedures were adhered to through the consultation of North-West University statistical services that assisted with capturing, analysing and interpreting data collected. Descriptive statistics and inferential statistics were used to summarise what was covered through different methods and determine the extent of perception of beginner teachers and those not exposed to induction and mentoring (*cf.* 3.7).

The reliability and validity were ensured by conducting a pilot study, which confirmed the appropriateness and practicality of the data collection instrument (*cf.* 3.8). Furthermore, the role of the researcher in this study was objective and contained no human interest (*cf.* 3.9).

The reliability and validity of the quantitative research component (*cf.* 3.10) were ensured by adhering to the quality criteria of internal validity, external validity, face validity, statistical conclusion validity, content validity, and construct validity.

The researcher adhered to the ethics rules throughout the study (*cf.* 3.11), and all the stakeholders and respondents were fully aware of the research aim, process, benefits or risks they could be exposed to in this study.

In the following chapter, the data analysis and interpretation will be present.

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

4.1 INTRODUCTION

The researcher provided a detailed overview and motivation for the research methodology in the previous chapter. This chapter, therefore, reports on and interprets the data collected. The study aimed to determine the difference between an induction and mentoring process on beginner teachers' perceptions of self-directedness. The population of the study was all BEd part-time honours students in South Africa working as beginner teachers but was confined to a sample of BEd part-time honours students at a South Africa University from three campuses working as beginner teachers in year 1 to 3 at that moment.

An independent person of the North-West University sent an online questionnaire to the sampled population in the form of a google link. The intended number of needed responses was at least 210 and the responses received were 222. Hence, this constitutes a reliable sample from which meaningful deductions could be made. Data were therefore represented in frequencies (f) and percentages (%).

Note: The graphs did not indicate round-off percentages like the tables. The intended reason was to improve visibility. In the discussions, the researcher considered the unrounded percentages. (**factors=constructs**)

4.2 PROFILE OF RESPONDENTS

Section A of this questionnaire was based on the biographical information of the respondents, which comprised of:

- Type of school
- School environment
- Age
- Ethnic group
- Teaching experience
- Campus graduated
- Geographical information

4.2.1 Type of school

Table 4.1 depicts data from respondents teaching in both primary and secondary schools.

Table 4.1: Type of school

	Frequency	Percentage
Primary school	126	56.8%
Secondary school	96	43.2%
Total	222	100.0%

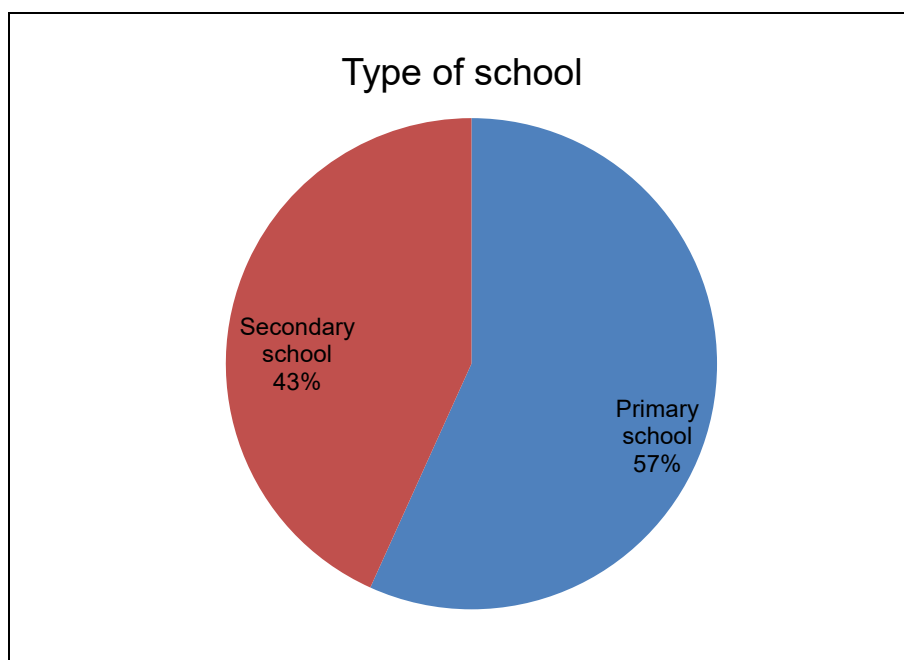


Figure 4.1: Type of school

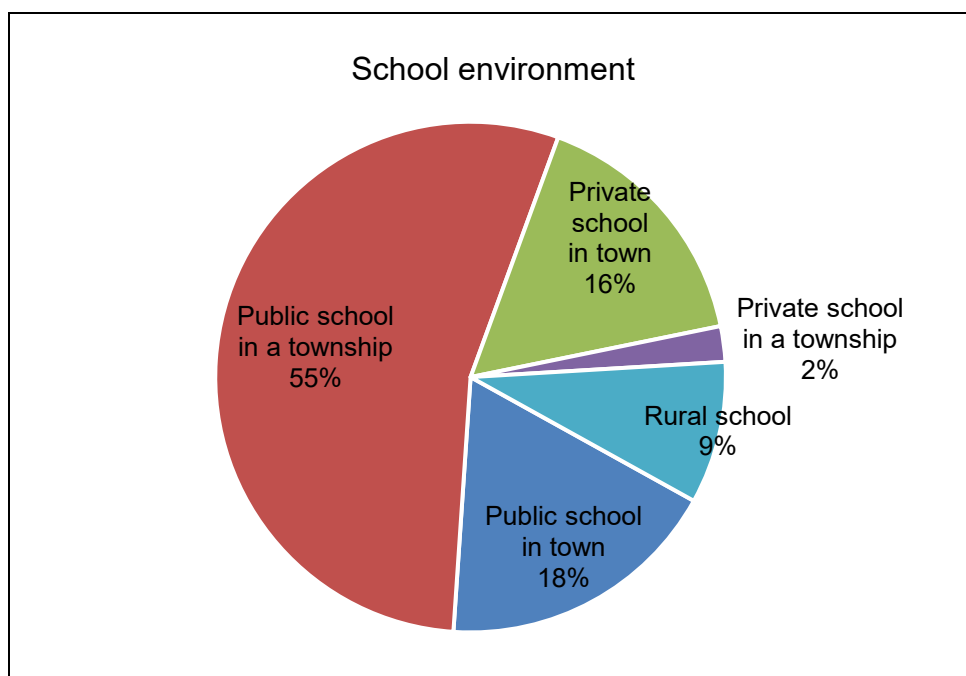
Table 4.1 illustrates that most (56.8%) of the respondents work in primary schools, while 43.2% work in secondary schools. The rationale for including the type of school question in this questionnaire was to indicate that although the sample used was BEd part-time students at a South Africa University, they are concurrently working as beginner teachers, teaching in primary and secondary schools.

4.2.2 School Environment

Table 4.2 illustrates data regarding the school environments where respondents work.

Table 4.2: School environment

	Frequency	Percentage
Public school in town	40	18.0%
Public school in a township	121	54.5%
Private school in town	36	16.2%
Private school in a township	5	2.3%
School in a rural area	20	9.0%
Total	222	100.0%

**Figure 4.2: School environment**

The rationale for including the school environment question was mainly to demonstrate that teaching occurs in different school environments, as indicated in the table above. Therefore, the respondents of this questionnaire are teaching in different school environments. According to Figure 4.2, the majority of respondents (54.5%) are beginner teachers who are working in public schools, where the first year of teaching is mostly accompanied by factors like overcrowding, learner discipline and classroom management (Meier & West, 2021:3) (*cf.* 2.6.4). In addition, 9% of respondents in the sample were beginner teachers who teach in rural areas where schools are isolated and under-resourced (Du Plessis & Mestry, 2019:1) (*cf.* 2.6.4) and beginner teachers are struggling with adaptation, unlike private schools where

beginner teachers are able to thrive by using resources and professional networks that are readily available.

4.2.3 Age

Table 4.3 presents the age groups of beginner teachers who participated in the questionnaire.

Table 4.3: Age

	Frequency	Percentage
20-25	102	45.9%
26-30	94	42.3%
31-35	13	5.9%
36-40	6	2.7%
41-45	4	1.8%
46-Older	3	1.4%
Total	222	100.0%

The question of age is featured in the questionnaire to demonstrate diversified age groups of beginner teachers working in different school environments. Table 4.3 shows that 88.2% of the respondents in this questionnaire are beginner teachers between the ages of 20-30. It alludes to them as young professionals who just got into teaching. At the same time, the difference of 11.8% represents beginner teachers who have less than three years of experience in the teaching profession but are aged between 31-46 years or older. The researcher believes that respondents between the ages of 31-46 and above who are beginner teachers may have entered the profession of teaching at these ages due to reasons such as unemployment, change from their previous careers to teaching, or they only started working after completing various qualifications.

4.2.4 Ethnic groups

Table 4.4 illustrates data of beginner teachers in terms of their different ethnic groups.

Table 4.4: Ethnic groups

	Frequency	Percentage
Asian	0	0%
Black	170	76.6%
Coloured	27	12.2%
White	23	10.4%
Other	2	0.9%
Total	222	100.0%

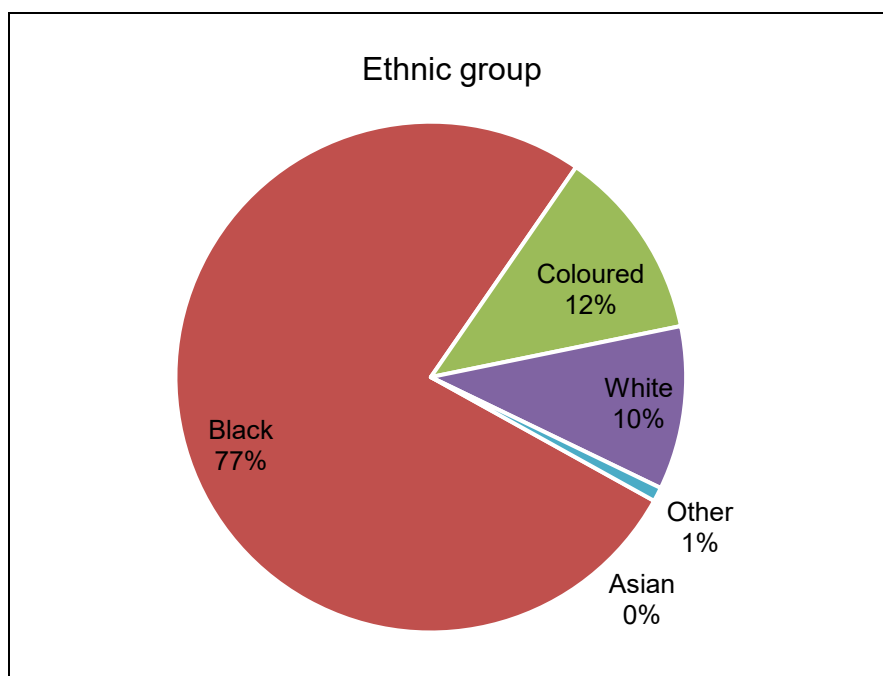


Figure 4.3: Ethnic group

Ethnic groups in the table above indicate those beginner teachers who participated in this study are from different races. Although, as Table 4.2 demonstrates, the majority of respondents teach in public schools, Table 4.4 finds the majority of these respondents (76.6%) are black. As a result, it could therefore be interpreted that many of the respondents who participated in this study are black and coloured beginner teachers in the public schools as compared with other races illustrated in the table above.

4.2.5 Teaching experience

Table 4.5 presents data on the respondent's years of experience in the profession of teaching.

Table 4.5: Teaching experience

	Frequency	Percentage
One year	103	46.4%
Two years	76	34.2%
Three years	43	19.4%
Total	222	100.0%

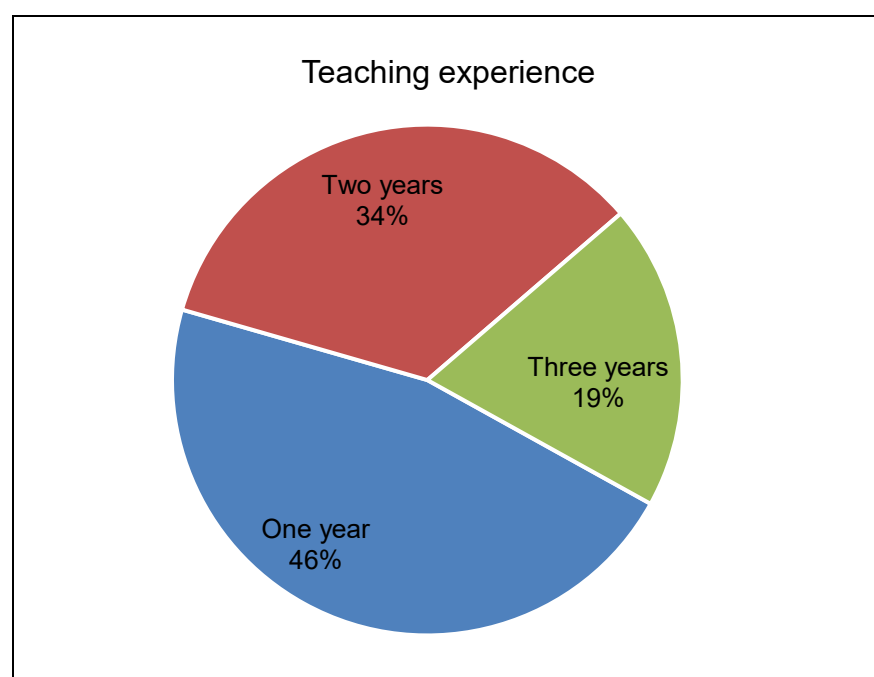


Figure 4.4: Teaching experience

For the purpose of the study, a beginner teacher is a qualified individual with three years or less experience (Ngwira & Potokri, 2019:744) (*cf.* 2.1.3). Table 4.5 presents that 100% of beginner teachers (222) who were respondents in this questionnaire have one to three years of experience in teaching. 46.4% have one-year experience, 34.2% have two years of experience and 19.4% have three years of experience in teaching. Despite this minimal experience acquired by beginner teachers in their first years of teaching, beginner teachers perceive these first years of teaching as challenging (Kiru, 2020:43; Kozikoglu, 2017:91; Reitman & Karge, 2019:9) (*cf.* 2.6.3) and find it hard to remain in the profession without the professional support of induction and mentoring.

4.2.6 Campus

Table 4.6 presents data from respondents who are beginner teachers from different campuses of a South African university.

Table 4.6: Campus

	Frequency	Percentage
Campus 1	63	28.4%
Campus 2	13	5.9%
Campus 3	146	65.8%
Total	222	100.0%

Table 4.6 displays the collected data from the researcher's sample of part-time BEd honours students in the faculty of education at a South African university who are employed in both primary and secondary schools. An independent person distributed the Google Forms-based online survey to all three campuses.

The table above indicates that the vast majority of beginner teachers (65.8%) are from Campus 3, while the minority (5.9 %) are from Campus 2. The researcher is of the opinion the reason why most of the respondents were from Campus 3 might be they knew the researcher when they saw his name on the informed consent letter. The researcher acknowledges that being known to the Campus 3 students might have contributed to some form of bias to the research.

4.2.7 Geographic location

Table 4.7 depicts data of beginner teachers from different provinces in South Africa who studied during their year 1 to 3 of teaching for an honours degree at NWU.

Table 4.7: Province of origin

	Frequency	Percentage
Gauteng	149	67.1%
Free State	17	7.7%
Mpumalanga	4	1.8%
Eastern Cape	3	1.4%
Northern Cape	1	0.5%
Western Cape	3	1.4%
KwaZulu Natal	2	0.9%
Limpopo	4	1.8%
North West	39	17.6%
Total	222	100.0%

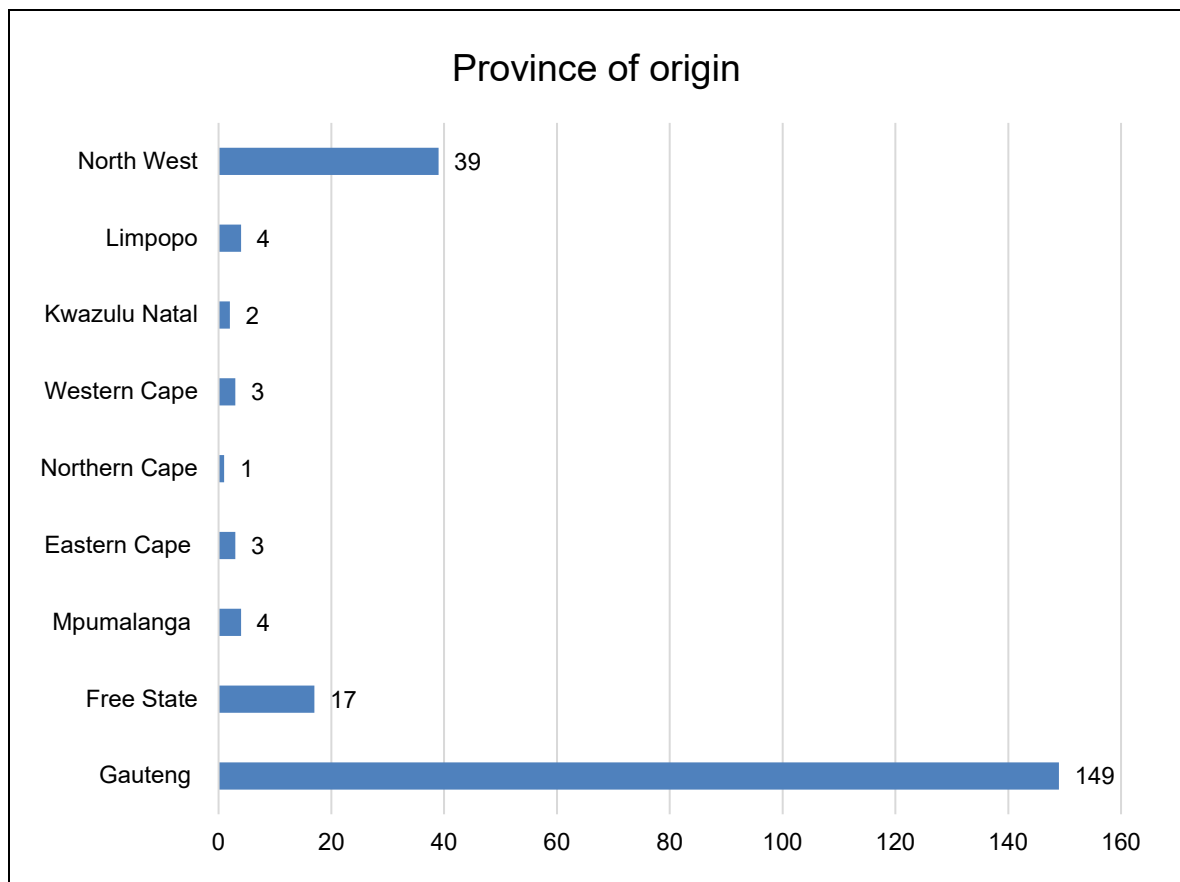


Figure 4.5: Geographic location

Different provinces are represented in the table above through NWU BEd part-time honours students working as beginner teachers and staying at various geographical locations.

Table 4.7 shows most of the respondents (67.7%) to this questionnaire are from Gauteng, while the second largest (17.6%) is from North-West Province. Therefore, the limitation of this study based on the geographical location would be the low representation of beginner teachers in other provinces, as demonstrated in Table 4.7.

4.3 SELF-DIRECTED LEARNING

4.3.1 Introduction

The respondents completed the standardised 52 items Self-Directed Learning Readiness Scale (SDLRS) questionnaire developed by Fisher in 2001 (Fisher *et al.*, 2001:523) (*cf.* 1.7.4.2).

