

**‘LEARNING TO TEACH’:
DEVELOPMENTAL TEACHING
PATTERNS OF
STUDENT TEACHERS**

Leanne Rusznyak

A dissertation submitted to the Wits School of Education, Faculty of Humanities,
University of Witwatersrand, Johannesburg, in fulfilment of the requirements for
the degree of Doctor of Philosophy.

Johannesburg, 2008

ABSTRACT

The process of ‘learning to teach’ is still not well understood. In particular, existing research does not fully reflect the complexities of the process; how student teachers’ level of subject matter knowledge influences their teaching, or how their placement affects the process. This study provides an alternative *non-linear, relational model* for understanding the process of ‘learning to teach’. I study the ways in which 66 BEd students teach during eight school-based Teaching Experience sessions, conducted over the four year duration of their pre-service teaching degree. I primarily draw on evidence obtained from lesson observation reports written by university tutors as they respond to lessons taught by this cohort of student teachers. I cluster their comments into five facets necessary for enabling learning, namely, student teachers’ knowledge and understanding of content; their preparation; their teaching strategies; their classroom management; and the ways in which they monitor learning. These five facets have links to the process of teaching described by Shulman’s (1987b) Model of Pedagogical Reasoning and Action. Within each of these five facets, varying levels of competence were demonstrated by the student teachers in this study. I develop an analytical tool that describes four developmental levels of student teaching over each of the five facets of the teaching process. An in-depth study of the developmental teaching portraits of five student teachers illustrates that they are often more advanced in some facets of their teaching, and less so in others. The portraits highlight the ways in which certain facets affect teaching in other facets. The interactions between these differing levels and facets give rise to particular challenges that student teachers experience as they ‘learn to teach’. Some of these challenges are more significant than others, as certain inter-facet relationships are essential to the development of pedagogically reasoned action, and other relationships are less crucial. My findings suggest that although ‘learning to teach’ is a non-linear process, there nevertheless exists a *logical hierarchy* within the facets, whereby some facets create conditions of possibility for others. In particular, I find that the way in which student teachers use their knowledge and understanding of the content to inform other facets, establishes the

logical conditions necessary for the development of teaching as pedagogically reasoned action.

KEYWORDS:

‘Learning to teach’; Pedagogical Content Knowledge (PCK); student teachers; classroom teaching; practical teaching; professional teacher knowledge; subject matter knowledge; pedagogy.

DECLARATION

I declare that this thesis is my own unaided work. It is submitted for the degree of Doctor of Philosophy in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any other degree or examination in any other university.

_____ day of _____, 2008.

ACKNOWLEDGEMENTS

I am deeply indebted to:

My supervisor, Professor Yael Shalem, for her profound insights, meticulous attention to detail, and for providing me with inspiration, challenge and unwavering support. It was a privilege to learn from you.

My beloved husband, Greg, for being my rock over the past 22 years; for your unconditional love always; your steadfast encouragement and support in everything I undertake; for being my personal graphics designer and IT support crew, and for all the 'toast & chai tea' suppers.

My precious sons, Timothy and Matthew, for building blocks and reading stories with me when I needed to take a break from 'playing' on the computer.

My parents, Ed and Ann, who inspired me with their respective passions for life-long learning and teaching. To them, my mother-in-law, Maureen, and my 'sister' Rahab for being my unfailing support system through this process.

Student teachers at the Wits School of Education for their willingness to participate in this study and their commitment to becoming dedicated educators.

My colleagues at the Wits School of Education, who so graciously gave their time to share their experience and insights with me, and for their collegiality, support and encouragement during my studies.

Those who made sure I kept my priorities straight, my humour intact and my wine rack empty: Paul; Paddy & Dave; Lauren; Alex; Jo & Neil; Colleen & Ross; Drew & Cath; Anth & Goose.

Libby Lemour and Sue Fox for the deeply appreciated assistance with transcribing, editing and proof reading.

The Carnegie Foundation for providing me with funding for a 'Time-Out' sabbatical to undertake the writing of this thesis.

TABLE OF CONTENTS

Abstract.....	2
Keywords:	3
Declaration.....	4
Acknowledgements	5
Table of Contents.....	6
List of Figures	10
List of Tables.....	11
List of Abbreviations.....	14
SECTION A: INTRODUCING THE STUDY.....	15
Chapter 1: Literature Review and Introduction to the Research Question.....	16
Research into ‘learning to teach’	19
Contributions and limitations of existing models of ‘learning to teach’	35
Critique of models of ‘learning to teach’	46
Literature gap.....	47
Aim of this study	48
The research question	49
Rationale for this study	50
Organisation and implementation of TE.....	55
1. Government policies and teacher education (Macro-perspective)	55
2. Studies about the organisation of TE (Meso-level perspective)	56
3. Studies on the relationship between teacher education programmes and student teaching (Micro-level perspective).....	60
Structure of this dissertation	68
SECTION B: LOCATING THE STUDY	71
Chapter 2: Teacher Education in South Africa	72
Teacher education under Apartheid	72
Transition to Outcomes-Based Education	74
Teacher education policy development	79
Reorganising teacher education	82
Organisation of the BEd degree.....	83
Critical studies on teacher education in SA	86
Subsequent developments in teacher education policy	92
Chapter 3: Theoretical Framework.....	94
The beginning knowledge base of student teachers.....	94
Shulman’s categories of teacher knowledge.....	99