Table 4.8 indicates the frequency (percentages) distribution of the responses on the SDLRS 52 items questionnaire. The numbering in brackets indicate the numbering in the questionnaire attached in Annexure D)

Table 4.8: Frequency (percentages) distribution of the responses on the SDLRS 52 items questionnaire

Key:								
Almost never	-	“Almost never true of me; I hardly feel this way”						
Not often	-	“Not often true of me; I feel this way less than half the time”						
Sometimes	-	“Sometimes true of me; I feel this way about half the time”						
Usually	-	“Usually true of me; I feel this way more than half the time”						
Almost always	-	“Almost always true of me; there are very few times when I don't feel this way.”						

No	Statement	Almost never	Not often	Sometimes	Usually	Almost always	Mean	Standard Deviation
SDL1	“I solve problems using a plan”	2.25	18.92	39.19	23.42	16.22	3.32	1.03
SDL2	“I prioritise my work”	0.90	6.76	34.68	27.48	30.18	3.79	0.98
SDL	“I like to solve (answer) puzzles/questions”	2.25	19.37	34.68	23.87	19.82	3.40	1.08
SDL4	“I manage my time well”	3.15	17.12	36.49	25.23	18.02	3.38	1.06

No	Statement	Almost never	Not often	Sometimes	Usually	Almost always	Mean	Standard Deviation
SDL5	"I have good management skills"	1.35	16.67	34.23	26.13	21.62	3.50	1.05
SDL6	"I set strict time frames"	1.35	16.22	45.05	22.97	14.41	3.33	0.96
SDL7	"I prefer to plan my own learning"		13.06	31.08	28.38	27.48	3.70	1.01
SDL8	"I prefer to direct my own learning"	0.45	12.61	30.18	29.28	27.48	3.71	1.02
SDL9	"I believe the role of the teacher is to act as a resource person"	1.35	13.51	27.93	19.37	37.84	3.79	1.13
SDL10	"I am systematic in my learning"	1.35	12.16	38.74	26.58	21.17	3.54	1.00
SDL11	"I am able to focus on a problem"	0.45	10.81	33.78	32.88	22.07	3.65	0.96
SDL12	"I often review the way teaching practices are conducted"	1.35	12.61	37.39	30.18	18.47	3.52	0.98
SDL13	"I need to know why"	1.35	8.56	35.14	24.77	30.18	3.74	1.03
SDL14	"I critically evaluate new ideas"		7.7	36.0	30.6	25.7	3.74	0.93
SDL15	"I prefer to set my own learning goals"	0.45	11.71	29.73	30.18	27.93	3.73	1.01
SDL16	"I am willing to change my ideas"	0.45	13.06	36.04	28.83	21.62	3.58	0.98
SDL17	"I will ask for help in my learning when necessary"	0.45	10.81	31.08	25.68	31.98	3.78	1.03
SDL18	"I am willing to accept advice from others"	0.45	9.46	29.28	25.68	35.14	3.86	1.02
SDL19	"I learn from my mistakes"	0.90	7.21	25.68	31.53	34.68	3.92	0.99
SDL20	"I will alter my practices when presented with the facts"	1.35	10.81	28.83	30.63	28.38	3.74	1.03
SDL21	"I am open to new learning opportunities"	0.45	6.76	27.03	24.77	40.99	3.99	1.00
SDL22	"I am open to new ideas"	0.45	4.50	29.73	24.32	40.99	4.01	0.97
SDL23	"When presented with a problem I cannot resolve, I will ask for assistance"	1.35	11.71	27.03	23.42	36.49	3.82	1.09

No	Statement	Almost never	Not often	Sometimes	Usually	Almost always	Mean	Standard Deviation
SDL24	"I am responsible"	0.90	3.60	28.38	27.48	39.64	4.01	0.95
SDL25	"I like to evaluate what I do"		9.46	27.48	36.49	26.58	3.80	0.94
SDL26	"I have high personal expectations"		7.66	27.93	26.58	37.84	3.95	0.98
SDL27	"I have high personal standards"		5.41	33.33	28.83	32.43	3.88	0.93
SDL28	"I have high beliefs in my abilities"	0.45	8.11	31.98	25.68	33.78	3.84	1.00
SDL29	"I am aware of my own limitations"	0.90	10.36	35.59	29.28	23.87	3.65	0.99
SDL30	"I am assertive"	0.45	9.46	33.78	31.08	25.23	3.71	0.96
SDL31	"I am confident in my ability to search out information"		8.56	30.63	31.08	29.73	3.82	0.96
SDL32	"I enjoy studying"	0.45	8.56	35.59	29.73	25.68	3.72	0.96
SDL33	"I have a need to learn"		9.01	30.18	28.38	32.43	3.84	0.98
SDL34	"I enjoy a challenge"	0.90	9.01	32.43	31.53	26.13	3.73	0.98
SDL35	"I want to learn new information"	0.45	7.66	28.38	27.48	36.04	3.91	0.99
SDL36	"I enjoy learning new information"	0.45	6.76	30.18	28.83	33.78	3.89	0.97
SDL37	"I set specific times for my self-study"	1.80	16.67	31.98	27.93	21.62	3.51	1.06
SDL38	"I am self-disciplined"		11.71	32.43	30.18	25.68	3.70	0.98
SDL39	"I like to gather the facts before I make a decision"	0.90	15.32	27.93	30.18	25.68	3.64	1.05
SDL40	"I am organised"	1.35	11.26	34.68	26.13	26.58	3.65	1.03
SDL41	"I am logical"		9.46	31.53	33.33	25.68	3.75	0.95
SDL42	"I am methodical"	1.35	9.91	39.19	31.08	18.47	3.55	0.95
SDL43	"I evaluate my own performance"	0.90	9.91	35.59	29.73	23.87	3.66	0.98
SDL44	"I prefer to set my own criteria on which to evaluate my performance"	0.90	11.26	41.89	29.73	16.22	3.49	0.93
SDL45	"I am responsible for my own decisions"		7.66	29.73	31.53	31.08	3.86	0.95

No	Statement	Almost never	Not often	Sometimes	Usually	Almost always	Mean	Standard Deviation
SDL46	"I can be trusted to pursue my own learning"		9.91	32.43	24.77	32.88	3.81	1.01
SDL47	"I can find out information for myself"		6.76	33.78	28.38	31.08	3.84	0.95
SDL48	"I need minimal help to find information"	0.90	12.61	38.29	29.73	18.47	3.52	0.96
SDL49	"I like to make decisions for myself"	0.45	11.26	28.83	26.58	32.88	3.80	1.04
SDL50	"I prefer to set my own goals"	0.90	7.66	30.63	22.97	37.84	3.89	1.03
SDL51	"I am in control of my life"	1.35	7.66	26.13	30.18	34.68	3.89	1.01
SDL52	"I need to be in control of what I learn"	0.45	8.56	31.53	27.48	31.98	3.82	0.99

Considering the statements regarding self-directed learning, the lowest means, according to Table 4.8, were reported for SDL1, stating that "I solve problems using a plan." (mean = 3.32; SD = 1.03) and SDL6 stating "I set strict time frames" (mean = 3.33; SD = 0.96) indicating that respondents on average feel that these are "Sometimes true of them; they feel this way about half the time". The highest mean was reported for SDL22 stating "I am open to new ideas" (mean = 4.01; SD = 0.97), and SDL24 asserting "I am responsible" (mean = 4.01; SD = 0.95), indicating that respondents, on average feel that these are "Usually true of them; they feel this way more than half the time". The majority of the respondents reported on average between "Sometimes true of me; I feel this way about half the time" and "Usually true of them; they feel this way more than half the time", with a mean above 3.5 as measured on a five-point scale, which indicated that the respondents rate themselves high regarding the nature of their self-directed learning skills.

Although the 52 items of the SDLRS were reduced for this research to 40 (Fisher & King, 2010:46) (*cf.* 2.2.1), the researcher decided to distribute the data collection tool in its entirety and not fragmented. The 40 items used for the research were categorised into three factors, and for statistical purposes. The 40 items from the 52 items of the SDLRS were reported (Fisher *et al.*, 2001:523) (*cf.* 3.6.3) further in this chapter. Table 4.9 indicates the 40 items (questions) divided into three factors.

Table 4.9: The distribution of the 40 items into three factors

Factor	Questions
Self-Management	1, 2, 4, 5, 6, 7, 10, 31, 37, 38, 40, 42, 46
Desire for Learning	13, 14, 19, 22, 23, 25, 32, 33, 34, 35, 36, 39
Self-Control	11, 15, 24, 26, 27, 28, 29, 41, 43, 44, 45, 47, 49, 50, 51

4.3.2 Validity

Confirmatory Factor Analysis

Hox and Becher (1999) explain that Structural Equation Modeling (SEM) assesses the relationships amongst theoretical constructs through regression or path coefficients, thus testing how well the theoretical model fits the data. Therefore, a Confirmatory Factor Analysis (CFA), by means of an SEM, was conducted on the data (n = 222) of this study to assess how well the proposed model fits the data (Figure 4.6). As a result, all the variables contribute statistical significance to the model (p-values of all the regression coefficients < 0.05), and all the correlations between the constructs are practically significant (correlations ranging between 0.45 – 0.92), seeing that a correlation of 0.5 is considered to be large or practically significant according to Pallant (2020).

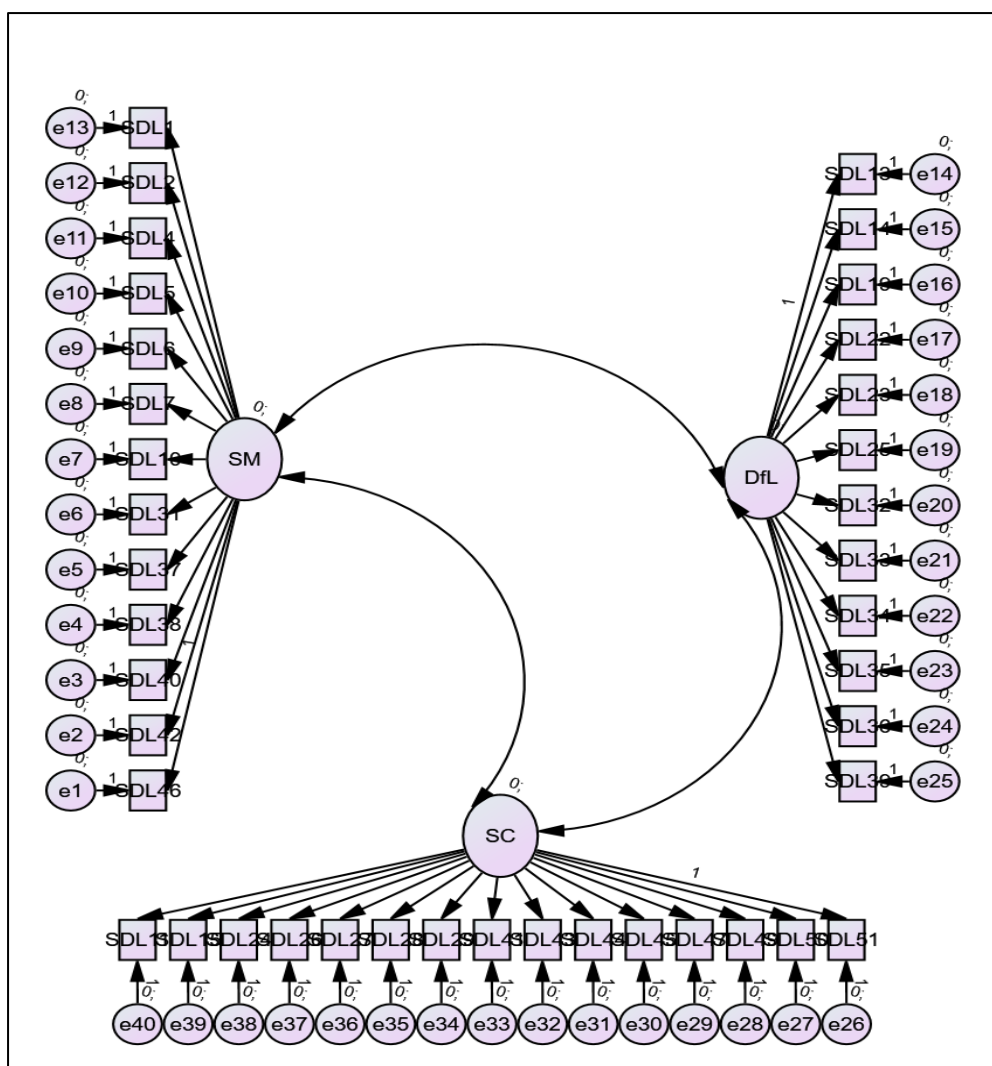


Figure 4.6: SEM diagram of the theoretical model being tested

A statistical method called confirmatory factor analysis (CFA) is used to confirm the factor structure of a set of observed variables. CFA is widely used to evaluate a latent structure that has been developed a priori and is driven by a theoretical foundation (DiStefano & Hess, 2005:226). CFA enables the researcher to test the hypothesis that there is a relationship between observable variables and their underlying latent constructs. The researcher uses knowledge of the theory and empirical research to postulate the relationship pattern a priori and then statistically test the hypothesis. A CFA verifies whether the specific data set matches the theoretical factors. Table 4.10 depicts the CFA results.

Table 4.10: Regression Weights

Key: SDL: Self-directed learning; SM: Self-Management; DfL: Desire for Learning; SC: Self-Control							
		Estimate		S.E.	C.R.	P	Label
SDL46	<--- SM	1.000					
SDL42	<--- SM	.780		.066	11.882	***	
SDL40	<--- SM	.921		.069	13.315	***	
SDL38	<--- SM	.910		.064	14.129	***	
SDL37	<--- SM	.833		.075	11.124	***	
SDL31	<--- SM	.849		.064	13.211	***	
SDL10	<--- SM	.839		.069	12.212	***	
SDL7	<--- SM	.887		.068	13.002	***	
SDL6	<--- SM	.719		.068	10.508	***	
SDL5	<--- SM	.877		.072	12.133	***	
SDL4	<--- SM	.774		.077	10.103	***	
SDL2	<--- SM	.872		.066	13.281	***	
SDL1	<--- SM	.707		.075	9.383	***	
SDL13	<--- DfL	1.000					
SDL14	<--- DfL	.861		.075	11.529	***	
SDL19	<--- DfL	.970		.078	12.371	***	
SDL22	<--- DfL	1.030		.075	13.660	***	
SDL23	<--- DfL	.999		.088	11.318	***	
SDL25	<--- DfL	.965		.074	13.023	***	
SDL32	<--- DfL	.861		.078	11.111	***	
SDL33	<--- DfL	1.032		.077	13.392	***	
SDL34	<--- DfL	.985		.078	12.709	***	
SDL35	<--- DfL	1,103		,077	14.352	***	
SDL36	<--- DfL	1,063		,075	14.101	***	

Key: SDL: Self-directed learning; SM: Self-Management; DfL: Desire for Learning; SC: Self-Control							
		Estimate		S.E.	C.R.	P	Label
SDL39	<--- DfL	1.049		.084	12.565	***	
SDL51	<--- SC	1.000					
SDL50	<--- SC	1.177		.085	13.815	***	
SDL49	<--- SC	1.174		.086	13.713	***	
SDL47	<--- SC	1.031		.079	13.084	***	
SDL45	<--- SC	1.032		.079	13.077	***	
SDL44	<--- SC	.801		.079	10.097	***	
SDL43	<--- SC	.933		.083	11.235	***	
SDL41	<--- SC	1.025		.079	13.024	***	
SDL29	<--- SC	.927		.084	11.078	***	
SDL28	<--- SC	1.046		.084	12.484	***	
SDL27	<--- SC	.962		.078	12.338	***	
SDL26	<--- SC	1.019		.082	12.374	***	
SDL24	<--- SC	1.069		.079	13.536	***	
SDL15	<--- SC	1.013		.085	11.911	***	
SDL11	<--- SC	.957		.081	11.875	***	

In Table 4.10, the null hypothesis tests that the regression coefficient is 0; *** meaning that the p-value is less than 0.001 (as AMOS cannot express numbers smaller than this). If $p < 0.05$ (or *** as this means smaller than 0.001), the probability that the variable's coefficient equals 0 is very small, and therefore the null hypothesis can be rejected. Thus, the variable does contribute significantly to the model. All the p-values of the regression coefficients were smaller than 0.5, and thus all the variables contributed significantly to the model.

Latent variables have no natural metric, and by setting the factor loading to 1 is done to fix the problem. The latent variables referred to in Table 4.10 are: self-management, desire for learning and self-control. By fixing one of the factor-indicator regression weights for the latent variables to 1, all the regression weights for that specific factor will be made relative to it. It

allows you to use the relationship between the latent variable and the observed variables to determine the variance of the latent variable (Cross validated, 2014).

4.3.3 Correlations

The term “correlation” is typically used to describe a linear relationship between two continuous variables; this relationship is denoted by Pearson product-moment correlation.

The Pearson correlation coefficient is typically applied to normally distributed data sets. The scale used to quantify correlation coefficients ranges from -1 to 1. There is no linear relationship between the two items if the value is 0. The relationship strengthens and eventually resembles a straight line as the coefficient gets closer to 1 (Schober *et al.*, 2018:1763) (*cf.* 3.7).

4.3.3.1 Correlations between factors

Reliable factors were determined to be those that had a Cronbach's Alpha coefficient of 0.7 or above, but a threshold of at least 0.5 was also required. According to Table 4.11, all the correlations between the factors were practically significant, seeing that the reported values were 0.929 – 0.979.

Table 4.11: Correlations between factors

Correlation between		Correlation coefficient
Self-management	Desire for learning	.929
Self-Control	Self-Management	.959
Self-Control	Desire for Learning	.979

Model Fit Summary

Fit indices from three of the broad categories are reported, namely: chi-squared test statistic divided by the Degrees of Freedom (CMIN/DF), Comparative Fit Index (CFI), and Root Mean Square Error Approximation (RMSEA) with a 90% confidence interval (LO 90 and HO 90). Blunch's (2008) guideline values (as indicated in Table 4.12) will be used for interpretation.

These indicate how well the data fit the theoretical constructs. A value near 1 is considered a sign of a good fit.

Table 4.12: SEM fit indexes (guidelines and reported values)

Broad category	Absolute Fit Measure	Relative Fit Measure	Non-Central Distribution
Fit index	CMIN/DF	CFI	RMSEA (LO90: HI90)
Guideline value	Near 1	>0.95	Around 0.05
Reported value	2.37	0.87	0.05 (0.074:0.084)

It is evident from Table 4.12 that the model fits the data relatively well.

4.3.4 Reliability (Cronbach Alpha)

Reliability determines whether a questionnaire and its underlying factors continuously reflect what is being measured. This means that:

- all other things being equal, a person completing the questionnaire at two different moments in time should receive the same score for each item each time completing the questionnaire, and
- two people who are similar in terms of the constructs the questionnaire is measuring should receive the same results for these factors.

Table 4.13 presents Cronbach Alpha values of the subscales resulting from the confirmatory factor analysis.

Table 4.13: Cronbach Alpha values of the subscales

Factor	Questions	Cronbach's Alpha	Mean interitem correlation
Self-Management	1, 2, 4, 5, 6, 7, 10, 31, 37, 38, 40, 42, 46	0.93	0.51
Desire for Learning	13, 14, 19, 22, 23, 25, 32, 33, 34, 35, 36, 39	0.95	0.61
Self-Control	11, 15, 24, 26, 27, 28, 29, 41, 43, 44, 45, 47, 49, 50, 51	0.96	0.61

The reported Cronbach Alpha values, which ranged between 0.93 – 0.96, are all above the guideline value of at least 0.7 (Pietersen & Maree, 2020:267) (*cf.* 3.10). This indicates that the resulting factors are reliable. Furthermore, Table 4.13 demonstrates that all the constructs' Cronbach Alphas are above the guideline value. Thus, it can be interpreted that the constructs are reliable.