Types of knowledge for teaching.....	101
Challenges of remembering and enacting teacher knowledge	106
Shulman's Model of Pedagogical Reasoning and Action.....	109
A model of 'learning to teach' based on the acquisition and enactment of PCK?.....	115
SECTION C: RESEARCH DESIGN & Tools of analysis.....	118
Chapter 4: Investigating the Question.....	119
Research design: Case study.....	119
Wits School of Education, 'Class of 2006'	121
Sources of data.....	125
Limitations of the data	135
My involvement as a researcher	136
Possible sources of bias	138
Developing a language of description.....	138
Developing a conceptual tool for analysing data	144
Chapter 5: Teaching Experience within the BEd Programme at the Wits School of Education: A Case Study	157
Teaching Experience within the BEd programme	158
Organisation of TE	158
Requirements of student teachers during TE	161
Assessment and evaluation of student teachers	164
The assessment tools used between 2003 and 2006	165
Discrepancies between the official assessment criteria and the professional judgement of university tutors	172
Summary.....	178
SECTION D: DATA ANALYSIS	180
Chapter 6: Developmental Teaching Patterns of Student Teachers	181
FACET 1: KNOWLEDGE & UNDERSTANDING OF CONTENT	183
Level 1 of Knowledge and understanding of content: Memorised/generalised knowledge	187
Level 2 of Knowledge and understanding of content: 'Need-to-know' knowledge	191
Level 3 of Knowledge and understanding of content: Investigated topic knowledge and understanding.....	195
Level 4 of Knowledge and understanding of content: Discipline-grounded topic knowledge and understanding.....	199
FACET 2: PREPARATION	203
Level 1 of Preparation: Focuses on formatting of lesson plan.....	208
Level 2 of Preparation: Devises disjointed lesson steps	211
Level 3 of Preparation: Plans for coherent lessons	215
Level 4: Purposefully plans for learners' needs.....	219
FACET 3: TEACHING STRATEGIES	223

Level 1 of Teaching strategies: Strategies that give information.....	227
Level 2 of Teaching strategies: Strategies that get through the work	231
Level 3 of Teaching strategies: Strategies that maximise learner participation	235
Level 4 of Teaching strategies: Strategies for conceptual understanding	239
FACET 4: CLASSROOM MANAGEMENT	244
Level 1 of Classroom management: Learner misbehaviour unchallenged	247
Level 2 of Classroom management: Struggles for class control.....	250
Level 3 of Classroom management: Explicitly enforces classroom routines	256
Level 4 of Classroom management: Creates organised learning environments	259
FACET 5: MONITORING LEARNING.....	263
Level 1 of Monitoring learning: Assumes learning	266
Level 2 of Monitoring learning: Infers class understanding from individual responses	269
Level 3 of Monitoring learning: Monitors learners' answers	272
Level 4 of Monitoring learning: Probes learner understanding during lesson	275
Concluding remarks.....	281
Chapter 7: Portraits of Teaching Practice for Five Student Teachers	284
A portrait of Brenda.....	288
A portrait of Amos.....	304
A portrait of Zanele	318
A portrait of Maggie	333
A portrait of Joseph:	349
Summary of levels of teaching reached by each student teacher.....	363
Non-linear developmental patterns in 'learning to teach'	365
Chapter 8: Relationships between Facets.....	375
Relationship between Knowledge and understanding of content (Facet 1) and Preparation (Facet 2):.....	377
Relationship between Knowledge and understanding of content (Facet 1) and Teaching strategies (Facet 3).....	379
Relationship between Knowledge and understanding of content (Facet 1) and Classroom management (Facet 4).....	382
Relationship between Knowledge and understanding of content (Facet 1) and Monitoring learning (Facet 5):.....	385
Relationship between Preparation (Facet 2) and Teaching strategies (Facet 3):	386
Relationship between Preparation (Facet 2) and Classroom management (Facet 4):	388
Relationship between Preparation (Facet 2) and Monitoring Learning (Facet 5):.....	389
Relationship between Facet 3 (Teaching Strategies) and Facet 4 (Classroom Management)	391
Relationship between Teaching Strategies (Facet 3) and Monitoring Learning (Facet 5):..	393

Relationship between Classroom Management (Facet 4) and Monitoring Learning (Facet 5)	395
The role of subject matter knowledge in ‘learning to teach’	396
The development of teaching as pedagogically reasoned action	398
Chapter 9: Contribution of This Study	402
Developmental patterns of student teaching	402
Implications for teacher education	404
Contributions to teacher education in South Africa	416
Implications for the BEd programme	419
Suggested areas of further research	427
Conclusion	430
REFERENCES	433
Appendix A: Letters of information & consent	446
Appendix B: Interview schedules	451
Appendix C: TE Assessment tools	455
Appendix D: School Experience Principles & Practice	462

LIST OF FIGURES

Figure 4.1: Distribution of final TE marks achieved by 66 student teachers.....	124
Figure 4.2: Diagram showing how Shulman's Model of Pedagogical Reasoning and Action links with the five facets of teaching practice in this study	147
Figure 6.1: Levels of teaching practice across five facets.....	281
Figure 7.1: Position of five student teachers in final mark distribution graph.....	285
Figure 7.2: The development of Brenda's teaching practice over four years of study	290
Figure 7.3: The development of Amos' teaching practice over four years of study	306
Figure 7.4: The development of Zanele's teaching practice over four years of study	320
Figure 7.5: The development of Maggie's teaching practice over four years of study.....	336
Figure 7.6: The development of Joseph's teaching practice over four years of study.....	351

LIST OF TABLES

Table 1.1. Comparative table showing differences and similarities between stages of the models of ‘learning to teach’ reviewed in this chapter.....	22
Table 2.1: Table showing the eight NQF levels divided into three bands of education.....	75
Table 3.1: Summary of Shulman’s Model of Pedagogical Reasoning and Action and the relevant knowledge bases.....	110
Table 4.1 Diversity in terms of race and gender of the 66 BEd (Inter/Sen) student teachers in this study	123
Table 4.2: Table showing the percentage of student teachers within each racial and gender division who were awarded a mark of 75% or higher during their summative TE assessment	124
Table 4.3: The profiles of the eleven students participating in the focus group discussions.	129
Table 4.4: The percentage of difficulties documented in lesson observation reports for the different years of study	142
Table 4.5: Links between the themes that emerged from lesson observation reports, Shulman’s Model of Pedagogical Reasoning and Action, and Shulman’s categories of teacher knowledge	145
Table 4.6: Table showing aspects of Shulman’s pedagogical reasoning and action that are not specifically included in the facets, and an explanation for their omission.....	148
Table 4.7: Table showing relationships between the 11 themes emerging from lesson observation reports, the five defined facets and Shulman’s Model of Pedagogical Reasoning and Action.....	149
Table 5.1: Minimum requirements for teaching loads required of BEd students in different years of their degree (College of Education, 2003, Appendix D, pp. 462 - 469).	162
Table 5.2: Extract from BEd TE requirements, suggesting differences between NQF levels 5 and 6 (College of Education, 2003, Appendix D, pp. 462 - 469).	163
Table 5.3 Similarities and differences in criteria between various TE assessment tools used	166
Table 5.4: Table showing how exit level outcomes (SGB for Educators, 2001) informed criteria in the TE assessment tool used by Wits School of Education	168
Table 5.5 showing relationship between criteria from previous assessment tool and the criteria used for assessment of fourth year student teachers	172
Table 6.1: The percentage of student teachers whose university tutors express concern regarding knowledge and understanding of lesson content for the different years of study	185
Table 6.2: Summary of Facet 1, Level 1: Memorised/generalised knowledge	191
Table 6.3: Summary of Facet 1, Level 2: ‘Need-to-know’ knowledge	195

Table 6.4: Summary of Facet 1, Level 3: Investigated topic knowledge.....	199
Table 6.5: Summary of Facet 1, Level 4: Discipline-grounded topic knowledge and understanding.....	201
Table 6.6: SUMMARY OF FACET 1: KNOWLEDGE & UNDERSTANDING OF CONTENT.....	202
Table 6.7: The percentages of student teachers whose university tutors expressed concerns related to lesson preparation for the different years of study	206
Table 6.8: Summary of Facet 2, Level 1: Focuses on formatting of lesson plan	210
Table 6.9: Summary of Facet 2, Level 2: Devises disjointed lesson steps.....	215
Table 6.10: Summary of Facet 2, Level 3: Plans for coherent lessons	218
Table 6.11: Summary of Facet 2, Level 4: Purposefully plans for learners' needs	221
Purposeful planning in line with learning area goals highly commended Adjustments of lesson to meet needs of learners highly commended	221
Table 6.12: SUMMARY TABLE OF FACET 2: PREPARATION.....	222
Purposeful planning, in line with learning area goals highly commended Adjustments of lesson to meet needs of learners highly commended	222
Table 6.14: Summary of Facet 3, Level 1: Strategies that give information	230
Table 6.15: Summary of Facet 3, Level 2: Strategies that get through the work (with minimal disruption).....	235
Table 6.16: Summary of Facet 3, Level 3: Strategies that maximise learner participation..	239
Table 6.17: Summary of Facet 3, Level 4: Strategies for conceptual understanding	242
TABLE 6.18: SUMMARY OF FACET 3: TEACHING STRATEGIES	243
Table 6.19: The percentages of student teachers whose university tutors expressed concern about classroom management and class control.....	246
Table 6.20: Summary of Facet 4, Level 1: Learner misbehaviour unchallenged	250
Table 6.21: Summary of Facet 4, Level 2: Struggles for class control.....	256
Table 6.22: Summary of Facet 4, Level 3: Explicitly enforces classroom routines	258
Table 6.23: Summary of Facet 4, Level 4: Creates organised learning environments	261
Table 6.24: SUMMARY OF FACET 4: CLASSROOM MANAGEMENT.....	262
Table 6.25: The percentages of student teachers whose university tutor expressed concern about the student teacher's monitoring of learner understanding, for the different years of study	265
Table 6.26: Summary of Facet 5, Level 1: Assumes learning.....	269
Table 6.27: Summary of Facet 5, Level 2: Infers class understanding from individual responses	272
Table 6.28: Summary of Facet 5, Level 3: Monitors learners' answers	275
Table 6.29: Summary of Facet 5, Level 4: Probes learner understanding during lesson	279
Table 6.30: SUMMARY OF FACET 5: Monitoring Learning	280
Table 6.31: Summary of developmental levels of student teaching	282