4.3.5 Descriptive statistics

The descriptive statistics of the three constructs are depicted in Table 4.14

Table 4.14: Descriptive statistics of three factors of Self-directed Learning scale

	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Self-Management	2.077	5.000	3.585	.746	.119	-1.203
Desire for Learning	1.833	5.000	3.813	.798	-.190	-1.203
Self-Control	1.750	5.000	3.777	.772	-.183	-1.180
Self-directed learning	1.878	5.000	3.727	.746	-.134	-1.221

The skewness and kurtosis statistics are all within the range of (-2, 2); therefore, there is no reason to suspect that the normality assumptions have been violated. The values for skewness and kurtosis between -2 and +2 are considered acceptable in order to prove normal univariate distribution (George & Mallery, 2022:114).

4.4 FIRST YEAR OF TEACHING EXPERIENCE

4.4.1 Challenges related to beginner teachers' preparedness in their first year of teaching

Section C of the questionnaire was self-created to determine the respondents' experience as beginner teachers. Table 4.15 presents frequency data demonstrating the challenges related to beginner teachers' preparedness in their first years of teaching. The "not at all prepared" and "somewhat prepared" percentages combined constituted the "poorly prepared" group, and the "well prepared" and "very well prepared" percentages, made up the well prepared group.

Table 4.15: The level of preparedness of beginner teachers in relation to dealing with challenges in their beginning years of teaching

C1	Question	Not at all prepared		Somewhat prepared		Well prepared		Very well prepared		Poorly prepared	Well prepared
	n=222	f	%	f	%	f	%	f	%	%	%
1.	Manage a variety of classroom management tasks	2	0.9	97	43.7	91	41.0	32	14.4	44.6	55.4

C1	Question	Not at all prepared		Somewhat prepared		Well prepared		Very well prepared		Poorly prepared	Well prepared
	n=222	f	%	f	%	f	%	f	%	%	%
2.	Manage a variety of discipline issues	10	4.5	112	50.5	79	35.6	21	9.5	55.0	45.0
3.	Use a variety of instructional methods	2	0.9	101	45.5	87	39.2	32	14.4	46.4	53.6
4.	Teach subject content	3	1.4	49	22.1	113	50.9	57	25.7	23.5	76.6
5.	Assess your learners	2	0.9	71	32.0	89	40.1	60	27.0	32.9	67.1
6.	Select and adapt curriculum and instructional materials	6	2.7	78	35.1	94	42.3	44	19.8	37.8	62.2
7.	Motivate learners	29	13.1	85	38.3	82	36.9	26	11.7	51.4	48.6
8.	Work with learners who have behavioural challenges	29	13.1	85	38.3	82	36.9	26	11.7	51.4	48.6
9.	Work with learners who have emotional challenges	32	14.4	88	39.6	75	33.8	27	12.2	54.0	46.0
10.	Work with learners who have developmental challenges	30	13.5	92	41.4	69	31.1	31	14.0	54.9	45.1
11.	Work with learners with physical challenges	51	23.0	87	39.2	58	26.1	26	11.7	62.2	37.8
12.	Collaborate with colleagues to plan together to ensure alignment in grade	10	4.5	93	41.9	66	29.7	53	23.9	46.4	53.6
13.	Work with the principal or other instructional leaders	8	3.6	80	36.0	91	41.0	43	19.4	39.6	60.4
14.	Plan effective lessons	6	2.7	62	27.9	99	44.6	55	24.8	30.6	69.4
15.	Be an effective teacher	5	2.3	53	23.9	106	47.7	58	26.1	26.2	73.8

C1	Question	Not at all prepared		Somewhat prepared		Well prepared		Very well prepared		Poorly prepared	Well prepared
	n=222	f	%	f	%	f	%	f	%	%	%
16.	Address the needs of diversity of learners	1	0.5	82	36.9	94	42.3	45	20.3	37.4	62.6
17.	Manage variety of administrative duties	6	2.7	59	40.1	81	36.5	46	20.7	42.8	57.2
18.	Teach by using different self-directed teaching strategies	4	1.8	96	43.2	80	36.0	42	18.9	45.1	54.9
19.	Manage workload	6	2.7	99	44.6	84	37.8	33	14.9	47.3	52.7
20.	Balance your teaching and private life	13	59.9	95	42.8	77	34.7	37	16.7	48.6	51.4
21.	Start your teaching career with the knowledge you gain from the university	3	1.4	90	40.5	83	37.4	46	20.7	41.9	58.1

Table 4.15 reports on the challenges in relation to preparedness of beginner teachers in their first years of teaching. Next, the researcher elaborated on five areas for which beginner teachers were most poorly prepared. Interestingly these five areas were identified when the factor loadings of the extracted factors emerged, namely operational instructional management challenges and teaching challenges. One of the factors, teaching challenges (*cf.* Table 4.17), is the factor on which the five items loaded.

1. Work with learners with physical challenges

A vast number of respondents (62.2%) have been represented by Table 4.15 as lacking preparedness to work with learners with physical challenges. Only a minority of a joint percentage, 37.8%, have indicated that they are prepared to work with learners with physical challenges. The National Educational Policy Act, 26 of 1996 (DoE, 2000:13) (*cf.* 2.3.3), commands teachers, including beginner teachers, to fulfil the role of a learning mediator by creating a positive learning environment that accommodates learners with different educational needs. Based on this reason, the researcher argues that self-directed learning during the first years of teaching is of paramount importance because it is during this time those beginner teachers can identify their learning needs. In addition, working with learners with physical challenges requires collaboration with more experienced and skilled teachers to discover solutions to this issue.

2. Manage a variety of discipline issues

With a combined percentage of 55.0%, most respondents said they are not adequately equipped to handle discipline-rated concerns. However, some respondents (45.0%) indicated they were ready to take care of discipline. The vast majority of schools in South Africa are experiencing enormous learner discipline issues (Shakespear *et al.*, 2018:2) (*cf.* 2.6.5). Therefore, both prepared and unprepared teachers in terms of discipline management must acquire self-direction to investigate causes and develop solutions that will assist them in elevating learners' aggression and disruptive behaviour in classrooms and toward teachers (Jinot & Madhuree, 2020:841) (*cf.* 2.6.5). As a result, the researcher is of the opinion that induction and mentoring are sustainable solutions to help beginner teachers to develop self-directedness that will assist them in managing a better variety of discipline issues beginner teachers may come across.

3. Work with learners who have developmental challenges

A vast number of beginner teachers indicated (54.9%) they are not prepared and somewhat prepared to work with learners with developmental challenges. Some beginner teachers had a greater understanding of learners who compared to teachers who had merely taken a three-month introduction course covering the fundamentals of special needs education (Richards and Farrell (2016:112) (*cf.* 1.3). According to the researcher, beginner teachers require a considerable amount of assistance from peers and mentors related to developmental challenges (Eisenman *et al.*, 2015:1) (*cf.* 2.6.5). Beginner teachers have to promote engagement in classroom discussions and other collaborative activities in the classroom (Louws *et al.*, 2017:172) (*cf.* 1.6). Beginner teachers acquire guidance in developing learning objectives that are congruent with all learners' abilities, interests, and future aspirations. Social constructivism necessitates social interaction as a fundamental approach for beginner teachers' communication with learners within a Zone of Proximal Development (ZPD) (*cf.* 2.3.2). Vygotsky (1978:86) contends that every learner needs to have active, two-way interactions with their peers and teachers.

4. Work with learners with emotional challenges

Table 4.15 indicates the majority of respondents (54%) have shown that they are not prepared and somewhat prepared to work with learners with emotional challenges. Beginner teachers represented in this table are primarily responsible for fulfilling a pastoral role (Schonert-Reichl *et al.*, 2017:7) (*cf.* 2.3.3), which encompasses mentoring and nurturing learners' diverse educational needs, including emotional ones. As a result, a lack of preparedness could result in more challenges working with learners with emotional needs. Based on this, the researcher believes that beginner teachers who indicated they are somewhat prepared need support from

more experienced teachers to assist them in executing this role accordingly. Thus, the Zone of Proximal Development theory is essential in induction and mentoring beginner teachers to be well-prepared when working with learners with different emotional needs.

5. Work with learners who have behavioural challenges

According to Table 4.15, most respondents (51.4%) are neither very prepared nor somewhat prepared to work with learners with behavioural issues. Classroom management includes dealing with learners' behavioural challenges and lack of readiness. Furthermore, a lack of professional assistance during the first years of teaching regarding coping with behavioural matters causes others to leave the profession early (Vikaraman *et al.*, 2017:158) (*cf.* 1.2). To make teaching and learning conducive for beginner teachers, the researcher believes that challenges, including learner behavioural issues, discipline, and classroom management should be recognised and given priority during induction and mentorship.

4.4.2 Validity

Seeing that this part of the questionnaire (Section C: Teaching experience in year 1 – 3) was self-created, an exploratory factor analysis (EFA) was used to condense a large number of variables to a smaller number of factors depending on the underlying structure of the data. Principal Axis Factoring was used as the extraction method and the Direct Oblimin rotation method. When testing for sample adequacy, the Kaizer-Meyer-Olkin measure is utilised, and values higher than 0,7 indicate acceptable sample adequacy (*cf.* 3.5.2). The Kaiser-Meier-Olkin (KMO) measure of sampling adequacy according to the following scale:

- < 0.5: not acceptable
- 0.5 – 0.7: medium
- 0.7 – 0.8: good
- 0.8 – 0.9: very good
- > 0.9: superb (Field, 2018:926).

Table 4.16: Kaiser-Meier-Olkin Measure

KMO Measure	Adequacy
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.952

Table 4.16 reported a value of 0,95, indicating that the sample size was indeed sufficient to perform factor analyses on the data. Figure 4.7 illustrates the first two extracted factors, and from factors 3 to 21, the line begins to flatten, indicating that no additional factors can be identified.

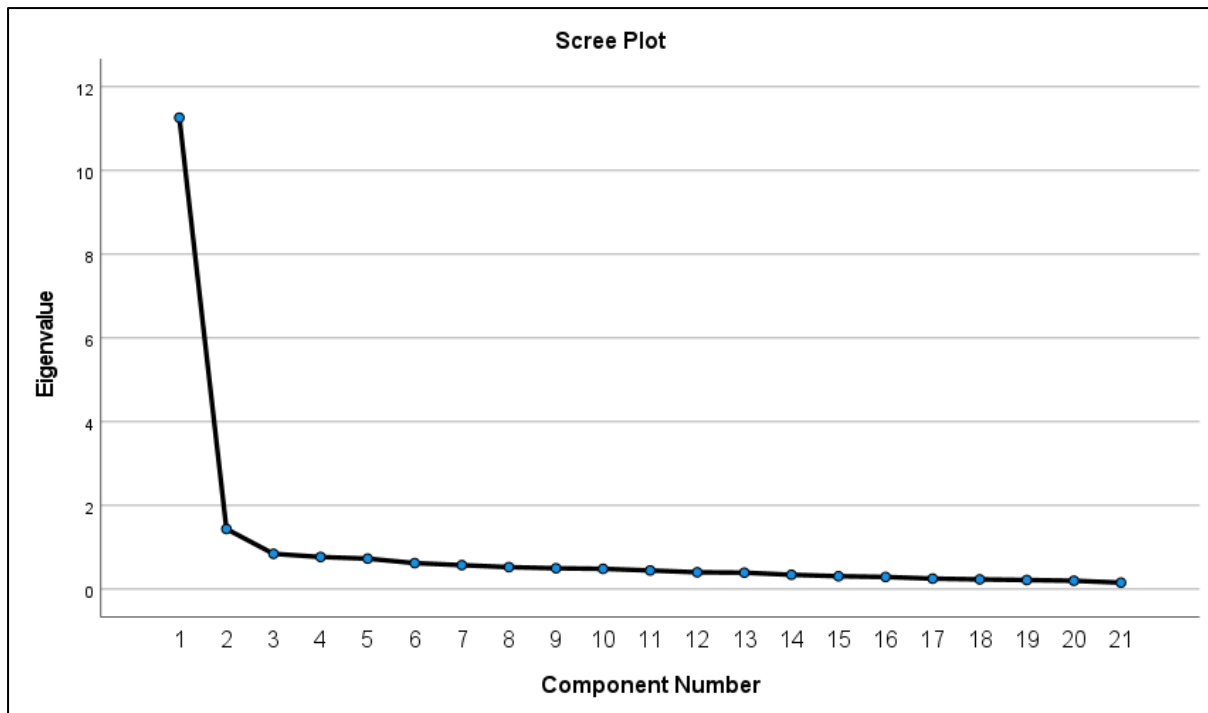


Figure 4.7: Factor loadings of two extracted factors

Table 4.17 reports on the factor loadings of the extracted factors, which indicate that two factors emerged in the section related to challenges related to the preparedness of beginner teachers in their first years of experience. These factors were named: Operational instructional management challenges and Teaching challenges. By graphing the eigenvalues, one identifies the importance of each factor. According to Field (2012:677) factors with eigenvalues more than 0.7 can be retained, although Kaiser (1960) cited by Field (2012:677) argues for an eigenvalue of 1 for a factor to be retained. The two-factor model explains 60.479% of the variance in Table 4.17.

Table 4.17: Total variance explained

	Total	% of Variance	Cumulative %
Operational instructional management	11.262	53.629	53.629
Teaching challenges	1.438	6.850	60.479

The researcher decided to group the items under these two factors under names that best describe the areas of challenge in relation to preparedness. The first factor is operational instructional management challenges, which outlines the integration of managerial functions with learning components such as students, teachers, desired outcomes, resources, methods,

assessment, and technology. Factor two is teaching challenges and summarises areas where beginner teachers experience difficulties in their first years of teaching.

Table 4.18 reports the factor loadings of the two extracted factors, operational instructional management challenges and teaching challenges.

Table 4.18: Factor loadings of two extracted factors

		Operational instructional management challenges	Teaching challenges
1	Manage a variety of classroom management tasks	.553	
2	Manage a variety of discipline issues		.615
3	Use a variety of instructional methods	.518	
4	Teach subject content	.785	
5	Assess your learners	.774	
6	Select and adapt curriculum and instructional materials	.632	
7	Motivate learners	.595	
8	Work with learners who have <u>behavioural</u> challenges		.792
9	Work with learners who have <u>emotional</u> challenges		.849
10	Work with learners who have <u>developmental</u> challenges		.818
11	Work with learners who have <u>physical</u> challenges		.790
12	Collaborate with colleagues to plan together to ensure alignment in the Grade	.609	
13	Work with the principal or other instructional leaders	.686	
14	Plan effective lessons	.760	
15	Be an effective teacher	.723	
16	Address the needs of diversity of learners	.618	
17	Manage a variety of administrative duties	.672	
18	Teach by using different self-directed teaching strategies	.727	
19	Manage your workload	.548	
20	Balance your teaching task and your private life		.579

		Operational instructional management challenges	Teaching challenges
21	Start your teaching career with the knowledge you gain from the University	.631	

4.4.3 Descriptive statistics for challenges related to the preparedness of beginner teachers in their first years of teaching

In Table 4.19, the researcher presents the descriptive statistics of the two factors posing challenges related to the preparedness of beginner teachers.

Table 4.19: Descriptive statistics of two factors of the challenges related to the preparedness of beginner teachers in their first years of teaching

	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Operational instructional management challenges	1.5334	4.000	2.814	.584	.301	-.780
Teaching challenges	1.000	4.000	2.459	.701	.286	-.513
Preparedness Total	1.524	4.000	2.713	.586	.395	-.717

The skewness and kurtosis statistics are all within the range of (-2, 2); therefore, there is no reason to suspect the normality assumptions have been violated (George & Mallery, 2022:114).

4.4.4 Reliability

The reliability of a questionnaire and its underlying factors is determined by whether they consistently represent what is being measured. Table 4.20 represents the Cronbach Alpha values and inter-item correlation of the self-structured section of the questionnaire on the two factors of the preparedness of beginner teachers.

Table 4.20: Cronbach Alpha values and inter-item correlation of two factors of preparedness

	Cronbach Alpha	Inter-item correlation
Operational instructional management	0.945	0.532

Teaching challenges	0.898	0.595
Preparedness Total	0.956	0.511

The reported Cronbach Alpha values, which ranged between 0.89 – 0.95, are all above the guideline value of at least 0,7 (Pietersen & Maree, 2020:267) (*cf.* 3.10). This indicates that the resulting factors are reliable. Furthermore, Table 4.20 demonstrates that the factors' Cronbach Alpha coefficients are above the guideline value. Thus, it can be interpreted that the constructs are reliable.

4.5 INDUCTION

4.5.1 Introduction

The induction process should provide beginner teachers with guidance in meeting their commitments to the expected level, creating relationships with colleagues, nurturing attributes of a self-directed teacher, and, most significantly, being solution-oriented when faced with teaching-related issues (Costa *et al.*, 2019:59) (*cf.* 2.4.1). Respondents were asked to indicate whether or not they followed an induction programme. Table 4.21 depicts data on respondents who followed and did not follow induction when they started teaching.

Table 4.21: Respondents who followed and who did not follow an induction

	Frequency	Percentage
Followed induction programme	160	72.1%
Did not follow induction programme	62	27.9%
Total	222	100%

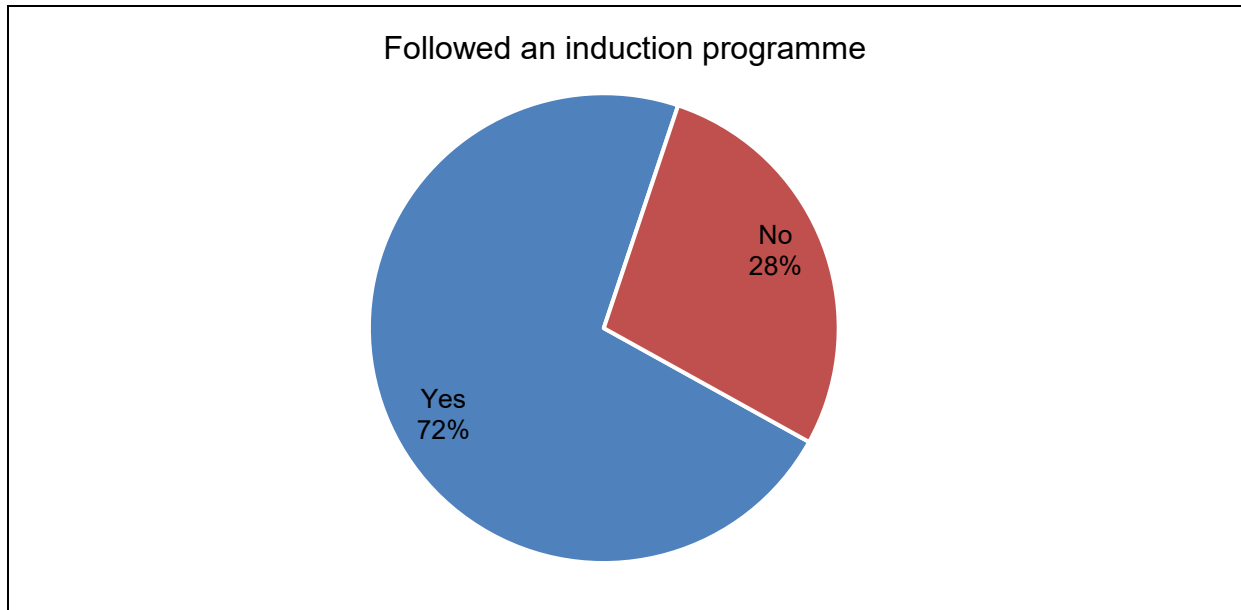


Figure 4.8: Participation in an induction process

According to Table 4.21, only 72.1% of the respondents followed the induction programme when they started working as beginner teachers. An induction programme is a teacher development strategy used across the globe to provide beginner teachers with development and benefits of improved self-efficacy, teacher collaboration, professional learning and cognitive pedagogical mastery (Jin *et al.*, 2021:741) (*cf.* 2.4.3). An alarming number (27.9%) is presented in Table 4.21 as not having followed induction. As a result, the researcher agreed with the literature (Botha & Rens, 2018:1; Du Plessis & Letshwene, 2020:78; Harmsen *et al.*, 2019:259; Ngwira & Potokri, 2019:775; Van Tonder, 2021:879) (*cf.* 2.4.2) that beginner teachers who have not followed the induction programme are possibly experiencing hardships and challenges in the profession and are not engaged in professional learning activities that will develop them and keep them retained in the profession.