Table 7.1: Summary of details of student teachers whose portraits will be investigated.....	284
Table 7.2: A comparison of levels achieved by student teachers by the end of their fourth year of study.	364

LIST OF ABBREVIATIONS

Bachelor of Education	BEd
Bachelor of Primary Education	BPrimEd
Council on Higher Education	CHE
Further Education and Training Phase (Grades 10 – 12)	FET
Higher Diploma in Education	HDipEd
Higher Education Quality Committee	HEQC
Intermediate and Senior Phase (Grades 4 – 9)	Inter/Sen
Johannesburg College of Education	JCE
National Curriculum Statement	NCS
National Qualifications Framework	NQF
National Students Financial Aid Scheme	NSFAS
Department of Education (2000). <i>Recognition and evaluation of qualifications for employment in education based on the Norms and Standards for Educators</i> . Pretoria: Government Gazette.	NSE Report
Outcomes Based Education	OBE
Pedagogical Content Knowledge	PCK
Post-Graduate Certificate in Education	PGCE
South African Qualifications Authority	SAQA
Standards Generating Body	SGB
Student Teacher, X ¹ Focus Group Discussion	S X FGD
Student Teacher, X ¹ Reflection on Teaching Experience Essay	S X RTE
Supervising Teacher, X ¹	ST X
Teaching Experience	TE
University of the Witwatersrand	Wits
University of South Africa	UNISA
University Tutor, Focus Group Discussion	UT FGD
University Tutor, Lesson Observation Reports, X ¹	UT LO X

¹ X: Denotes the student teachers' year of study

SECTION A: INTRODUCING THE STUDY

CHAPTER 1: LITERATURE REVIEW AND INTRODUCTION TO THE RESEARCH QUESTION

Although it may take years for teachers to develop sophisticated teaching expertise, the very first class of learners of a newly qualified teacher still has a “right to sound instruction and learners can ill afford to lose a meaningful year of schooling due to an ineffective new teacher, who is ‘learning to teach’ by trial and error” (Bransford, Darling-Hammond & LePage, 2005a, p. 3). By the time prospective teachers are ready to take responsibility for a class, they should be able to design processes that enable learning. However, this is easier said than done. The systematic study of student teacher development is essential if ‘learning to teach’ is to be more than a hit-and-miss affair. This thesis will explore the complexities associated with ‘learning to teach’ and offers an empirically derived model for analysing the development of student teaching.

Teaching Experience as a core component of teacher education

An abundance of literature suggests that a classroom-based practicum, or *Teaching Experience* (TE), has a pivotal role to play in developing student teachers’ classroom practice and their understanding of the nature of teaching (Darling-Hammond et al., 2005; Fraser et al., 2005; Haigh, 2005; Mawoyo & Robinson, 2005; Reddy, 2003; Robinson, Vergnani & Sayed, 2003; Samuel & Pillay, 2003; George et al., 2000; Calderhead & Shorrock, 1997; Yule et al., 1990). A study of TE practices in Lesotho concluded that student teachers are “learning things [on TE] that they could not learn in the college classroom – the real professional skills of handling a class and how to operate as a member of the school community” (Lefoka, Jobo & Moeti, 2001, p. 23). Such sentiments are echoed in local studies. Local teacher education programmes, too, are constructed around a premise that a “large part of learning to become a teacher is developed during the on-site school-based teaching experience” (Samuel & Pillay, 2003, p 148). Reddy’s (2003) study found that student teachers and university tutors alike rate TE as “the most useful part of the teacher education curriculum because it provides hands-on experience” (p. 187).

TE familiarises student teachers with the nature and complexities of classroom life. It also provides them with examples of classroom practice that can be related to theoretical aspects of their teacher education programme (Calderhead, 1988, p. 78). TE can provide a context in which student teachers integrate the theory from university with the practice of the profession (Marais & Meier, 2004, p. 228). The almost unanimous support that TE receives as an invaluable part of teacher education is summed up by McNally et al. (1997), who assert that “there are few certainties in initial teacher education – perhaps one of them is that student teachers need to have experience in teaching in a school” (p. 485).

Potential value of TE in ‘learning to teach’

In spite of the widespread support in the literature for TE, its value to student teachers can vary dramatically. While TE may be a “process of self-discovery and reflection” for some student teachers, it also has the potential to be an “uncoordinated trial-and-error personal experience, an exercise in modelling and imitation; an accumulation of practical tips on class management, or a cementing of pre-existing conceptions and misconceptions” (Calderhead, 1988, p. 78). Although TE sessions “may give future teachers a taste of reality”, it may also lead to some student teachers “foster[ing] bad habits and narrow vision” (Feimennemser, 1983, p. 156).

Without a detailed understanding of how student teachers ‘learn to teach’, the potential value of the TE component of teacher education programmes may not be adequately exploited. In 1969, Fuller suggested that “education courses may be answering quite well questions the student teachers are not asking” and described how teacher education may seem irrelevant in relation to what student teachers perceive their own needs to be (p. 208). Calderhead and Shorrock (1997) echo this concern, suggesting that knowledge about teaching “can seem quite irrelevant to student teachers unless it is introduced at a time when they can appreciate the link between the ideas, the practical problems and their own practice as a teacher” (p. 196). They assert that the value of teacher knowledge depends on introducing

knowledge and learning opportunities to student teachers at an appropriate time in their teacher development.

In contrast, Kagan (1992) perceives the learning during TE to be the *only relevant learning* that student teachers acquire during their pre-service teacher education programmes. She argues that during pre-service education, student teachers should be exclusively involved in acquiring knowledge of learners, establishing a teacher identity, and developing a repertoire of classroom routines. She proposes that university tutors should expect that student teachers will be “obsessed” with class control and that “attempts to force a different focus of attention may be misguided” (p. 163). She therefore questions whether “formal theory is relevant to teachers at any point in their professional development” (p. 163), and urges that teacher education programmes focus on the “procedural, not theoretical, knowledge” that will be of practical use to student teachers during TE (p. 162).²

Although there is overwhelming support for the use of TE in pre-service teacher education programmes, concerns have been expressed that simply sending student teachers into classroom during TE does not necessarily lead to the development of effective teaching practice. This study assumes that TE has the *potential* to be a time in which student teachers meaningfully develop their teaching practice. Such potential can only be fully exploited if university tutors and supervising teachers alike understand the processes involved in ‘learning to teach’ and if TE programmes are designed to support this development.

Hammerness, Darling-Hammond, Grossman, Rust and Shulman (2005b, p. 401) argue that teacher education programmes should be coherent (by linking courses), should integrate theory of coursework with practice during TE, and should be consistent in their view of what constitutes good teaching. They argue that TE is most valuable if done concurrently with coursework, when it leads to increased student understanding and learning and is more likely to impact on student

² Grossman (1992) rejects these assertions, arguing that student teachers grapple with how to effectively teach subject matter alongside their struggle to master classroom routines (p. 173).

teachers' preconceptions about teaching. Yule et al. (1990) suggest that early exposure to the classroom environment enables student teachers to confirm their career choice early. It also provides a context for reflection when beginning student teachers are exposed to educational theory (Yule et al., 1990).

Research into 'learning to teach'

There are several different research thrusts that relate to TE and student teaching. These include approaches to organising TE; the mentoring of student teachers by university tutors and supervising teachers; and the impact of teacher education programmes on the classroom practices of student teachers. This section will review research on student teaching, and the current state of knowledge and understanding of TE and studies related to the process of 'learning to teach'.

Tomlinson (1995) argues that although each student teacher is in some way unique, this is not the case in every aspect of their practice. Consequently, a general developmental understanding of 'learning to teach' may offer useful insights into student teaching. In an attempt to understand the process of 'learning to teach', some researchers have proposed a series of stages describing the patterns that student teachers follow, which suggest that student teachers may follow a developmental trajectory as they 'learn to teach'. Although the identification of developmental stages across the literature is "tentative and uneven", there exist "relatively strong trends that recur" across international studies (Huberman, 1992, p. 123).

The nature of developmental models

Developmental models are simplified representations that organise and interpret systematic observations of changes in human functioning over time (Horowitz, 1987). Because they identify significant manifestations and processes associated with change, these frameworks "stimulate new observation, re-examination of familiar behaviour and enable us to pay more attention to variables we have previously slighted" (Miller, p. 12). Developmental models generally attempt to

address three main aspects of understanding change over time. Firstly, they document observed changes in human functioning. Secondly, they identify aspects of functioning that are related. Successive stages in a model document how relationships are expected to change as development proceeds. Thirdly, models offer an explanation for the changes observed (Miller, 1989). In doing so, developmental models consider the role of early experience on later functioning, and suggest the preconditions necessary for development (Horowitz, 1987). They are therefore intrinsically hierarchical in that they provide a progression or sequence of developmental levels through which all participants must proceed, without which functioning at a higher level can't happen. While some models regard development as a continuous change that occurs smoothly in incremental steps, stage models propose a discontinuous series of stable characteristics, interspersed with unstable periods of transition (Perry, 1970).