In an open-ended question, the respondents were requested to give reasons for not attending an induction program. The following reasons were given:

- No induction was provided at school
- They had other commitments during the time of induction
- They also do not know why induction was not provided
- No mentor was allocated to induct them
- No manpower to support beginner teachers
- There was no induction programme in place
- Had to give things out on their own

- Induction was not provided because they assumed they knew
- School not well organised

Based on these reasons, beginner teachers who have not been granted an opportunity to receive induction are most likely to experience reality shock and burnout from the challenges of the profession (Botha & Rens, 2018:1; Van Tonder & Fourie 2018:1336) (*cf.*1.2).

4.5.2 The providers of teacher induction programmes for beginner teachers

Table 4.22 depicts beginner teachers' perceptions of who they think provides teacher induction.

Table 4.22: Programme provider

	Frequency	Percentage
District Office (DBE)	97	43.7%
Principal	74	33.3%
School Governing Body	13	5.9%
Do not know	38	17.1%
Total	222	100%

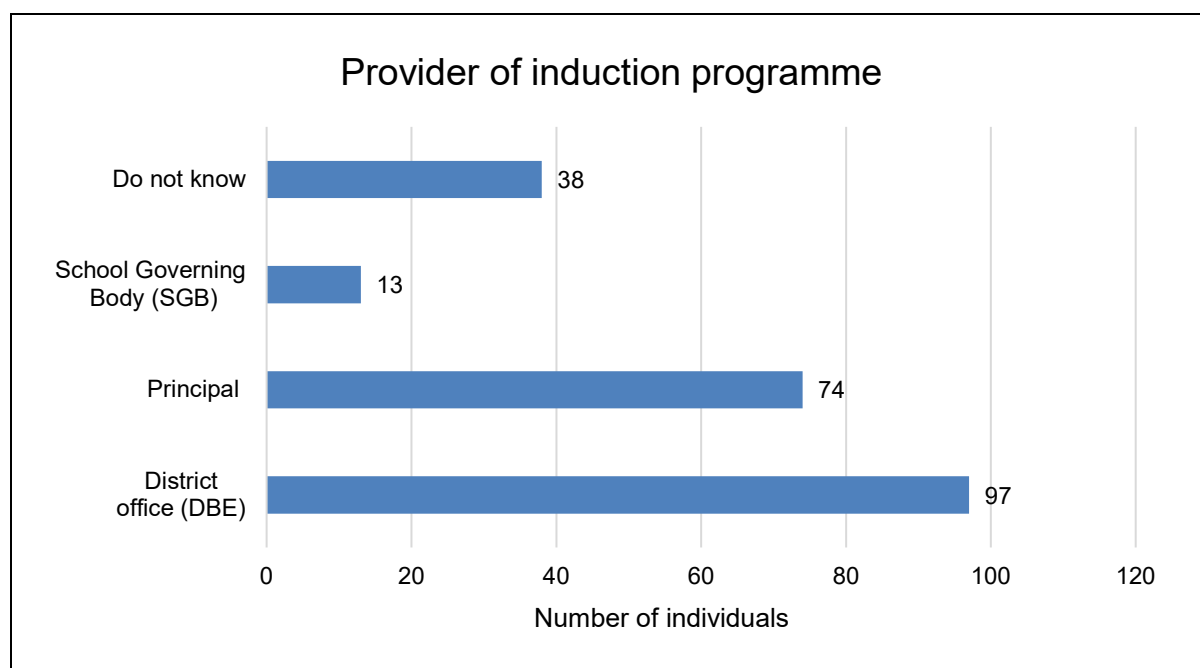


Figure 4.9: Induction programme provider

According to Table 4.22 majority of the respondents (43.7%) are of the opinion that the district office (DBE) is the induction provider, while (33.3%) believe that it is the responsibility of the

principal to provide induction. On the other hand, 5.9% of respondents who were in the minority indicated the school governing body (SGB) as the induction programme provider. In comparison, 17.1% of the respondents had no clue who needed to provide an induction to beginner teachers. The South African Department of Basic Education has published guidelines for beginner teacher induction (New Teacher Orientation Booklet, 2016:1-5) (*cf.* 2.4.2). Beginner teachers often leave the profession too soon due to a lack of professional support that prevents effective induction and mentorship programmes from being implemented (Ngwira & Potokri, 2019:775) (*cf.* 2.4.2). As a result, the researcher thinks that there is a need for collaboration between various stakeholders (district, principal, SGBs and universities) to ensure sustainable professional development in the form of induction and mentoring.

4.5.3 Primary purpose of induction

Table 4.23 presents beginner teachers' perceptions concerning the primary purpose of induction.

Table 4.23: Primary purpose of induction

	Frequency	Percentage
General support/guidance	95	42.8%
Orientation to the school/district	89	40.1%
Promote standards-based teaching	38	17.1%
Total	222	100%

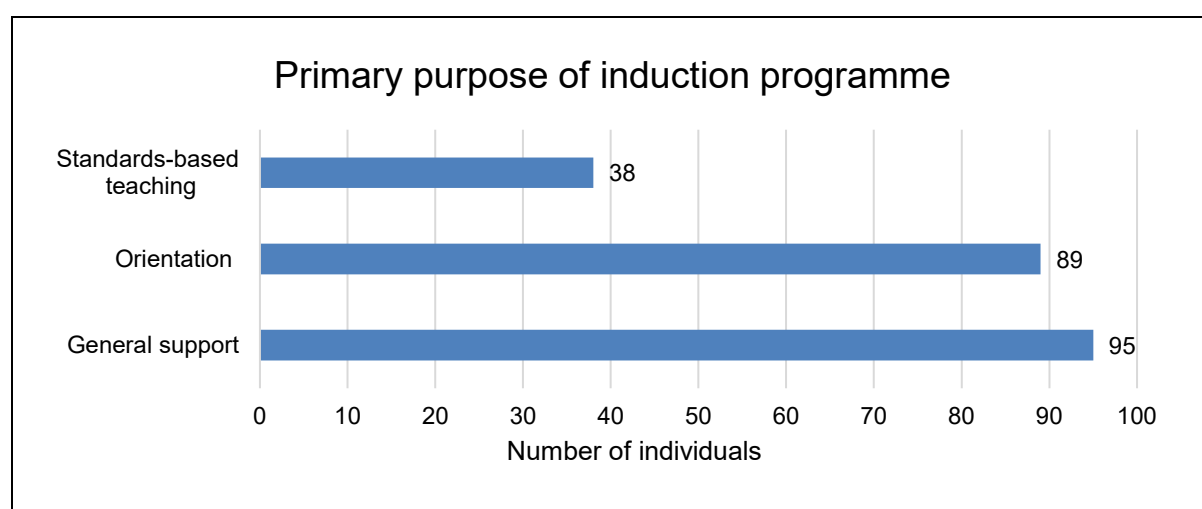


Figure 4.10: Purpose of Induction

As reflected in Table 4.23, the majority of the respondents (42.8%) believe that induction provides general support to beginner teachers, while 40.1% comprehend induction as an orientation to the school or district. A minority of the respondents (17.1%) believe that the induction programme aims to promote standard-based teaching. The induction process unfolds during the first three years of teaching, where the Zone of Proximal Development is applied (Guvesa & Solomonovich, 2017:776) (*cf.* 2.4.1) to provide professional support to beginner teachers. As a result, the researcher believes that all three mentioned purposes are encompassed in the induction programme and that the ultimate purpose is to assist beginner teachers in developing self-directedness that will sustain them throughout their teaching careers.

4.6 THE MENTORING PROCESS

Good teaching practice is facilitated by mentoring, a training ground in which more experienced teachers oversee, support, and advise beginner teachers on the roles and responsibilities they need to fulfil to achieve required pedagogical competence (Nopriyeni & Sulaiman, 2022:2617) (*cf.* 2.5.1).

4.6.1 Do you have a mentor?

Table 4.24 shows the number of respondents who indicated that they had or did not have a mentor in their first year of teaching.

Table 4.24: Do you have a mentor?

	Frequency	Percentage
Yes	72	32.4%
No	150	67.6%
Total	222	100%

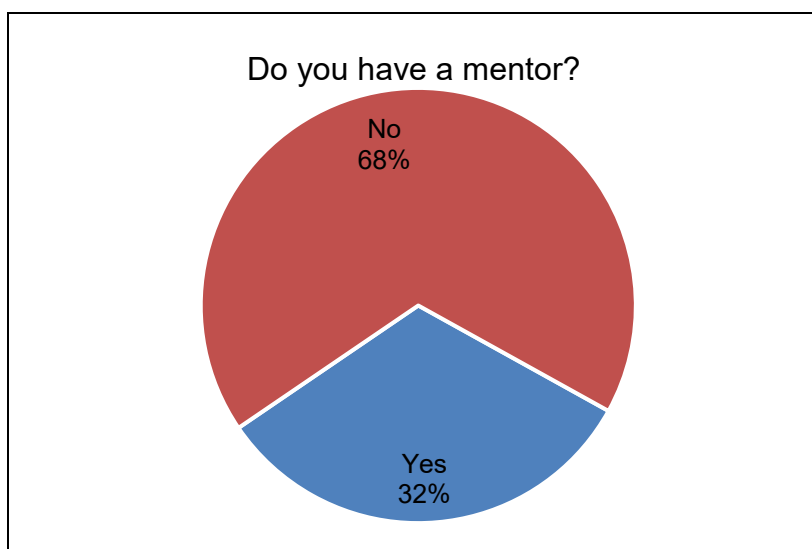


Figure 4.11: Respondents with or without mentors

In Table 4.24, most respondents (67.6%) have indicated that they are experiencing their first years of teaching without mentors. Only 32.4% of the respondents have mentors. Induction and mentoring are effective when used concurrently. Beginner teachers who participate in induction and mentoring programmes do not only benefit from pedagogical support but also emotional support, which enables them to survive the inevitable challenges of the teaching profession (Schuck *et al.*, 2018:214) (*cf.* 2.5.2). Based on this reason, the researcher is of the view that strategies to develop beginner teachers' self-directedness do not only emanate from induction only but also from mentoring. Hence these two programmes must be implemented in conjunction with each other.

4.6.2 Position of mentor

In Table 4.25, the respondents indicated from which multiple positions of experienced teachers they received mentorship.

Table 4.25: Position of mentor

	Frequency	Percentage
A full-time teacher in your school?	33	45.8%
A part-time teacher in your school?	1	1.4%
A full-time mentor who has been released from teaching?	5	6.9%
Your head of department?	31	43.1%
A district office person?	1	1.4%

Total	71	98.6%
Missing system	1	1.4%
Total	72	100.0%

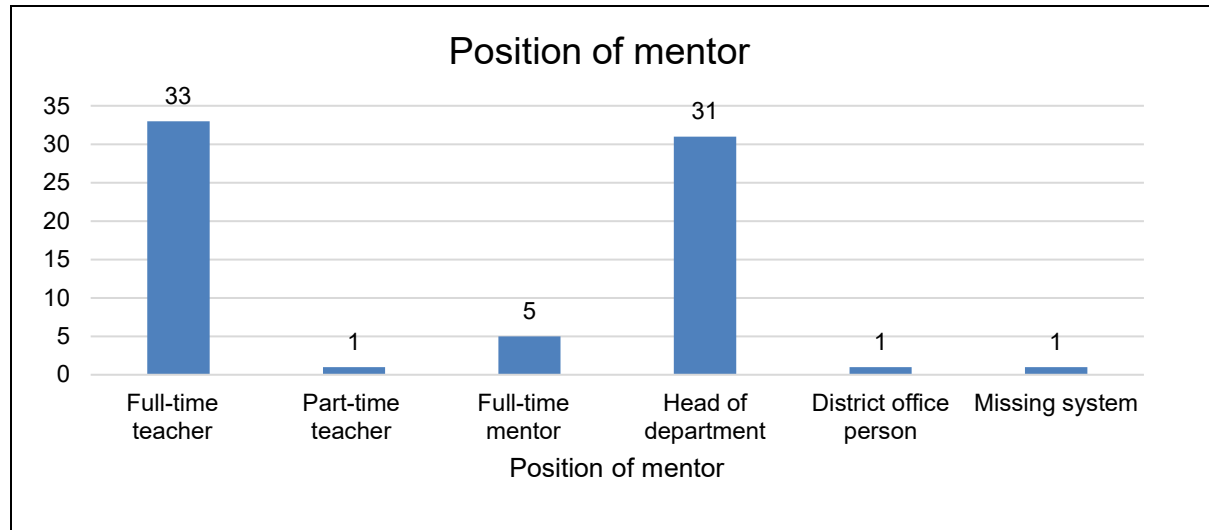


Figure 4.12: Position of mentor

In the teaching profession, a more experienced teacher is reckoned suitable to assume the responsibility of a mentor, which is mainly to supervise, nurture and guide beginner teachers until they reach the expected pedagogical competence (Nopriyeni & Sulaiman, 2022:2617) (*cf.* 2.5.1). As represented in Table 4.25, the researcher provided respondents with multiple positions of experienced teachers to indicate from which ones, they received mentorship. As a result, most respondents (45.8%) have shown full-time teachers and 43.1% heads of departments as their mentors. These indications could mean that full-time, experienced teachers and heads of departments within the schools are the most expected and relevant individuals to provide beginner teachers with professional development and self-directedness in the form of mentoring.

Assigned mentor

Table 4.26 shows if a mentor was assigned to the respondent and by whom.

Table 4.26: Assigned mentor

Assigned mentor	f	%	By whom	f	%
Yes	43	59.7	Not applicable	11	15.3
No	29	40.3	District or Principal	3	4.2

Total	72	100.0	Principal	32	44.4
			Head of department	3	4.2
			Other	8	11.1
			Total	57	79.2
			Missing System	15	20.8
			Total	72	100.0

Although some mentors assume the mentoring responsibility to be formal, others consider it to be informal without it being a role that needs to be assigned by any programme leader (Shillingstad *et al.*, 2014:4) (*cf.* 2.5.3). Some of the respondents, 40.3%, indicated having mentors that were not assigned to them. In comparison, 59.7% have shown that their mentors were assigned to them. Therefore, the researcher is of the view that mentors who assumed the mentoring responsibility without being assigned by the relevant programme leader saw the dire need to support and develop beginner teachers, even if this role is assumed informally. One might also conclude that the 59.7% who found a formal mentoring programme in place were probably assigned these mentors by the district, principal, head of departments or other relevant education personnel.

Meetings with mentor

Table 4.27 indicates when the beginner teacher and the mentor meet and when informal meetings usually occur.

Table 4.27a & b: Time when the beginner teacher and the mentor meet (informal)

Meet at specific time (a)	f	%	When (b)	f	%
Yes	40	55.6	Before school	4	5.6
No – not applicable	32	44.4	After school	23	31.9
			During lunch	10	13.9
Total	72	100.0	During planning period	12	16.7
			Not applicable- we do not meet on a specific time	22	30.6
			Other	1	1.4
			Total	72	100.0

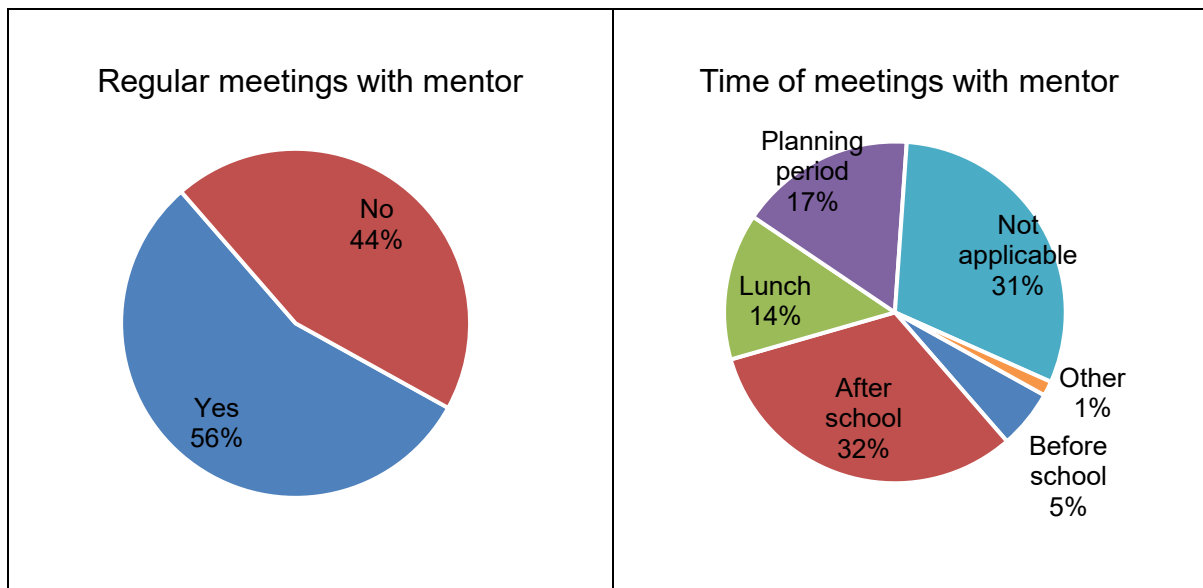


Figure 4.13: Time when the beginner teacher and the mentor meet (informal)

According to Table 4.27a, the composite number of respondents (100%) do acquire time to meet with their mentors, although only (55.6%) of the respondents expressed certainty that they have time to meet with their mentors. Time often scheduled for meetings between mentors and mentees, as indicated in Table 4.27b, is mostly before and after school, during lunch and during a planning period. While 44.4% indicated meeting with their mentors but not at a specified time could mean that their mentors were not assigned to them formally. As a result, only meet them when there is a need (*cf.* Figure 4.13). Engaging in a positive professional relationship requires a beginner teacher to have time to communicate, share ideas regularly, have mutual understanding and build trust with their mentors (Hadi & Rudiyanto, 2017:2) (*cf.* 2.5.3). While 22 of 72 (*cf.* Table 4.27(b)) meet with a mentor informally, they do not specify when the meetings occur, which may explain why the data did not correlate with 32 of 72 (*cf.* Table 4.27(a)) who indicated they do not meet at a specific time.

Table 4.28 and its adjacent graphs depict the time and duration of meeting between beginner teachers and their mentors.