Stages should be more than “convenient ways for chunking developmental time”; they should have some inherent properties that reveal an understanding of the developmental processes under investigation (Horowitz, 1987). However, even some developmental stage models acknowledge that development is not always as linear as a sequence of successive stages seems to suggest. In his cognitive developmental theory, Piaget (1952) noticed inconsistencies in which children seemed to be more cognitively advanced in certain domains compared to others. He uses the term ‘*décalage*’³ to describe the uneven rates of development that simultaneously may occur across different knowledge domains (such as logic, language, mathematical thinking and so on). While vertical *décalage* refers to qualitative differences between one stage or development and the next, horizontal *décalage* would indicate that the subject has acquired cognitive operational abilities at a certain level in some domains, but not yet in others. Perry (1970), on the other hand, prefers to describe a sequence of increasingly complex ‘positions’ rather than ‘stages’ in his study of changes in how college students perceive their outlook in relation to other worldviews. He rejects the use of the term ‘stage’ to

³ A French word for ‘time lag’.

avoid an inherent assumption about the duration about a stable state of being. While ‘stages’ imply an exclusive state of development, Perry’s use of ‘positions’ allows the subject to manifest a range of structures simultaneously (p. 48). In this study, I will argue that student teacher development is not adequately represented by a linear sequence of stages, and an alternative model that reflects uneven development is more appropriate. This study will ultimately offer a non-linear model of development that allows for uneven development across different facets of teaching; that is context-sensitive; and furthermore considers complexities associated with teaching and learning.

A number of developmental stage models already form part of the body of ‘learning to teach’ literature. Some models (like those proposed by Feiman-Nemser, 1983; Huberman, 1993; Tomlinson, 1995; Berliner, 1994) span the entire career path of teachers from pre-service to retirement. Others (like the models proposed by Fuller, 1969 and 1975; and Maynard & Furlong, 1993, 1995) focus more on the process of ‘learning to teach’ as experienced by pre-service student teachers and are therefore especially relevant to this study. I will review the developmental models in ascending order of attention given to the complexities associated with ‘learning to teach’ during the pre-service stage of teacher education. The distinguishing characteristics of the models of ‘learning to teach’ to be reviewed are summarised in the Table 1.1, that follows:

Table 1.1. Comparative table showing differences and similarities between stages of the models of 'learning to teach' reviewed in this chapter

	Feimen- Nemser (1983)	Huberman (1993)	Tomlinson (1995)	Berliner (1994)	Fuller (1969); Fuller & Brown (1975)	Maynard & Furlong (1993, 1995)
Development in ‘learning to teach’	‘Learning to teach’ involves confronting misconceptions of teaching acquired through own schooling	‘Learning to teach’ as degree of satisfaction obtained through teaching as a career	‘Learning to teach’ as skill acquisition: increase in competence and fluidity	‘Learning to teach’ as the development of expertise: rule- bound to flexibility in teaching	‘Learning to teach’ as a shift in concerns from self to learners	‘Learning to teach’ as changing conceptions and development of a teacher identity
Comparative stages of ‘learning to teach’	1. Pre-training	1. Stage of Induction: Survival and discovery	1.Unconscious incompetence	-	1. Non-concern	1. Early idealism
	2. Pre-service Challenging preconceptions about teaching		2.Conscious incompetence	1. Novice	2.Survival concerns	2. Struggle for survival
			3.Conscious competence	2. Advanced beginner	3. Mastery of skills	3. Dealing with difficulties
				3. Competent	4. Learner concerns	4. Hitting a plateau
Beyond pre-service teaching	3. Induction: Survival Consolidation 4. In-service Mastery	2. Stabilisation 3. Diversification 4. Serenity 5. Disengagement	4.Unconscious competence	4. Proficient 5. Expert	5.Concerned with impact OR 5.Resistant to feedback	Autonomous teaching

After presenting all the models of 'learning to teach', I will discuss the contribution and limitations of these models in light of the broader body of 'learning to teach' literature. This will be followed by a critique of existing models of 'learning to teach' through which I will identify a literature gap.

Feiman-Nemser's (1983) model of 'learning to teach'

Feiman-Nemser (1983) suggests that the career path of teachers spans four phases. Her model identifies four phases: a *pre-training* phase; a *pre-service* phase; an *induction* phase; and an *in-service* phase. In their *pre-training phase* of learning to teach, student-teachers-to-be are exposed to informal and culturally pervasive "patterns and ideas of teaching and schooling" (p. 152). Feiman-Nemser argues that the *pre-service* phase of teacher education programmes does not do much to prepare student teachers for teaching because "informal influences [from their pre-training phase] are too strong, the time [of the pre-service phase] is too short"

to adequately challenge and rectify misconceptions about teaching that student teachers possess (p. 157). She suggests that pre-service teacher education can “only provide a beginning” and can, at best, only prepare student teachers for their next phase of ‘learning to teach’ by “laying a foundation for learning and teaching” (p.157). Feiman-Nemser argues that the real business of ‘learning to teach’ happens during the *induction* and *in-service* phases of a teachers’ career (p. 157), during which time teachers go through a survival stage, a stage of consolidation, and ultimately a stage of mastery. She argues that this transition takes about five years, by which time, teachers “if they are still teaching, feel confident, secure, and professionally competent” (p. 162).