Table 4.28: Frequency and length of meetings

Frequency	f	%	Length	f	%
Daily	8	11.1	Less than 15 minutes	11	15.3
2-4 times per week	10	13.9	Less than 30 minutes	20	27.8
Once a week	16	22.2	Less than an hour	19	26.4
2-3 times per month	6	8.3	An hour	15	20.8

Frequency	f	%	Length	f	%
Once a quarter	7	9.7	More than an hour	4	5.6
Bi-annually	5	6.9	Other	1	1.4
Whenever there is a need	18	25.0	Total	70	97.2
Other	1	1.4	Missing system	2	2.8
Total	71	98.6	Total	72	100.0
Missing system	1	1.4	Note: f = frequency %= percentage		
Total	72	100.0			

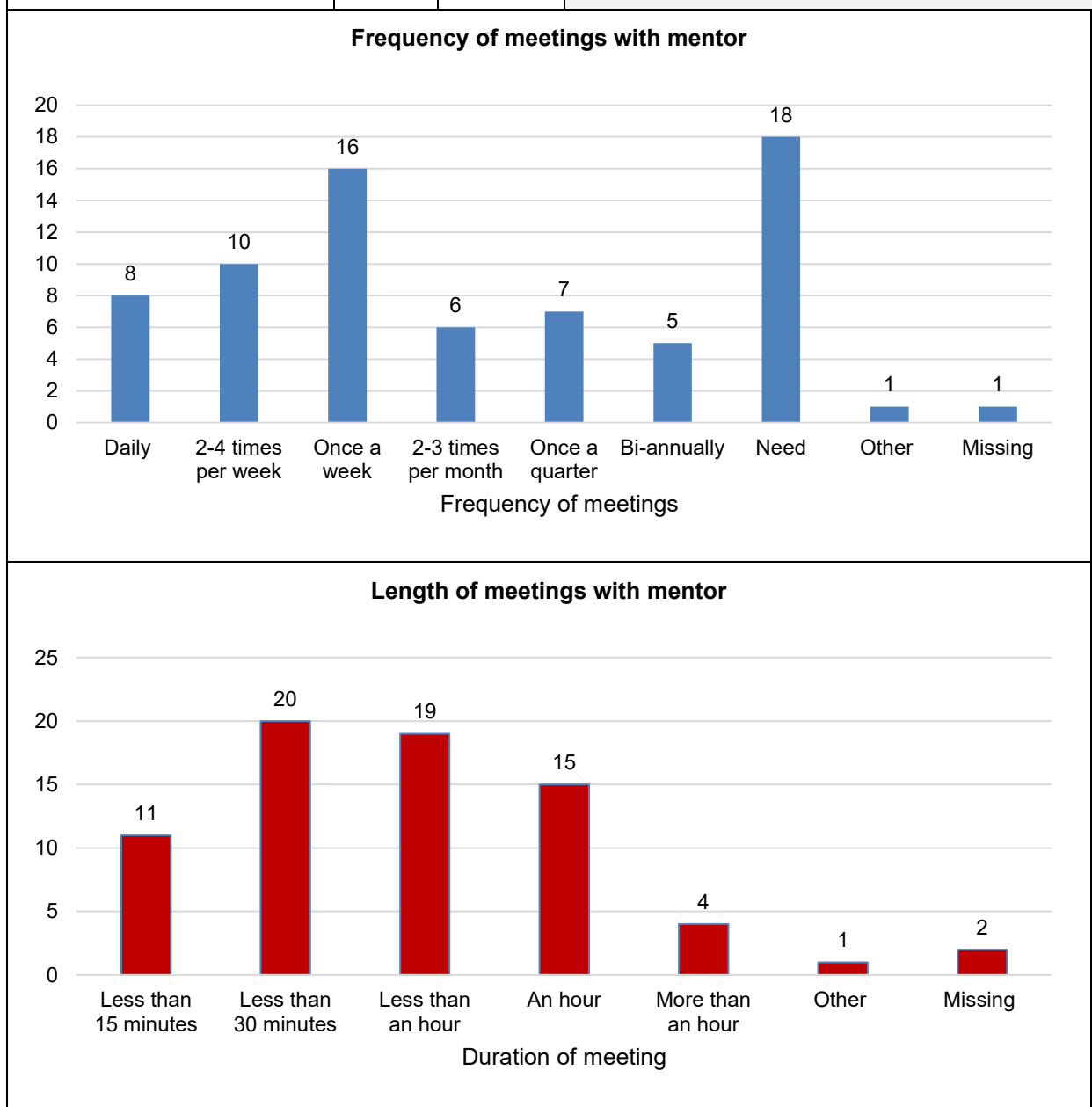


Figure 4.14: How often are the meetings and how long do they take?

Table 4.28 and its adjacent graphs indicate the frequency and the duration of meetings when respondents as beginner teachers meet with their mentor teachers. As reflected in Table 4.28, many respondents (25.0%) have expressed to only meet with their mentor teachers when there is a need, while the second large number of respondents (22.2%) have indicated meeting with their mentor teachers once a week. The duration spent on mentoring meetings (*cf.* Figure 4.14), as expressed by most respondents (65 of 72), is an hour or less, which indicates to the researcher that more regular meetings of longer duration are essential. An hour for meetings that are not regular is not sufficient to develop the self-directedness of beginner teachers because collaborative classroom activities, planning lessons, sharing teaching strategies and methods and assisting each other in triumphing teaching challenges (Nopriyeni & Sulaiman, 2022:2617) (*cf.* 2.5.1) require time to intensify the interpersonal relationship between a mentor and a beginner teacher.

Table 4.29: The sufficient time for mentorship meetings

	Frequency	Percentage
Strongly agree	13	18.1%
Agree	38	52.8%
Disagree	16	22.2%
Strongly disagree	5	6.9%
Total	72	100%

Although Table 4.29 indicates that most respondents (70.9%) confirmed that the time scheduled between them and their mentor is sufficient, the researcher is of the view that mentees perceive this time as adequate because the meetings address tasks that they can perform on their own. The Zone of Proximal development dictates that ample time is needed for a mentor to assist a mentee with the tasks they cannot perform on their own without the help of a more experienced teacher (Guvesa & Solomonovich, 2017:776) (*cf.* 2.4.1).

Table 4.30: The scheduled time your mentor spent during the most recent full teaching week

	No time		Less than 30 min		Less than 1 hour		1 hour		More than 1 hour		Total	
	f	%	f	%	f	%	f	%		%	f	%
Observing your teaching	21	29.2	21	29.2	18	25.0	10	13.9	2	2.8	72	100.0
Meeting with you on a one-to-one basis	13	18.1	30	41.7	15	20.8	10	13.9	3	40.2	71	100.0
Meeting with you together with other beginner teachers	22	30.6	11	15.3	19	26.4	13	18.1	7	9.7	72	100.0
Meeting with you together with other teachers (excluding meeting with other beginner teachers)	16	22.2	27	37.5	15	20.8	9	12.5	5	6.9	72	100.0
Modelling a lesson	23	31.9	12	16.7	18	25.0	15	20.8	4	5.6	72	100.0
Co-teaching a lesson	33	45.8	6	8.3	14	19.4	17	23.6	2	2.8	72	100.0

Observing your teaching

Learning through observation improves mastery of pedagogical competence and beginner teachers' self-efficacy (Fariyani *et al.*, 2020:100) (*cf.* 2.4.3). Table 4.30 presents that (21 of 72) beginner teachers have not had a teacher observation during their recent work. As a result, the researcher is of the opinion that these respondents could be the ones who receive mentoring informally as their mentors were not formally assigned to them to provide ample time for these teaching observation lessons.

Co-teaching a lesson

Collaboration as an essential element of social constructivist theory signifies co-teaching lessons as a useful strategy to improve quality teaching while simultaneously motivating and boosting beginner teachers' self-efficacy (Tahir *et al.*, 2018:234) (*cf.* 2.4.3). An alarming number (45.8%) of respondents, as indicated in Table 4.30 have indicated that they have had no time scheduled during the recent week to co-teach a lesson with their mentor teacher. As a result, the researcher concurs with the literature (Misra & Tyagi, 2019:67) (*cf.* 2.4.4) that structured planning is essential during induction and mentoring because it affords the beginner teacher with consistent opportunities to learn from observing teaching to team teaching.

Modelling a lesson

During the most recent week, according to Table 4.30, about 31.9% of respondents had no time to meet with their mentor to model a lesson, while 16.7% had an inadequate time of fewer than 30 minutes to meet and model a lesson with their mentors. According to literature (Fariyani *et al.*, 2020:100; Macphail *et al.*, 2019:850; Mukeredzi & Manwa, 2019:3) (*cf.* 2.4.3), learning to master pedagogical content knowledge requires beginner teachers' ability to learn through observation. It, therefore, implies that there is a need for sufficient time for a mentor and a beginner teacher to schedule regular meetings to improve beginner teachers' self-directedness in delivering quality and comprehensive lessons.

Meeting with you together with other teachers (excluding meeting with other beginner teachers)

The majority of the respondents (77,8%), according to Table 4.30, have indicated to have had time to meet with other teachers during the most recent week. Only 22.2% of the respondents had no time to meet. Literature signifies (Craig, 2021:28; Jong *et al.*, 2019:1; Podolsky *et al.*, 2019:8) (*cf.* 2.5.6) that professional meetings are crucial because they allow more experienced and less experienced teachers to collaborate to share knowledge, reflect on their teaching and collectively develop strategies for resolving their work challenges. Therefore, time spent by respondents meeting their mentors joined by other teachers during the recent week has contributed positively towards collaborative work amongst teachers with different teaching experiences.

Meeting with you together with other beginner teachers

Table 4.30 illustrates that (30.6%) of beginner teachers have had no time during the recent week to meet their mentor with other beginner teachers, while (60.4%) have had this opportunity. Beginner teachers often meet with some more experienced person who serves as a mentor in the particular subject of teaching initiated by the Department of Education (DoE, 2009:1) (*cf.* 2.5.6), and their purpose is basically to provide general support in the subject of specialisation. As a result, the researcher believes these meetings are less valuable than meetings with more experienced teachers.

Meeting with you on a one-on-one basis

According to Table 4.30, only (18 out of 72) respondents have indicated that they had time during the recent week to have one-on-one meetings with their mentors. The researcher is of the view that a reason for no meetings with the indicated beginners could be that their mentors

were not assigned to them (*cf.* Table 4.24). As a result, they only meet with them when there is a need. One-on-one mentoring meetings signify a positive working relationship and allow beginner teachers to share their frustrations and achievements with their mentors (Barret *et al.*, 2019:535) (*cf.* 2.5.2).

Table 4.31: The extent your mentor supports you during the most recent full teaching week

N=72	Not at all		To a small extent		To a moderate extent		To a large extent		To an extreme extent	
	f	%	f	%	f	%	f	%	f	%
f = Frequency % = Percentage										
Give you suggestions on how to improve your teaching strategy	7	9.7	14	19.4	34	47.2	14	19.4	3	4.2
Give you encouragement or moral support	5	6.9	6	8.3	30	41.7	20	27.8	11	15.3
Provide an opportunity for you to raise issues	9	12.5	7	9.7	25	34.7	23	31.9	8	11.1
Mentor provides guidance on administrative issues	9	12.5	7	9.7	27	37.5	21	29.2	8	11.1
Provide guidance on logistical issues	9	12.5	12	16.7	22	30.6	21	29.2	8	11.1
Provide guidance on teaching to meet national or district standards	7	9.7	6	8.3	29	40.3	21	29.2	9	12.5
Work with you to identify teaching challenges and possible solutions	10	13.9	5	6.9	27	37.5	18	25.0	12	16.7
Discuss with you instructional goals	7	9.7	13	18.1	22	30.6	16	22.2	13	18.1
Discuss with you ways to achieve your instructional goals	7	9.7	14	19.4	20	27.8	23	31.9	7	9.7
Provide guidance on how to assess your learners	7	9.7	11	15.3	19	26.4	22	30.6	13	18.1
Share lesson plans	10	13.9	6	8.3	23	31.9	19	26.4	14	19.4
Share assessments	5	6.9	10	13.9	23	31.9	21	29.2	13	18.1
Share other instructional activities	6	8.3	9	12.5	27	37.5	18	25.0	11	15.3
Act on something you requested the previous week	7	9.7	8	11.1	27	37.5	16	22.2	14	19.4

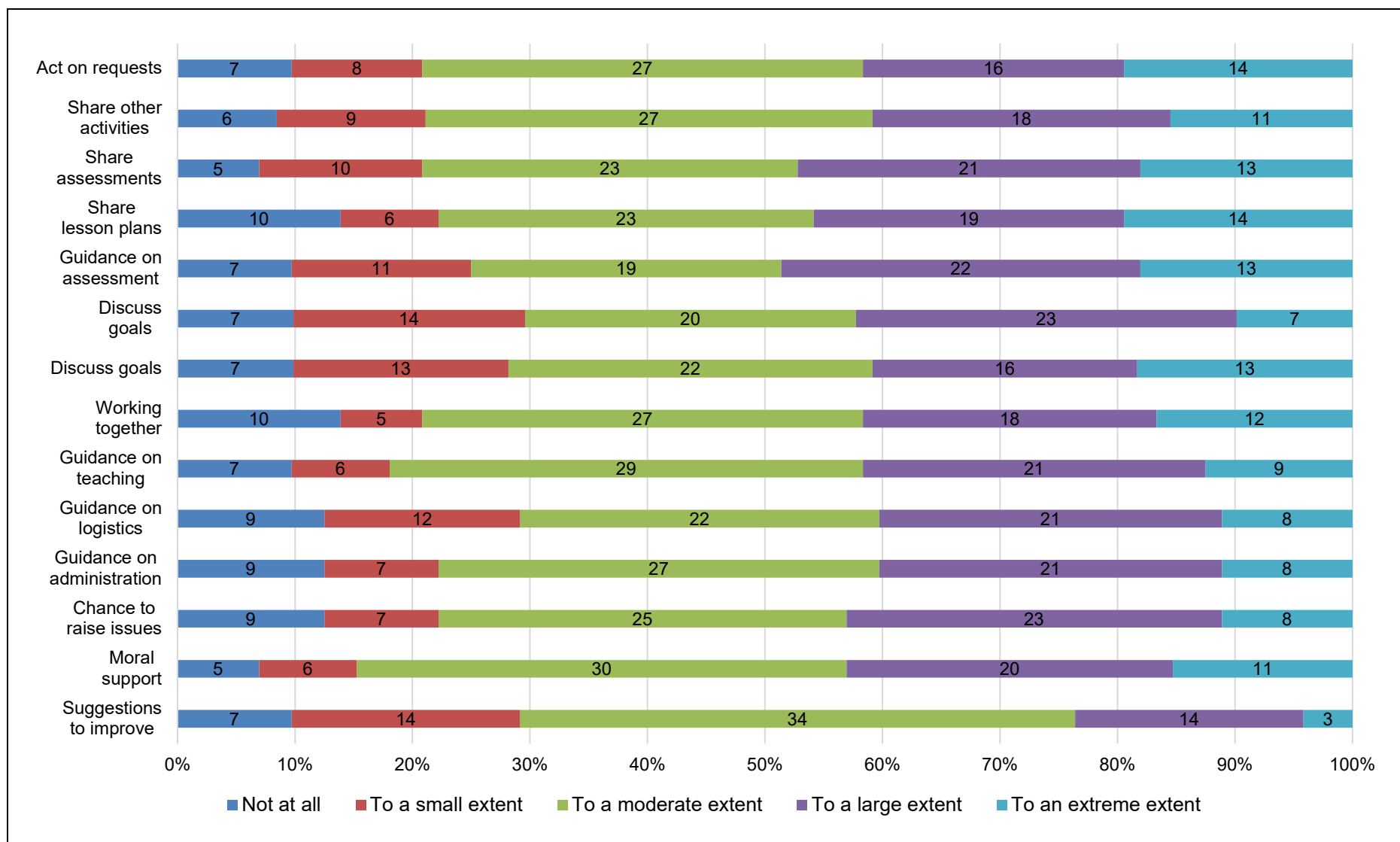


Figure 4.15: Extent of exposure to mentoring

According to Table 4.31, a large number of number of respondents responded that they experience a limited to a moderate extent of exposure to mentoring (76.3%), as opposed to the number of respondents (23.3%) that have expressed satisfaction over a great extent of support from a mentor in providing suggestions to improve their teaching in the recent week of teaching. Interpersonal and professional relationships between a mentor and a mentee intensify through sharing teaching strategies to address the profession's challenges (Nopriyeni & Sulaiman, 2022:2617) (*cf.* 2.5.1).

Although a significant number (43.1%) have received a large and extreme extent of encouragement and support from their mentors, a difference of 56.9%, respondents have expressed dissatisfaction by indicating no support at all to a moderate extent of support during the recent week. Each day in teaching has its own challenges and providing encouragement and support to beginner teachers is a significant step towards improving retention (Dean, 2017:29) (*cf.* 1.1). Encouragement and support provided to a large extent or even better, an extreme extent as indicated in Table 4.31, provides beginner teachers with a better chance to raise issues (Misra & Tyagi, 2019:67) (*cf.* 2.5.2).

Beginner teachers are compelled by their job description and their roles as teachers to fulfil teaching administrative duties (DBE, 2016:27-29) (*cf.* 2.3.3). Table 4.31 presents an immense joint number of respondents (59.7%) expressing dissatisfaction with not being guided or inadequately guided on administrative issues by their mentors in the recent week by indicating from not at all and a moderate extent of support. Moreover, the administrative workload is often a burden to beginner teachers, where they find themselves performing logistical and administrative work more than the actual teaching (Van Tonder & Fourie, 2015:220) (*cf.* 2.4.2). Based on this reason, a large extent of support in guiding beginner teachers with administrative and logistical issues plays a significant role in developing self-directed beginner teachers that will be solution orientated in future.

During the recent week of teaching, as expressed by the joint number of respondents (58.3%), as illustrated in Table 4.31, mentors have not had time, while others had minimal time to identify challenges and discuss possible solutions with their mentees. Beginner teachers often find the first year of teaching challenges overwhelming. As a result, they find it difficult to implement problem-solving skills independently, despite their extent of self-directedness (Wexler, 2020b:214) (*cf.* 2.5.5).

Based on this reason, the researcher believes that effective induction and mentoring will afford beginner teachers adequate time with their mentors to identify current challenges and find possible solutions, to meet the national and district standards as expected.

During induction and mentoring, a beginner teacher has the role of demonstrating a high level of commitment to learning and implementing instructional techniques by participating in collaborative activities (Izadinia, 2015:2) (*cf.* 2.5.3). Table 4.31 illustrates a joint number of respondents (58.4%) indicating that they have not had an adequate time to meet with their mentors to discuss instructional goals and ways to achieve it. Furthermore, only 42.6% have indicated that support has been largely and extremely provided regarding ways to achieve instructional goals. According to the literature (Çobanoğlu & Ayvaz-Tuncel, 2018:100) (*cf.* 2.5.6) continuous learning during induction and mentoring enables beginner teachers to optimise socialisation and implement instructional goals, resulting in self-directedness.

One of the roles of a teacher is to be an assessor and understand that assessment is a crucial and policy-regulated process of teaching and learning (Van Tonder & Fourie, 2015:220) (*cf.* 2.3.3). According to Table 4.31, a joint number of respondents (48.7%) which is below average, have indicated that they have acquired guidance on assessment from their mentors to a large and an extreme extent during the recent week of teaching. However, the difference of 51.3% of respondents did not share the same sentiments as the extent of support they received was moderate. As a result, the researcher is of the opinion that assessment as a policy-regulated process should be prioritised during mentoring and induction as this process determines the quality of teaching and learning a beginner teacher will be providing in the education fraternity.

A reasonably joint number of respondents (45.8%) below average have expressed satisfaction that their mentors have shared lesson plans to a large and extreme extent during the recent week of teaching. However, the difference (44.2%) does not share the same sentiment as the support provided regarding lesson plans was to a moderate extent and below. This is because a beginner teacher, like any other teacher, has a compelling responsibility of being a learning area, subject and phase specialist (Van Tonder & Fourie, 2015:220) (*cf.* 2.3.3). Based on this reason, the researcher is of the view that regular engagement between a mentor and a mentee on lesson planning will assist in mastering this role of being a subject specialist.

The mentors guided the beginner teachers, but it was necessary to determine how much they had developed during the past three months by adjusting their classroom practices.

4.7 THE IMPACT OF INDUCTION AND MENTORING ON A BEGINNER TEACHER'S SELF-DIRECTEDNESS

4.7.1 Attending an induction programme and self-directed learning

The researcher wishes to clarify, that based on the advice of the independent statistician effect sizes are only reported for results that were statistically significant. In this regard, Kühberger *et al.* (2015:5) also argue that according to the nullification fallacy statistically non-significant findings can be interpreted as evidence of no effect and therefore the effect size should be related as approximately zero.

The results are depicted in Table 4.32 below.

Table 4.32: Differences in the constructs of SDL between those who attended induction and those who did not

	Mean	Std Dev	t-value	p-value
Self-directed learning				
Induction	3.700	.769	-0.910	0.364
No induction	3.796	.682		
Self-Management				
Induction	3.595	.7615	0.313	0.762
No induction	3.561	.710		
Desire for Learning				
Induction	3.759	.815	-1.701	0.092
No induction	3.953	.739		
Self-Control				
Induction	3.741	.795	-1.181	0.240
No induction	3.870	.707		

Note: Attended induction: n =160; Did not attend induction: n = 62

No statistically significant differences in the perceived level of self-directedness in relation to the three SDL factors, namely: self-management, desire for learning and self-control, were observed, as all the p-values testing the differences between the means of the two groups of beginner teachers who attended an induction programme and those who did not were greater than 0.05.

4.7.2 Attending an induction programme and preparedness to deal with teaching challenges

Two-sample t-tests were done to determine whether attending an induction programme has an effect on the challenges related to the preparedness of the beginner teacher, namely operational instructional management challenges and teaching challenges. The results are depicted in Table 4.33 below.

Table 4.33: Differences in the challenges related to preparedness between those who attended induction and those who did not

	Mean	Std Dev	t-value	p-value
Preparedness related to dealing with challenges				
Induction	2.757	.593	1.873	0.063
No induction	2.598	.555		
Operational instructional management challenges				
Induction	2.842	.593	1.873	0.063
No induction	2.742	.557		
Teaching challenges				
Induction	2.544	.699	3.030	0.003**
No induction	2.239	.661		

Note: Attended induction: n = 160; Did not attend induction: n = 62

The only statistically significant difference was found in the factor called Teaching challenges. This difference is significant at a 1% significance level, and the effect size (Cohen's d) is 0.689, indicating a medium to large effect. This implies that the difference in the factor Teaching challenges is practical significant. The mean of the group who attended induction is 2.544 (SD 0.699), and that of the group who did not is 2.239 (SD 0.661). This means that beginner teachers who took part in an induction programme responded they felt better prepared to deal with teaching and learning challenges than those who did not take part in an induction programme.

4.7.3 Having a mentor and self-directed learning

Two-sample t-tests were done to determine whether having a mentor has an effect on the self-directed learning scale. The results are depicted in Table 4.34 below.

Table 4.34: Differences in the constructs of SDL between those who had a mentor and those who did not

	Mean	Std Dev	t-value	p-value	Cohen's D Effect size
Self-directed learning					
Mentor	4.189	.769	7.802	.000**	1.013
No mentor	3.506	.682			
Self-Management					
Mentor	4.013	.633	6.437	.000**	0.923
No mentor	3.380	.709			
Desire for Learning					
Mentor	4.275	.588	7.218	.000**	0.934
No mentor	3.592	.791			
Self-Control					
Mentor	4.266	.5513	8.105	.000**	1.044
No mentor	3.542	.7538			

Note: Had mentor: n = 72; Did not have mentor: n = 150

As indicated in Table 4.34, all the p-values were smaller than 0.05, and all the effect sizes were greater than 0.8. This implies that the SDL factors of the beginner teachers who had a mentor are statistically and practically higher than those who did not have a mentor. Therefore, mentoring seems to have a positive impact on SDL.

4.7.4 Having a mentor and preparedness in relation to challenges beginner teachers teaching experience

Two-sample t-tests were done to determine whether mentoring has an effect on the preparedness in relation to challenges beginner teachers experience who were exposed to and not exposed to mentoring. The results are depicted in Table 4.35 below.

Table 4.35: Differences in the constructs of preparedness in relation to challenges beginner teachers teaching experience

	Mean	Std Dev	t-value	p-value	Cohen's D Effect size
Preparedness in relation to dealing with challenges					
Mentor	3.133	.533	5.331	0.000**	0.763
No Mentor	2.661	.545			

Operational instructional management challenges					
Mentor	2.657	.7186	6.090	0.003**	0.873
No Mentor	2.363	.674			
Teaching challenges					
Mentor	2.997	.551	2.912	0.000**	0.427
No Mentor	2.576	.553			

Note: Attended induction: n = 70; Did not attend induction: n = 150

All the p-values are smaller than 0.05. Therefore, the differences in the total and the differences in both the two factors are statistically significant. The d-values in relation to preparedness for dealing with operational instructional management challenges have a large effect, and the teaching challenges factor has a medium effect. Thus, the means of the two groups differ in all three variables.

The items for dealing with challenges in relation to preparedness were valued on the following four-point Likert scale.



The higher the mean, the further to the right the specific group lies on the Likert scale above and if the mean of the group that had a mentor is higher than the one that did not have one, then they were more prepared.

Regarding operational instructional management, the mean of the group who attended mentoring is 2.657 (SD 0.7186) had a higher level of perceived preparation than those who did not have a mentor (mean = 2.363, SD = 0.674). For the teaching challenges factor, the mean of respondents who attended mentoring is 2.997 (SD 0.551) vs those who did not (mean = 2.576, SD = 0.553). This means that beginner teachers who took part in mentoring responded they felt better prepared to deal with teaching challenges than those who did not participate in mentoring.

Thus, the total preparedness of the respondents who attended mentoring has a mean of 3.133 (SD 0.533) vs those who did not (mean = 2.661, SD = 0.545). On average, the respondents who attended mentoring had a higher level of perceived preparation than those who did not have a mentor.

4.7.5 Challenges related to classroom practice: Adjusting classroom practice on mentor's guidance

The paired t-test was used to determine how much the beginner teachers who received mentoring were guided in specific areas over the previous three months and how much the beginner teachers adjusted their classroom practice in response to the guidance they received from their mentor over the last three months. The results are depicted in Table 4.36 below.

Table 4.36: T-test comparison between mentoring guidance and adjustment of classroom practice

		Mean	N	Std. Dev.	t-value	p-value	Cohen's d	Effect size
Pair 5	Guidance Collaboration	3.42	68	1.205	-2.115	0.038	0.17	Very small
	Adjust Collaboration	3.62	68	1.099				
Pair 19	Guidance Planning Lessons	3.49	67	1.106	-2.025	0.047	0.19	Very small
	Adjust Planning Lessons	3.70	67	1.073				
Pair 20	Guidance Using Assessments to Inform	3.34	67	1.095	-2.370	0.021	0.23	Small
	Adjust Using Assessments to Inform	3.60	67	1.031				
Pair 22	Guidance Reflecting Instructional Practices	3.34	68	1.205	-2.363	0.021	0.18	Very small
	Adjust Reflecting Instructional Practices	3.56	68	1.084				
Pair 24	Guidance Teaching Varying Ethnic Backgrounds	3.12	68	1.216	-2.938	0.005	0.18	Very small
	Adjust Teaching Varying Ethnic Backgrounds	3.34	68	1.205				
Pair 26	Guidance Teaching Socio Economic	3.34	65	1.189	-3.052	0.003	0.21	Small
	Adjust Teaching Socio Economic	3.60	65	1.235				

Table 4.36 revealed statistically significant differences, where the p-value was smaller than 0.05, for six of the 26 paired aspects related to guidance provided by a mentor and the beginner teacher then adjusting classroom practice based on the guidance provided. The effect sizes for all of the six paired aspects indicated a very small ($d < 0.2$) to small ($d = 0.2$) practical effect. The researcher is of the opinion that extended guidance over a longer period might yield improvement in mean scores which could contribute to larger practical effects.

To conclude, during the last three months (after guidance), beginner teachers seemed to be able to adjust their classroom practices without going back to their mentors for advice in relation to dealing more successfully with adjusting the way they approached dealing with paperwork, the planning of lessons, using assessment to inform, reflecting on instructional practice, and adjusting teaching to varying ethnic and socio economic backgrounds. The results indicated the mentors had successfully implemented mentorship. Considering the items that possibly did not benefit significantly from the guidance received, there is a need for increased guidance efforts to enable the beginner teachers to become more adept at adjusting to school culture and school policies, accessing resources, working with other staff members, working with parents, teaching learners of varying ability, reviewing and assessing learners' work, applying classroom management strategies, dealing with discipline, acquiring multiple teaching strategies and techniques, teaching according to standards, motivating learners, teaching special needs learners and learner from varying racial backgrounds.

4.8 SUMMARY

This research was conducted with a sample of BEd honours part-time students at a South African University from three different campuses. They are working as beginner teachers in primary and secondary schools. Findings indicate that 54.5% of beginner teachers are working in public schools in a township, where schools are mostly under-resourced, overcrowded and learners face various socio-economic issues (*cf.* 4.2.2). From the data analysis the researcher derived the following important findings that will enable the researcher to answer the research questions:

- (i) overall, the perceived level of self-directedness measured 3.5 on the five-point Likert scale that was used to collect data, thus indicating that the respondents perceived their ability to apply self-regulation skills related to self-management, the desire to learn and self-control on a sometimes to usual basis (*cf.* 4.3.1, Table 4.8);
- (ii) in general, the perceptions about preparedness to deal with challenges during the beginning years of teaching pointed to a lack of preparedness to deal with teaching challenges; specifically,

in working with learners with physical challenges, managing a variety of discipline issues, and dealing with learners with developmental, emotional and behavioural challenges (*cf.* 4.4.1, Table 4.15);

(iii) beginner teachers who received induction as well as those who did not receive **induction** did not benefit in becoming **self-directed** in terms of self-management, having a desire to learn, and exercising self-control. In all mentioned instances, the comparisons between the two groups were statistically insignificant, $p > 0.05$ (*cf.* 4.7.1, Table 4.32);

(iv) the data indicated that beginner teachers who received **induction** were better prepared to deal with teaching **challenges** than their peers who did not receive induction. The comparison between the two groups indicated a statistically significant difference, $p < 0.05$, $p = 0.003$ with a medium to large practical effect, $d = 0.689$, in favour of the group who received induction (*cf.* 4.7.2, Table 4.33);

(v) concerning the comparison of **mentoring** benefits towards becoming **self-directed** concerning the three areas of self-management, the desire to learn and to display self-control between the group who did not receive mentoring, and the group that did receive mentoring, statistically significant p -values, $p < 0.5$, $p = 0.000$ for all three mentioned areas of self-regulation in favour of the group who received mentoring (*cf.* 4.7.3, Table 4.34) were observed, with large practical effects, $d > 0.8$. The self-directedness of the group who received mentoring was statistically significantly better than the self-directedness of the group who did not receive mentoring ($p < 0.05$, $p = 0.000$, $d = 1.013$ (large practical effect)).

(vi) the group who received **mentoring** benefitted more than the group who was not exposed to mentoring concerning dealing with teaching **challenges** ($p < 0.05$, $p = 0.000$, $d = 0.427$) and in handling operational instructional managerial challenges ($p < 0.5$, $p = 0.003$, $d = 0.873$). The mentioned statistically significant differences had a small practical effect for teaching challenges and a large practical effect for operational managerial challenges (*cf.* 4.7.4, Table 4.35). Overall, the preparedness to deal with challenges of the group who received mentoring was statistically significantly better than the group who did not receive mentoring ($p < 0.05$, $p = 0.000$, $d = 0.763$ (medium to large practical effect)); and finally;

(vii) guidance during mentoring enabled beginner teachers to be more effective at adjusting their approach to collaboration ($p < 0.05$, $p = 0.038$, $d = 0.17$), planning lessons ($p < 0.05$, $p = 0.047$, $d = 0.19$), using assessment to give information ($p < 0.05$, $p = 0.021$, $d = 0.23$), reflecting on instructional practice ($p < 0.05$, $p = 0.021$, $d = 0.18$), and adjusting teaching to varying ethnic (p

< 0.05 , $p = 0.005$, $d = 0.18$) and socio economic backgrounds ($p < 0.05$, $p = 0.003$, $d = 0.21$) (cf. 4.7.5, Table 4.36). As indicated, in all mentioned instances, statistically significant differences with a small to very small practical effect were noted between the giving of guidance and successful adjustment following the guidance.

Beginner teachers are indicating to be in dire need for mentoring for them to develop self-directedness and triumph teaching challenges they experience. However, the research results showed that mentoring has a more powerful effect on developing self-directedness than what induction has. Induction and mentoring however, are two actions beginner teachers need simultaneously to bridge the challenges of the first three years of teaching. The next chapter will present findings, recommendations and conclusions.

CHAPTER 5

FINDINGS, RECOMMENDATIONS AND CONCLUSIONS

5.1 INTRODUCTION

In the previous chapter, the researcher presented the analysis and interpretation of the data collected. This chapter will provide findings, recommendations and conclusions concerning the research aim, literature review, research methodology, data analysis and interpretation that will inform the development of recommendations to develop beginner teachers' self-directedness through induction and mentoring.

5.2 SUMMARY OF THE STUDY

Chapter 1

Chapter 1 outlined the introduction and motivation for the study, presented the problem statement and theoretical framework within which the research was situated, and presented detail about the empirical research design applied during the execution of the research. This study focussed on beginner teachers in South Africa who experience numerous challenges in dealing with pressure in a self-directed manner caused by academic workload and administrative that could lead to pressure, stress and attrition (Botha & Rens, 2018:1; Richards & Farrell, 2016:113) (*cf.* 1.2). Unfortunately, mentoring and induction processes that need to support and guide beginner teachers in becoming more adept and autonomous in dealing with the challenges they face, appear to be ineffective or absent (Callahan, 2016:7; Kidd *et al.*, 2015:156) (*cf.* 1.2). Against this background, the researcher aimed to establish the perceptions of beginner teachers who are exposed to and not exposed to induction and mentoring processes about the nature of their self-directedness, which includes their preparedness in dealing with challenges and being able to adjust their classroom practice (*cf.* 1.4). Flowing from the data analysis, recommendations were made to alert stake holders in education to the importance of placing stronger emphasis on the use of induction and mentoring processes for beginner teachers.

Guided by a positivist research paradigm, the researcher employed quantitative non-experimental descriptive research to collect objective and numerical data with a pre-determined and structured five-point Likert scale questionnaire. The purpose of the questionnaire was to establish the nature of self-directedness, preparedness level in dealing with challenges, and adjusting classroom practice after exposure to guidance among beginner teachers (teachers with less than four years' experience in primary and secondary schools). The convenient and purposive sample included

part-time BEd honours students (n = 222) in the Faculty of Education at a university in South Africa. Descriptive statistics, more specific frequencies, percentages, means and standard deviations were used to summarise the data. Inferential statistics, supplemented by effect sizes (where statistically significant differences were observed), was used to determine to what extent the perceptions of beginner teachers who are exposed to and those not exposed to the induction and mentoring process differ regarding the nature of their self-directedness that also included the preparedness to deal with challenges and adjusting classroom practice.

The revised version of the 52-item SDLRS questionnaire (Fisher *et al.*, 2001:523), now containing 40 items (Fisher & King, 2020:46) (*cf.* 3.6.3) was used for data collection. In addition, a modified questionnaire by Glazerman *et al.* (2006:72), “Design of an Impact Evaluation of Teacher Induction Programs”, was also included to collect data about induction and monitoring processes. The researcher also included a self-constructed section in the questionnaire that examined perceptions about the beginner teachers’ experiences in their first years of teaching.

Chapter 2

Chapter 2 discussed the concepts that stood central to this study, namely self-directedness that comprises preparedness in dealing with numerous challenges and being able to adjust their classroom practices. Guided by the work of Knowles (1975:18) and Fisher *et al.* (2001:517) (*cf.* 2.3.2) the researcher conceptualised self-directedness as taking responsibility and initiative for directing one’s own learning. Moreover, self-directedness also denotes among others, problem-solving ability (thus being well-prepared to deal with challenges) (Masitoh & Bachri, 2017:258) (*cf.* 2.3.2), applying good management skills (Department of Education, 2000:13) (*cf.* 2.3.2), being assertive (Du Toit-Brits & Van Zyl, 2017:122) (*cf.* 2.3.2), and displaying proper time management skills (Huda *et al.*, 2017:3) (*cf.* 2.3.2).

Some of the challenges beginner teachers need to deal with are: their roles and responsibilities as teachers (DBE, 2016:17) (*cf.* 2.3.3), teaching and classroom practice (Makafane, 2020:152) (*cf.* 2.6.2); adjusting to a new work environment (Kozikoglu, 2017:102) (*cf.* 2.6.4), discipline and classroom management (Van Tonder & Fourie, 2018:1335) (*cf.* 2.6.5), coping with workload (Van Tonder & Fourie, 2015:220 (*cf.* 2.6.6), curriculum matters (Perlshtein, 2015:138) (*cf.* 2.6.7), socialisation (Romar & Frisk, 2017:91), acquiring professional support (Khalid & Huslin, 2019:195) (*cf.* 2.6.9), and loneliness and isolation (Ahmed *et al.*, 2020:405) (*cf.* 2.6.10).

The researcher argues that developing self-directedness augers well with the application of social constructivist learning as postulated by Vygotsky (1978:86) (*cf.* 1.6, 2.4.1), according to which working in the Zone of Proximal Development and making use of scaffolding and collaborative

and social learning, hold potential to bolster increased self-directed action. The nature of induction and mentoring processes supports social constructivist learning (Podolsky, 2019:8; Neutzling *et al.*, 2019:757) (*cf.* 2.4.3; 2.5.1). For this reason, emphasis is placed on the use of induction and mentoring processes to enable beginner teachers to acquire strategies to become more self-directed to deal with the challenges they face in their first years of teaching.

Chapter 3

The empirical research design used in the study was elucidated in greater detail in Chapter 3. To avoid repetition of information, the researcher refers the reader back to the summary presented under Chapter 1.

Chapter 4

Data analysis and interpretation were completed in Chapter 4. The data were analysed by using descriptive and inferential statistics and presented in graphs and tables. To avoid duplication of information the findings that emanated from the research are presented as part of the findings from the research in the section below.

5.3 FINDINGS FROM THE RESEARCH

The research aimed to determine what does an induction and mentoring process make in the perceptions of beginner teachers concerning the nature of their self-directedness.

5.3.1 Findings related to the objectives of the research

First objective: To determine the overall perceived nature of the self-directedness of beginner teachers

This objective was achieved by analysing and interpreting descriptive data reflecting the perceptions of beginner teachers regarding the overall nature of their self-directedness.

The beginner teachers perceived their level of self-directedness as measured on the five-point Likert scale that was used to collect data on a sometimes to usual basis (3.5) for applying self-regulation skills in relation to the three-factor model for self-regulation that directed the data analysis and interpretation, namely self-management, the desire to learn and enacting self-control (*cf.* 4.3.1, Table 4.8).

Second objective: To establish the overall perceived preparedness level of beginner teachers in dealing with challenges during their first years of teaching.

This objective was achieved by analysing and interpreting descriptive data reflecting the perception of beginner teachers regarding their overall preparedness level to deal with challenge during their first years of teaching.

Perceptions about preparedness to deal with challenges during the beginning years of teaching testified specifically to an unpreparedness to deal with teaching challenges. These challenges include working with learners with physical challenges, handling discipline, and dealing with learners with developmental, emotional and behavioural challenges (*cf.* 4.4.1, Table 4.15).

Third objective: To identify the differences in perceptions of beginner teachers who are exposed to and not exposed to induction and mentoring processes regarding the nature of their self-directedness.

This objective was achieved by comparing the perceptions of beginner teachers and their counterparts who were not exposed to induction and mentoring regarding the nature of their self-directedness.

Beginner teachers who received induction as well as those who did not receive induction did not seem to experience enhanced self-directedness in terms of self-management, having a desire to learn, and exercising self-control. The comparisons between the two groups that focussed on all three the mentioned factors were statistically insignificant, $p > 0.05$ (*cf.* 4.7.1, Table 4.32). The benefits of mentoring towards becoming self-regulated concerning the three areas of self-management, the desire to learn and to display self-control revealed statistically significant p-values, $p < 0.5$, $p = 0.000$ for all three mentioned areas of self-regulation in favour of the group who received mentoring with large effect sizes, $d > 0.08$ (*cf.* 4.7.3, Table 4.34).