Huberman’s (1992; 1993) model of the career path of teachers

Huberman (1992) proposes a model that delineates five stages in a teacher’s career, from ‘learning to teach’ to retirement. His first stage, *induction*, is particularly relevant to this study, and will be reviewed in more detail than the other stages.

For the first three years of their teaching career, novice teachers are concerned with their personal selves, and are torn between their professional ideals and the reality they experience in a classroom. The initial stage of teaching is dominated by a dichotomy of *survival* and *discovery*, as beginning teachers “feel their way” (Huberman, 1993, p. 13). These two dimensions coexist, with beginning teachers making a number of discoveries like the experience of having their own class of learners and being a colleague. Huberman argues that the joy of these discoveries enable novice teachers to persevere, and tolerate the distressing fight for survival.

Huberman suggests that a two or three-year period of *stabilisation* follows, where teachers consolidate their pedagogical repertoire. Teachers who are seven to twenty-five years into their career are at a stage where they *diversify*, act as agents of change, and reassess their teaching. About twenty-six to thirty-three years into their career, teachers go through a stage of *serenity*, and ultimately *disengagement*, just preceding retirement.

Tomlinson's (1995) contribution: 'Learning to teach' as skill acquisition

Tomlinson (1995) regards teaching as a "complex but 'open' skill, in which teachers are required to apply their skills to new situations (p. 15). He describes four stages of skill acquisition that he applies to 'learning to teach'.

Phase 1: Unconscious incompetence: Student teachers rely on the understanding of teaching they gained as learners, and are as yet unaware of their misconceptions about teaching and learning.

Phase 2: Conscious incompetence: During this stage, student teachers suddenly realise how much they do not know, and crave a simplistic plan of action or procedure which will enable their initial basic attempts at teaching (p. 25). Tomlinson refers to this frustrating time as the *cognitive phase* of acquiring teaching skills (p. 19). Novice teachers with simplistic views of teaching strive at "getting clear on what to do" (p. 19).

Phase 3: Conscious competence: These student teachers know the concepts and theory of what they need to be doing, but this knowledge is not yet used to guide their actions in new contexts. Student teachers deliberately gather information about what strategies work, and adjust their teaching in response to feedback. Tomlinson (1995) refers to this as an *associative phase* of acquiring teaching skills, where student teachers find out what works, make efforts at remembering strategies, and use feedback to adjust their strategies. Tomlinson asserts that when learning a new skill, like teaching, each strategy is consciously planned and attempted. If student teachers are reflecting on their action adequately, and are able to integrate their own reflections as well as the feedback they receive from learners, supervising teachers and university tutors, they will adjust their strategy accordingly and try again. He calls this the plan-attempt-monitor-reflect (PAMR) cycle.

Phase 4: Unconscious competence: Tomlinson suggests that with reflective experience of teaching attempts, student teachers “gradually find things becoming easier and more intuitive” (p. 19). He refers to this as the ‘autonomous or intuitive phase’ of developing teaching skills. He further suggests that over time, such intuitively acting teachers may lose conscious awareness of their underlying professional knowledge, and may find it increasingly difficult to articulate their practice (p. 25).

Tomlinson makes further contributions in his exploration of strategies related to the mentoring of newly graduated teachers by a more senior teacher, in order to support new teachers actively during their first years of teaching.

Contribution of Berliner (1994, 2000, 2001, 2005): The development of expertise in teaching

Berliner’s model (1994) generates terminology for describing teachers at various levels of expertise, and outlines what it means to be an expert teacher. Berliner rates *experience* as the most important pre-requisite for building expertise within teachers, although eventually, some experienced teachers are far superior to others, and not all experienced teachers necessarily become expert (Berliner, 1994, p. 161). Berliner investigates differences between novices and experts in their perceptions of classroom dynamics. Berliner’s model of teacher development offers useful terminology for the different levels of expertise through which teachers pass, with a few ultimately reaching ‘expert level’ after many years of insightful teaching experience. He suggests that teachers pass through the following five stages of expertise as they develop from novice to expert:

Level 1: Novice

A novice teacher gathers information while trying to learn the tasks associated with being a teacher. Novices tend to be deliberate and rational, as they “learn the objective facts and features” of learners, teaching and the process of learning (Berliner, 1994, p. 165). They tend to be inflexible, as they “conform to whatever rules and procedures they were told to follow” (Berliner, 1994, p. 165). Berliner

contends that novices initially need be given a “set of context-free rules” which suffice until they gain a larger repertoire of personal teaching experience (Berliner, 1994, p. 164).