Most beginner teachers resume their teacher duties without being inducted by schools, and they often rely on the district for general support and orientation (*cf.* 4.5.2; 4.5.3). Teachers who do not have exposure to an induction programme can experience hardships and challenges in the profession for example psychological symptoms such as stress, burnout, and depression (Costa *et al.*, 2019:59) and are not engaged in professional learning activities that will develop them and keep them retained in the profession (Brown *et al.*, 2020:209). Most beginner teachers resume their teacher duties without being inducted by schools, and they often rely on the district for general support and orientation (*cf.* 4.5.2; 4.5.3). Also, many beginner teachers only survive their first years of teaching with minimal self-directedness, and possibly rely on the knowledge acquired

during their study years and what they acquired during school-based teaching learning exposure during their training (cf. 4.4.3; Table 4.24).

Fourth objective: To identify the differences in perceptions of beginner teachers who are exposed to and not exposed to induction and mentoring processes regarding their preparedness level to deal with challenges during their first years of teaching.

This objective was achieved by comparing the perceptions of beginner teachers and their counterparts who were not exposed to induction and mentoring regarding their preparedness level to deal with challenges during their first years of teaching.

Beginner teachers who received induction were better prepared to deal with teaching challenges than their peers who did not receive induction. A statistically significant difference was calculated for the comparison between the two groups, $p < 0.05$, $p = 0.003$ with a medium to large practical effect, $d = 0.689$, in favour of the group who received induction (cf. 4.7.2, Table 4.33). The group who received mentoring benefitted more than the group who was not exposed to mentoring concerning dealing with teaching challenges ($p < 0.05$, $p = 0.000$, $d = 0.427$), and handling operational instructional managerial challenges ($p < 0.5$, $p = 0.003$, $d = 0.873$). The mentioned statistically significant differences only had a small practical effect for teaching challenges and a large practical effect for operational managerial challenges (cf. 4.7.4, Table 4.35).

From the descriptive data it was revealed that beginner teachers exposed to induction and mentoring are formally assigned to mentors, while others acquire their mentors informally (cf. 4.5.2). Time provided by mentors to meet with their mentees enables regular engagement and participation in professional development activities embodied in social constructivist theory, which promotes beginner teachers' self-directedness (Neutzling *et al.*, 2019:757) (cf. 2.5.1; Table 4.27, 4.28). Beginner teachers exposed to induction and mentoring, which run concurrently, acquire self-directedness through development in areas such as co-teaching, modelling a lesson, meetings with beginner teachers and other teachers and lesson observations (Izadinia, 2015:2) (cf. 2.5.3; Table 4.30). The preparedness and attendance of an induction programme by beginner teachers appears not to have a meaningful change in their self-directedness compared to those receiving mentoring (cf. 4.7.2). The provision of mentoring in the preparedness of beginner teachers, on the other hand, contributes a notable change in the self-directedness of beginner teachers, which lead to improved teaching, moral support and encouragement opportunity to raise

issues, guidance on administrative duties, instructional goals, sharing of lesson plans and even administering assessment (Misra & Tyagi, 2019:67; Table 4.35).

Fifth objective: To discover to what extent beginner teachers have adjusted their classroom practices in response to advice from their mentors.

This objective was achieved by comparing the perceptions of beginner teachers who received guidance from a mentor and their counterparts who did not receive guidance from a mentor to establish if guidance received by a mentor enabled the teachers to be more effective at adjusting their classroom practice in the absence of guidance. The data showed that guidance during mentoring enabled beginner teachers to be more competent at adjusting their approach to collaboration ($p < 0.05$, $p = 0.038$, $d = 0.17$), planning lessons ($p < 0.05$, $p = 0.047$, $d = 0.19$), using assessment to inform ($p < 0.05$, $p = 0.021$, $d = 0.23$), reflecting on instructional practice ($p < 0.05$, $p = 0.021$, $d = 0.18$), and adjusting teaching to include various ethnic ($p < 0.05$, $p = 0.005$, $d = 0.18$) and socio economic backgrounds ($p < 0.05$, $p = 0.003$, $d = 0.21$) (cf. 4.7.5, Table 4.36). Statistically significant differences were noted in all the cited instances between the giving of guidance and successful adjustment following the guidance, however with a very small to small practical effect.

Interesting findings also emanated from the descriptive data. Beginner teachers who took part in an induction programme responded they felt better prepared to deal with teaching and learning challenges than those who did not take part in an induction programme (cf. Table 4.33). The research results provided evidence that mentoring seemingly has a greater effect on developing self-directedness than induction, as argued by Çobanoğlu and Ayvaz-Tuncel (2018:99) (cf. 2.5.6). The data provided support for the observation made by Du Plessis and Letshwane (2020:78) and Van Tonder, 2021:879) (cf. 2.4.2.2), that induction processes in South Africa is ineffective.

5.4 RECOMMENDATIONS

The research study aimed to determine the difference an induction and mentoring process makes on beginner teachers' self-directedness perceptions. A literature review was conducted to support the empirical research to realise this aim. Based on the findings made, the researcher brings forward the following recommendations:

Recommendation 1

The Department of Basic Education (DBE) should review its existing induction policy annually and contextualise it to the 21st century challenges beginner teachers are experiencing. In addition,

this policy should feature in the school and district readiness programmes to ensure districts and schools commence each academic year with induction and mentoring for beginner teachers.

Recommendation 2

The DBE should develop a management plan to monitor districts and schools implementing the latter's induction and mentoring programmes. Evidence of the progress and development of beginner teachers should be in place. There should also be an evaluation tool where beginner teachers will state their experiences of induction and what further assistance they still need from the department. Feedback from beginner teachers can then be used to address areas of concern and make necessary improvements.

Recommendation 3

The DBE should officialise school mentorship roles for experienced teachers and district officials. In addition, training and guidelines should be implemented and mediated to mentor teachers so they will know how to induct and mentor beginner teachers.

Recommendation 4

Principals should pair beginner teachers with more experienced teachers when they do annual subject allocation as well as the workload for each academic year. In addition, the workload provided to beginner teachers should be fair and manageable for execution.

Recommendation 5

Schools should provide beginner teachers with an opportunity to partake in co- and extra-curricular activities under supervision to promote social interaction between beginner teachers with more experienced teachers and various stakeholders inside and outside the Department of Basic Education (Fariyani *et al.*, 2020:100).

Recommendation 6

The DBE should make psychosocial awareness by reinforcing the effectiveness of physical and mental health awareness programmes in schools for beginner teachers who experience psychosocial issues affecting their work. Such services should be effective and easily accessible to alleviate the mammoth attrition rate of beginner teachers leaving the profession due to burnout.

Recommendation 7

The DBE should consider benchmarking from the European Union countries that excel in providing comprehensive and systematic induction programmes to support their beginner teachers to bring development in their induction policy (Costa *et al.*, 2019:59) (*cf.* 2.3.2).

Recommendation 8

In their planning, the DBE should mediate and encourage self-directed learning from national to local schools to improve and promote self-management, desire to learn and self-control among beginner and experienced teachers as well as other education officials (*cf.* 2.2.1).

Recommendation 9

School principals should promote self-directed strategies such as professional socialisation, which encompasses cooperative teaching, parent-to-teacher relationship, and school-based mentoring. In addition, promote a norm of self-reflective practice and establish a working environment enhanced with habits of mind.

Recommendation 10

From the descriptive data obtained the researcher recommends that more mentors be appointed for beginner teachers. According to Table 4.24, only 72 of the 222 respondents (32.4%) seem to be guided by mentors. Additionally, more frequent and intentional mentoring time is needed (*cf.* Table 4.28, 4.30). In support of this recommendation only 13 of the 72 beginner teachers who had exposure to mentoring (18.1%) (*cf.* Table 4.29) consider the mentoring to be sufficient. In particular the data suggest that there is a need for increased guidance efforts to enable the beginner teachers to become more adept and self-directed at adjusting to dealing with administrative paperwork, school culture and school policies, accessing resources, working with other staff members, working with parents, teaching learners of varying ability, reviewing and assessing learners' work, applying classroom management strategies, dealing with discipline, acquiring multiple teaching strategies and techniques, teaching according to standards, motivating learners, teaching special needs learners and learner from varying racial backgrounds (*cf.* 4.7.5).

Flowing from the descriptive data, the researcher also recommends that induction and mentoring programmes need to place focus on equipping beginner teachers to become more self-directed concerning operational managerial tasks, such as overseeing managerial functions and managing administrative work (*cf.* Table 4.15, Table 4.18).

Recommendation 11

Apart from induction and mentoring to bolster self-directedness that includes becoming prepared to deal with challenges and to be able to adjust classroom practices, the researcher also recommends the following strategies suggested in the literature.

- **Professional socialisation**

Professional socialisation, which is a process of learning through interaction, will develop beginner teachers' self-directedness through participation in the following activities (Tahir *et al.*, 2018:233) (*cf.* 2.6.8).

- **Cooperative teaching**

In an inclusive classroom, it is a prerequisite for a beginner teacher to possess self-directedness and apply a distinctive feature of cooperative teaching and collaboration to triumph over challenges related to teaching and learning of learners with diverse educational needs. Furthermore, initiating collaborative actions to promote cooperative teaching means that a beginner teacher will acquire a platform of interaction to share instructional teaching techniques, supportive teaching and learning activities and team teaching with a peer teacher and a more experienced teacher (Barton *et al.*, 2015:156) (*cf.* 2.4.3).

- **Establish parent-to-teacher relationship**

A positive relationship between a parent and a teacher represents a constructive interaction to support learning and combat related challenges (*cf.* 1.6).

- **School-based mentoring**

Ensuring school-based mentoring is essential for advancing self-directed behaviour among beginner teachers. A school-based mentoring programme is a learning opportunity for a beginner teacher to engage professionally with a more experienced teacher on the school vision, realities of teaching practices and behaviour management (Barton *et al.*, 2015:156; Dağ & Sari, 2017:115; Guvesa & Solomonovich, 2017:776).

- **Self-reflective practice**

Encouraging self-reflective practice is an essential evaluation process that promotes self-directedness through self-knowledge, self-monitoring, self-judgement and self-reflective thinking in an adult learner. It means that a beginner teacher as an individual will critically reflect on past learning experiences to develop a new set of skills (Kang & Berliner, 2012:272) (*cf.* 2.5.6).

- **Habits of mind**

Integrate cognitive processes, thinking skills and intelligent behaviour aimed to promote learning and develop mental habits (values and attitudes) such as persisting, managing impulsivity, listening to others with understanding, metacognition, striving for accuracy, thinking and communicating with clarity and precision and creating, imagining and innovating could be beneficial for encouraging self-directed behaviour (Eyre, 2016:43).

5.5 LIMITATIONS OF THE STUDY

This study was by no means without limitations. The first limitation was that this study was narrowed to one South Africa University part-time BEd honours students working as beginner teachers in different provinces at primary and secondary schools. As a result, the findings of this research might be interpreted by some critics as one-sided and not representative of the views of most beginner teachers in South Africa who are working.

The second limitation of this study is that the minimum sample size required was 210 out of 300 responses. However, in this study, 222 responses were received. As a result, the findings of this research might be considered not representative of the target sample size.

5.6 RECOMMENDATIONS FOR FURTHER RESEARCH

Based on the limitations of this research, the following recommendations are made for future research studies:

- Research to develop an online multimodal self-directed induction programme for beginner teachers who do not have access to mentors and induction during their first years of teaching.
- Further research is needed on the effects of self-directed teaching practices on mitigating the challenges in the first year of teaching.

5.7 SUMMARY

In this study, the researcher explored literature review and empirical research to determine the difference induction and mentoring make in the self-directedness of beginner teachers. Findings confirm first years of teaching for beginner teachers as very challenging. Furthermore, due to the absence of efficient induction and mentorship processes, beginner teachers believe they lack self-directedness.

As a result, it points out that beginner teachers need induction and mentoring to develop satisfactory self-directedness that will enable them to survive the challenges of the teaching profession.

The researcher in this chapter has outlined the summary of each chapter and presented findings, recommendations, limitations, and recommendations for further research.

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ANNEXURES

ANNEXURE A

PERMISSION GRANTED FROM THE NORTH-WEST UNIVERSITY RESEARCH DATA KEEPER COMMITTEE (NWU-RDGC)



Private Bag X6001, Potchefstroom
South Africa 2520

Tel: +2718 299-1111/2222

Web: <http://www.nwu.ac.za>

Research Data Gatekeeper Committee

NWU RDGC PERMISSION GRANTED / DENIED LETTER

Based on the documentation provided by the researcher specified below, on 02/12/2020 the NWU Research Data Gatekeeper Committee (NWU-RDGC) hereby grants permission for the specific project (as indicated below) to be conducted at the North-West University (NWU):

Project title: Strategies to develop beginner teachers' self-directedness through induction and mentoring.

Project leader: Prof JA Rens

Researcher/Project Team: TD Mokoena

Ethics reference no: NWU-01251-20-A2

NWU RDGC reference no: NWU-GK-2017-074

Specific Conditions:

- Due the COVID-19 pandemics the Committee would like to advise the researcher to practice the necessary caution and adhere to the National Covid-19 Guidelines when conducting research with participants.

Approval date: 02/12/2020

Expiry date: 01/11/2021

General Conditions of Approval:

- The NWU-RDGC will not take the responsibility to recruit research participants or to gather data on behalf of the researcher. This committee can therefore not guarantee the participation of our relevant stakeholders.
- Any changes to the research protocol within the permission period (for a maximum of 1 year) must be communicated to the NWU-RDGC. Failure to do so will lead to withdrawal of the permission.
- The NWU-RDGC should be provided with a report or document in which the results of said project are disseminated.

Please note that under no circumstances will any personal information of possible research subjects be provided to the researcher by the NWU RDGC. The NWU complies with the Promotion of Access to Information Act 2 of 2000 (PAIA) as well as the Protection of Personal Information Act 4 of 2013 (POPI). For an application to access such information please contact Ms Annamaria De Kock (018 285 2771) for the relevant enquiry form or more information on how the NWU complies with PAIA and POPI.

The NWU RDGC would like to remain at your service as scientist and researcher, and wishes you well with your project. Please do not hesitate to contact the NWU RDGC for any further enquiries or requests for assistance

Yours sincerely

Prof Marlene Verhoef

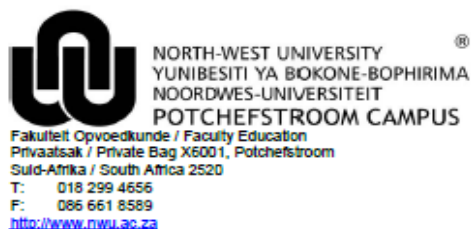
Chairperson NWU Research Data Gatekeeper Committee

Original details: (22351930) C:\Users\22351930\Desktop\test 2.docm
13 November 2018

ANNEXURE B

PERMISSION GRANTED FROM THE NORTH-WEST UNIVERSITY

EDUREC RESEARCH ETHICS COMMITTEE



1 October 2020

To Whom It May Concern

I hereby confirm that the ethics application, as stated below, is approved by the Ethics Committee members of the Faculty of Education and will be minuted at the meeting on 29 October 2020.

Ethics number: NWU-01251-20-A2

Project head: Prof JA Rens

Project team: TD Mokoena (MEd student – 25062433), Dr GP van Tonder

Title: Strategies to develop beginner teachers' self-directedness through induction and mentoring

Extended period: 1 October 2020 – 1 October 2021

Clearance given for only one year. Extension can be requested after a year.

Risk level: Low

Should you have further enquiries in this regard, you are welcome to contact Prof Jako Olivier at 018 285 2078 or by email at Jako.Olivier@nwu.ac.za or Ms Erna Greyling at 018 299 4656 or by email at Erna.Greyling@nwu.ac.za.

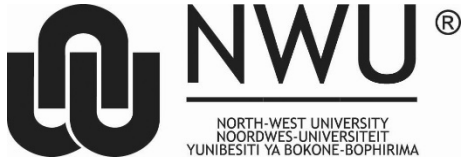
Yours sincerely



Prof J Olivier
Chair Edu-REC

ANNEXURE C

INFORMED CONSENT



Private Bag X6001, Potchefstroom
South Africa 2520

Tel: 018 299-1111/2222
Web: <http://www.nwu.ac.za>

Faculty of Education

(Self-directed Learning)

Tel: 016 910 3059
Email: deon.vantonder@nwu.ac.za
Date:

PARTICIPANT INFORMATION AND CONSENT FORM

I herewith wish to request your permission as an ex undergraduate BEd student at the North-West University (NWU), who is a beginner teacher with less than four years of service to participate in this research to determine the difference an induction and mentoring process, make on the perceptions of self-directedness of beginner teachers. Prior to granting permission, please acquaint yourself with the information below.

The details of the research are as follows:

TITLE OF THE RESEARCH PROJECT:

Strategies to develop beginner teachers' self-directedness through induction and mentoring

ETHICS APPLICATION NUMBER

NWU - 01251-20-A2 Edu-REC

NWU - GK - 2017 -074 RDGC Gatekeeper

PROJECT SUPERVISOR: Dr Deon van Tonder

ADDRESS: NWU Vanderbijlpark Campus

CONTACT NUMBER: 016 910 3059

PROJECT CO-SUPERVISOR: Prof J.A. Rens

ADDRESS: NWU Potchefstroom Campus

CONTACT NUMBER: 018 299 1893

MEMBER OF PROJECT TEAM MEd-Student: MR T D MOKOENA

ADDRESS: PO Box 13666, PABALLONG, PHUTHADITJHABA, WITSIESHOEK

CONTACT NUMBER: 078 920 9259

FACULTY OF EDUCATION RESEARCH ETHICS COMMITTEE

Contact person: Ms Erna Greyling, E-mail: Erna.Greyling@nwu.ac.za, Tel. (018) 299 4656

This study has been approved by the Research Ethics Committee of the Faculty of Education of the North-West University and will be conducted according to the ethical guidelines of this committee. Permission was also asked from the North-West University Research Data Keeper Committee (NWU-RDGC).

What is this research about?

The aims of this research are:

To determine the difference an induction and mentoring process, make on the perceptions of self-directedness of beginner teachers.

The main aim is operationalised in the following objectives:

- To determine the nature of the self-directedness of beginner teachers.
- To discover what challenges do beginner teachers experience in their first years of teaching.
- To determine what is the perceived status of self-directedness of beginner teachers who are not exposed to an induction and mentoring process.
- To determine what is the perceived status of self-directedness of beginner teachers who are exposed to an induction and mentoring process.
- To establish if there are differences in the perceptions of beginner teachers who are exposed to and those not exposed to an induction and mentoring process regarding their self-directedness.
- To establish potential strategies that can be implemented to support teachers to develop self-directedness with or without exposure to an induction and mentoring process.

Participants

The study sample in this study, will be ex-students of the North-West University, which include all three campuses who are beginner teachers with less than four years of service.

What is expected of you as participant?

Each respondent who voluntary indicates to take part in this study will be expected to complete one instrument, which includes two questionnaires.

The one questionnaire measures the self-directed ability of beginner teachers by using the standardised Self-Directed Learning Readiness Scale (SDLRS). The other questionnaire, focus on induction and mentoring, and the first years of teaching experience of beginner teachers.

The questionnaire will be made available to the respondents via a link through Google forms.

The questionnaire has an embedded consent form where the respondents will indicate to take part voluntary and can discontinue this survey at any time by simply closing their browser and anonymity and confidentiality will be ensured without penalty at any stage.

It will take approximately 50 minutes for the respondents to complete and submit the questionnaire.

Benefits to you as participant

No direct benefits to the participants, but there are indirect benefits:

This research can lead to planning, practical decisions and the development of policy, which are aimed at induction, mentoring and self-directedness of beginner teachers during their first years of teaching.

The findings from the research can contribute to make recommendations to the Department of Basic Education, regarding the difference an induction and mentoring process make on the perceptions of self-directedness of beginner teachers.

Risks involved for participants

The risks anticipated is minimal.

Conflict of interest, which can be minimised as the respondents are not known by the researcher.

The respondents will be informed that their participation is voluntary and that they could leave at any time.

Confidentiality and protection of identity

Complete anonymity can be guaranteed because the independent person will handle the entire collection process of data, which means, informed consent and the questionnaire distribution. Participants will complete the questionnaires anonymously. Confidentiality will be guaranteed as only the researcher, the supervisors and the statistical consultant will have access to the data obtained. The researcher, the supervisors and the independent person will sign a confidentiality agreement at the onset of the study.

Dissemination of findings

The findings of this study will be made available to the Department of Basic Education and participants upon request.

If you have any further questions or enquiries regarding your participation in this research, please contact the researchers for more information.

Yours sincerely
Mr TD Mokoena
(Researcher)

DECLARATION BY DEAN/OTHER RELEVANT PERSON:

By signing below, I agree to give permission for the research to take place with the identified participants in the study entitled:

Strategies to develop beginner teachers' self-directedness through induction and mentoring

I declare that:

- I have read this information and consent form and understand what is expected of the participants in the research.
- I have had a chance to ask questions to the researcher and all my questions have been adequately answered.
- I understand that taking part in this study is voluntary and participants will not be pressurised to take part.
- Participants may choose to leave the study at any time and will not be penalised or prejudiced in any way.
- Participants may be asked to leave the research process before it is completed, if the researcher feels it is in their best interests, or if they do not follow the research procedures, as agreed to.

Signed at (place)_____ on (date) ____/____/20____

Signature of participant

Researcher

ANNEXURE D

DATA COLLECTION INSTRUMENT: QUESTIONNAIRE

Strategies to develop beginner teachers' self-directedness through induction and mentoring

1. PARTICIPANT'S STATEMENT OF INFORMED CONSENT: If you agree with the *following statement and wish to participate in the study, please click on the circle in front of "I agree" below. If you do not agree, please click on the circle in front of "I disagree" below and simply close your browser.

"I am at least 18 years of age, have read and understand the explanation provided to me and voluntarily agree to participate in this study."

Mark only one oval.

☐

I agree

☐

I disagree

Skip to section 13 (THANK YOU)

Section A: Biographical information

Complete the following information by click the appropriate circle

2. Type of school*

Mark only one oval per row.

	Primary school	Secondary school
Choose one	☐	☐

3. School environment*

Mark only one oval.

☐

Public school in town

☐

Public school in a township

☐

Private school in town

☐

Private school in a township

☐

School in a rural area

4. Type of school*

Mark only one oval per row.

	20-25	26-30	31-35	36-40	41-45	46-older
Choose one	☐	☐	☐	☐	☐	☐

5. Ethnic group*

Mark only one oval.

- ☐ Asian
- ☐ Black
- ☐ Coloured
- ☐ White
- ☐ Other

6. Teaching experience*

Mark only one oval per row.

	One year	Two years	Three years
Choose one	☐	☐	☐

7. Campus graduated*

Mark only one oval per row.

	Campus 1	Campus 2	Campus 3
Choose one	☐	☐	☐

8. Geographical location*

Mark only one oval.

- ☐ Gauteng
- ☐ Free State
- ☐ Mpumalanga
- ☐ Eastern Cape
- ☐ Northern Cape
- ☐ Western Cape
- ☐ Kwazulu-Natal
- ☐ Limpopo
- ☐ North West
- ☐ Other

Skip to question 9

Section B: Self-directed learning

9. I solve problems using a plan *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

10. I prioritize my work *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

11. I like to solve (answer) puzzles/questions *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

12. I manage my time well *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

13. I have good management skills *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

14. I set strict time frames *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

15. I prefer to plan my own learning *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

16. I prefer to direct my own learning *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

17. I believe the role of the teacher is to act as a resource person *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

18. I am systematic in my learning *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

19. I am able to focus on a problem *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

20. I often review the way teaching practices are conducted *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

21. I need to know why *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

22. I critically evaluate new ideas *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

23. I prefer to set my own learning goals *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

24. I am willing to change my ideas *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

25. I will ask for help in my learning when necessary *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

26. I am willing to accept advice from others *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

27. I learn from my mistakes *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

28. I will alter my practices when presented with the facts *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

29. I am open to new learning opportunities *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

30. I am open to new ideas *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

31. When presented with a problem I cannot resolve, I will ask for assistance *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

32. I am responsible *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

33. I like to evaluate what I do *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

34. I have high personal expectations *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

35. I have high personal standards *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

36. I have high beliefs in my abilities *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

37. I am aware of my own limitations *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

38. I am assertive *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

39. I am confident in my ability to search out information *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

40. I enjoy studying *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

41. I have a need to learn *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

42. I enjoy a challenge *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

43. I want to learn new information *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

44. I enjoy learning new information *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

45. I set specific times for my self-study *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

46. I am self-disciplined *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

47. I like to gather the facts before I make a decision *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

48. I am organised *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

49. I am logical *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

50. I am methodical *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

51. I evaluate my own performance *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

52. I prefer to set my own criteria on which to evaluate my performance *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

53. I am responsible for my own decisions *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

54. I can be trusted to pursue my own learning *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

55. I can find out information for myself *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

56. I need minimal help to find information *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

57. I like to make decisions for myself *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

58. I prefer to set my own goals *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

59. I am in control of my life *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

60. I need to be in control of what I learn *

Mark only one oval.

- ☐ Almost never true of me; I hardly ever feel this way.
- ☐ Not often true of me; I feel this way less than half the time.
- ☐ Sometimes true of me; I feel this way about half the time
- ☐ Usually true of me; I feel this way more than half the time.
- ☐ Almost always true of me; there are very few times when I don't feel this way

Section C: First Teaching Experience:

At the end of your 6 months of teaching, how well prepared did you feel to...

61. manage a variety of classroom management tasks? *

Mark only one oval.

- ☐ Not at all prepared
- ☐ Somewhat prepared
- ☐ Well prepared
- ☐ Very well prepared

62. manage a variety of discipline issues? *

Mark only one oval.

- ☐ Not at all prepared
- ☐ Somewhat prepared
- ☐ Well prepared
- ☐ Very well prepared

63. use a variety of instructional methods? *

Mark only one oval.

- ☐ Not at all prepared
- ☐ Somewhat prepared
- ☐ Well prepared
- ☐ Very well prepared

64. teach subject content? *

Mark only one oval.

- ☐ Not at all prepared
- ☐ Somewhat prepared
- ☐ Well prepared
- ☐ Very well prepared

65. assess your learners? *

Mark only one oval.

- ☐ Not at all prepared
- ☐ Somewhat prepared
- ☐ Well prepared
- ☐ Very well prepared

66. select and adapt curriculum and instructional materials? *

Mark only one oval.

- ☐ Not at all prepared
- ☐ Somewhat prepared
- ☐ Well prepared
- ☐ Very well prepared

67. motivate learners? *

Mark only one oval.

- ☐ Not at all prepared
- ☐ Somewhat prepared
- ☐ Well prepared
- ☐ Very well prepared

68. work with learners who have behavioural challenges? *

Mark only one oval.

- ☐ Not at all prepared
- ☐ Somewhat prepared
- ☐ Well prepared
- ☐ Very well prepared

69. work with learners who have emotional challenges? *

Mark only one oval.

- ☐ Not at all prepared
- ☐ Somewhat prepared
- ☐ Well prepared
- ☐ Very well prepared

70. work with learners who have developmental challenges? *

Mark only one oval.

- ☐ Not at all prepared
- ☐ Somewhat prepared
- ☐ Well prepared
- ☐ Very well prepared

71. work with learners who have physical challenges? *

Mark only one oval.

- ☐ Not at all prepared
- ☐ Somewhat prepared
- ☐ Well prepared
- ☐ Very well prepared

72. collaborate with colleagues to plan together to ensure alignment in the Grade? *

Mark only one oval.

- ☐ Not at all prepared
- ☐ Somewhat prepared
- ☐ Well prepared
- ☐ Very well prepared

73. work with the principal or other instructional leaders? *

Mark only one oval.

- ☐ Not at all prepared
- ☐ Somewhat prepared
- ☐ Well prepared
- ☐ Very well prepared

74. plan effective lessons? *

Mark only one oval.

- ☐ Not at all prepared
- ☐ Somewhat prepared
- ☐ Well prepared
- ☐ Very well prepared

75. be an effective teacher? *

Mark only one oval.

- ☐ Not at all prepared
- ☐ Somewhat prepared
- ☐ Well prepared
- ☐ Very well prepared

76. address the needs of diversity of learners? *

Mark only one oval.

- ☐ Not at all prepared
- ☐ Somewhat prepared
- ☐ Well prepared
- ☐ Very well prepared

77. manage a variety of administrative duties? *

Mark only one oval.

- ☐ Not at all prepared
- ☐ Somewhat prepared
- ☐ Well prepared
- ☐ Very well prepared

78. teach by using different self-directed teaching strategies? *

Mark only one oval.

- ☐ Not at all prepared
- ☐ Somewhat prepared
- ☐ Well prepared
- ☐ Very well prepared

79. manage workload? *

Mark only one oval.

- ☐ Not at all prepared
- ☐ Somewhat prepared
- ☐ Well prepared
- ☐ Very well prepared

80. balance your teaching task and your private life? *

Mark only one oval.

- ☐ Not at all prepared
- ☐ Somewhat prepared
- ☐ Well prepared
- ☐ Very well prepared

81. start your teaching career with the knowledge you gain from the University? *

Mark only one oval.

- ☐ Not at all prepared
- ☐ Somewhat prepared
- ☐ Well prepared
- ☐ Very well prepared

82. Did you follow an induction programme at the school when you start teaching? *

Mark only one oval.

- ☐ Yes Skip to Question 84
- ☐ No Skip to Question 83

83. If you answered “No”, please provide the reasons why? *

Reason: _____

Section D: Induction process

Induction refers to a programme of professional development and support for beginning teachers. Teacher induction programmes consist of various components and activities and often include mentoring and professional development workshops.

84. Who provide the teacher induction programme for beginner teachers? *

Mark only one oval per row.

	District office (DBE)	Principal	School Governing Body (SGB)	Do not know
Choose one	☐	☐	☐	☐

85. What is the primary purpose of the induction programme? *

Mark only one oval.

- ☐ General support/guidance
- ☐ Orientation to the school/district

☐ Promote standards-based teaching

86. Do you have a mentor? *

Mark only one oval.

☐ Yes

☐ No

Skip to section 13 (THANK YOU)

MENTORING PROCESS

Mentoring describes a formal or informal learning relationship, usually between two individuals where the mentor has either experience or expertise in a particular area and provides information, advice, support, and feedback to the beginner teacher.

87. Is your mentor currently a ...

Mark only one oval.

☐ Full-time teacher in your school?

☐ Part-time teacher in your school?

☐ Full-time mentor who has been released from teaching?

☐ Your Head of Department

☐ District office person?

☐ Other: _____

88. Was this mentor assigned to you?

Mark only one oval per row.

	Yes	No
Choose one	☐	☐

89. If your mentor was assigned to you, please indicate by who.

Mark only one oval.

- ☐ Not applicable
- ☐ District or Principal
- ☐ Principal
- ☐ Deputy Principal
- ☐ Head of Department
- ☐ Other: _____

90. Is there a time you and your mentor usually meet? *

Mark only one oval.

- ☐ Yes
- ☐ Not applicable - we do not meet on a specific time

91. When do your informal or scheduled meetings usually take place?

Mark only one oval.

- ☐ Before school
- ☐ After school
- ☐ During lunch
- ☐ During planning period
- ☐ Not applicable - we do not meet on a specific time
- ☐ Other: _____

92. On average, how often do you and your mentor's informal or scheduled meetings occur?

Mark only one oval.

- ☐ Daily
- ☐ 2 – 4 times per week
- ☐ Once a week
- ☐ 2 – 3 times per month
- ☐ Once a month
- ☐ Once a quarter
- ☐ Bi-annually
- ☐ Whenever there is a need
- ☐ Other: _____

93. On average, how long are the informal or scheduled meetings with your mentor?

Mark only one oval.

- ☐ Less than 15 minutes
- ☐ Less than 30 minutes
- ☐ Less than an hour
- ☐ An hour
- ☐ Or More
- ☐ Other: _____

94. Do you feel there is adequate time scheduled for you to meet with your mentor?

Mark only one oval per row.

	Strongly agree	Agree	Disagree	Strongly disagree
Choose one	☐	☐	☐	☐

95. During the most recent full week of teaching, how much informal (not scheduled) contact did you have with your mentor?

Mark only one oval.

- ☐ No time
- ☐ Less than 15 minutes
- ☐ Less than 30 minutes
- ☐ Less than an hour
- ☐ An hour
- ☐ Or More

During the most recent full week of teaching, how much scheduled time did your mentor spend on...

96. observing your teaching?

Mark only one oval.

- ☐ No time
- ☐ Less than 30 minutes
- ☐ Less than an hour
- ☐ An hour
- ☐ Or More

97. meeting with you on a one-to-one basis?

Mark only one oval.

- ☐ No time
- ☐ Less than 30 minutes
- ☐ Less than an hour
- ☐ An hour
- ☐ Or More

98. meeting with you together with other beginner teachers?

Mark only one oval.

- ☐ No time
- ☐ Less than 30 minutes
- ☐ Less than an hour
- ☐ An hour
- ☐ Or More

99. meeting with you together with other teachers (excluding meeting with other beginner teachers)?

Mark only one oval.

- ☐ No time
- ☐ Less than 30 minutes
- ☐ Less than an hour
- ☐ An hour
- ☐ Or More

100. modelling a lesson?

Mark only one oval.

- ☐ No time
- ☐ Less than 30 minutes
- ☐ Less than an hour
- ☐ An hour
- ☐ Or More

101. co-teaching a lesson?

Mark only one oval.

- ☐ No time
- ☐ Less than 30 minutes
- ☐ Less than an hour
- ☐ An hour
- ☐ Or More

During the most recent full week of teaching, to what extent did your mentor...

102. give you suggestions on how to improve your teaching strategy?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

103. give you encouragement or moral support?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

104. provide an opportunity for you to raise/discuss your individual concerns?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

105. provide guidance on administrative issues?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

106. provide guidance on logistical issues?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

107. provide guidance on teaching to meet national or district standards?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

108. work with you to identify teaching challenges and possible solutions?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

109. discuss with you instructional goals?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

110. discuss with you ways to achieve your instructional goals?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

111. provide guidance on how to assess your learners?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

112. share lesson plans?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

113. share assessments?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

114. share other instructional activities?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

115. act on something you requested the previous week?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

During the last 3 months, to what extent has your mentor provided you with guidance...

116. in understanding the school's culture?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

117. in understanding the school's policies?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

118. in accessing district and community resources?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

119. in handling paperwork?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

120. in collaboration with colleagues to plan together to ensure alignment in the Grade?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

121. working with other staff (such as the principal, counsellors and a disability specialist)?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

122. working with parents?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

123. teaching subject-related content?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

124. teaching learners with varying levels of achievement?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

125. teaching learners with varying levels of ability?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

126. reviewing learners' work?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

127. assessing learners' work?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

128. implementing classroom management strategies?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

129. managing learner discipline and behaviour?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

130. using multiple instructional strategies/techniques to teach learners?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

131. selecting or adapting curriculum materials?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

132. understanding the national and district standards?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

133. teaching according to national and district standards?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

134. in planning lessons?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

135. using learner assessments to inform your teaching?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

136. in motivating learners?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

137. reflecting on your instructional practices?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

138. in teaching special needs learners?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

139. in teaching learners of varying ethnic backgrounds?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

140. in teaching learners of varying racial backgrounds?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

141. in teaching learners of socio-economic backgrounds?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

During the last 3 months, to what extent have you adjusted your classroom practice in response to advice you received from your mentor

142. understanding the school's culture?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

143. understanding the school's policies?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

144. accessing district and community resources?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

145. handling paperwork?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

146. collaboration with colleagues to plan together to ensure alignment in theGrade?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

147. working with other staff (such as the principal, counsellors and a disability specialist)?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

148. working with parents?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

149. teaching subject-related content?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

150. teaching learners with varying levels of achievement?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

151. teaching learners with varying levels of ability?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

152. reviewing learners' work?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

153. assessing learners' work?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

154. implementing classroom management strategies?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

155. managing learner discipline and behaviour?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

156. selecting or adapting curriculum materials?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

157. selecting or adapting curriculum materials?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

158. understanding the national and district standards?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

159. teaching according to national and district standards?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

160. in planning lessons?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

161. using learner assessments to inform your teaching?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

162. in motivating learners?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

163. reflecting on your instructional practices?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

164. teaching special needs learners?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

165. teaching learners of varying ethnic backgrounds?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

166. teaching learners of varying racial backgrounds?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

167. teaching learners of socio-economic backgrounds?

Mark only one oval.

- ☐ Not at all
- ☐ To a small extent
- ☐ To a moderate extent
- ☐ To a large extent
- ☐ To an extreme extent

THANK YOU

This content is neither created nor endorsed by Google.

Google Forms

ANNEXURE E

OFFICIAL CHANGE IN FUNCTIONARIES

Dr GP van Tonder has been appointed as Supervisor and Prof JA Rens as Co-Supervisor from 20 August 2021



Private Bag X1290, Potchefstroom
South Africa 2520

Tel: 018 299-1111/2222
Web: <http://www.nwu.ac.za>

Higher Degree Administration

Tel: 018-(0)18-910-3033
Email: Jenna.Wilson@nwu.ac.za

Date: 20 August 2021

Dear Dr GP van Tonder

CONFIRMATION OF APPOINTMENT AS SUPERVISOR OR PROMOTER FOR THE PURPOSE OF STUDY GUIDANCE TO A STUDENT

It is my pleasure to inform you of your appointment by the Faculty Board of the Faculty of Faculty of Educa
as Supervisor for the following candidate:

Initials & surname:	Mr TD Mokoena
Student number:	2 5 0 6 2 4 3 3
Full name of degree registered for:	Curriculum Studies ^{QM}
Programme and Curriculum code:	4 C C N 0 1 O 8 0 1 V
Research title:	Strategies to develop beginner teachers' self-directedness through induction and mentoring

Please find the relevant guidelines for supervision in paragraphs 4.8 and 5.8 of the NWU General Academic Rules as available as follows on the NWU web:

- [General Academic Rules \(A-Rules\)](#)

You might also find the guidelines contained in the Manual for Post- Graduate Studies helpful. The link to the Manual is as follows:

- [Manual for Higher Degree Studies](#)
- [Policy on Academic Integrity](#)

Please take note that your faculty might also have certain rules as part of the faculty rules (and as contained in the relevant faculty yearbook), and possibly as part of the quality manual of the faculty, that might be applicable for the supervision process.

Please acknowledge receipt of this letter to the sender at your earliest convenience.

Yours sincerely

Ms. Jenna Wilson
Digitally signed by Jenna Wilson
Date: 2021.08.20
09:40:21 +0200

FOR REGISTRAR

File reference: 7.1.11.1.3

ANNEXURE F

DECLARATION OF LANGUAGE EDITING

Olivier Language Practitioner¶

Editing and Translation Service¶

Date: 20 September 2022¶

Letter of confirmation of professional proofreading¶

¶

Title: Strategies to develop beginner teachers' self-directedness through induction and mentoring¶

Author: Thabang Mokoena¶

Student number: 25062433¶

Editor: Willemien Olivier¶

This paper was proofread¶

by¶

a proofreader¶

¶

LETTER OF CONFIRMATION OF ENGLISH EDITING¶

This is to confirm that the paper with the provisional title, Strategies to develop beginner teachers' self-directedness through induction and mentoring, to be submitted by Thabang Mokoena of North West University, has been edited for language by Olivier Language Practitioner, Willemien Olivier.

The document needed only a few amendments. Neither the research content nor the author's intentions were altered in any way during the editing process.¶

The editor guarantees the quality of the English language in this paper, provided the editor's changes are accepted and further changes made to the paper are checked by the editor.¶

Willemien Olivier¶

Honours Degree Translation Studies (2017) UNISA¶

Editing and Translation Service: Olivier Language Practitioner since 2008¶

Willemien Olivier¶

Olivier Language Practitioner¶

Translation, proof-reading and editing service¶

Cell phone: 079-978-9901.¶

E-mail address: willemienoli4@gmail.com¶