Level 2: Advanced Beginner

Teachers at this level accumulate episodic and case knowledge, which they are able to integrate with verbal feedback. They develop strategic knowledge of when to follow rules and when to break them (Berliner, 1994, p. 165). He proposes that different types of teaching may be appropriate at different stages of development, suggesting, “perhaps teachers must learn to be structured before they can be unstructured; perhaps they must control before they can improvise” (Berliner, 1994, p. 174).

Level 3: Competent

Competent teachers make “conscious choices” about what they are going to do, setting “rational goals” and they are able to “choose sensible means for reaching the goals they have in mind” (Berliner, 1994, p. 166). In addition they are able to prioritise and use their judgement about what is important and should be attended to, and what can be ignored. At this stage, teachers begin to allow the context to guide their responses and decisions (Berliner, 1994, p. 165) and tend to “feel more responsibility for what happens” in their lessons (Berliner, 1994, p. 166).

Level 4: Proficient

Berliner asserts that after some years of experience, a “modest number” of teachers become proficient. Their intuition becomes prominent as their wealth of experience allows them to view situations holistically and to recognise similarities and patterns amongst events. Such teachers will be analytic and deliberative in deciding what to do (Berliner, 1994, p. 166).

Level 5: Expert

‘Expert’ teachers respond to cues and nuances that learners or beginner student teachers would not notice. This stage is characterised by a seemingly effortless

fluid performer, who has an intuitive grasp of classroom situations, and is able to “sense in non-analytic and non-deliberative ways the appropriate response” to be made in any given situation (Berliner, 1994, p. 166).

In 1994, Berliner suggested it takes about five years for teachers to develop *competence*, and consequently he argued that teacher education programmes have a limited impact, in that they “can do no more than turn out educable novices and advanced beginners” (Berliner, 1994, p. 173). More recently, in responding to “those who bash teacher education”, Berliner maintains that teacher education can “offer the novice teacher[s] the findings, concepts, principles, technologies and theories from educational research” that they need before entering the profession, and that “high-quality teacher education programmes are profoundly challenging, indispensable, inaugural components in the development of accomplished performance by teachers” (Berliner, 2000, p. 358). There therefore appears to be a significant shift in what he believes initial teacher education is able to offer student teachers.

A revised vision of teaching expertise: Adaptive experts

Instead of striving to become ‘routine experts’ (who, with experience, become more and more efficient with their old routines in a static context), Berliner now suggests that student teachers need to become ‘*adaptive experts*’ (Berliner, 2001; Hammerness et al. 2005a).⁴ Adaptive experts are flexible because they continuously add depth and breadth to their knowledge and skills in the context of an ever-changing world, bringing the “expertise they possess to bear on new problems, and finding ways to tie the new situations they encounter to the knowledge base they have” (Berliner, 2001, p. 473). Teachers become *adaptive experts* when they are able simultaneously to be *efficient* in their ability to perform tasks, and *innovative* in moving beyond existing routines, rethinking key ideas and transforming established practices. These two dimensions of being an adaptive expert can either be complementary or obstructive. For example,

⁴ Berliner, writing with Hammerness and others (2005a), makes a contribution to our understanding of how student teachers learn and develop into adaptive experts.

although increased efficiency can make way for innovative practice, sometimes a well-established routine (that is efficient) may block innovation, or alternatively, an innovative way of doing something may seem less efficient. *Adaptive experts* are involved in a process of life-long learning, where the need to implement and embrace changes is not perceived as failure, but as an inevitable aspect of effective teaching.

In recent work on the development of expertise, Berliner (2001) acknowledges that his previous work ignores the role of talent and “the power of context” in influencing the development of “accomplished, exemplary or expert teachers” (p. 465, 466). He argues that, “policies from principals, superintendents, and school board, along with the expectations of the community...subtly, but powerfully affect teachers’ attitudes, beliefs, enthusiasm, sense of efficacy, conception of their responsibilities and teaching practices” (Berliner, 2001, p. 465-466). He therefore concludes that the three variables in the development of expert teaching are context, talent and deliberate practice. In his recent work, Berliner acknowledges the pivotal roles that “deeper understandings of subject matter knowledge” plays in characterising the attributes of an accomplished teacher (Berliner, 2001, p. 469; Berliner, 2000).

Fuller (1969); Fuller and Brown (1975): ‘Learning to teach’ as shifting concerns

In 1969, Fuller made an influential contribution in outlining a “developmental conceptualisation of teacher concerns” (Fuller, 1969, p. 218). He describes three (and later four) phases in which student teachers’ concerns shift substantially as they ‘learn to teach’.

Fuller describes a stage of *non-concern* with the specifics of teaching, in which student teachers think of teaching “in terms of their own experiences” as learners and as university students, prior to their having direct contact with learners (Fuller, 1969, p. 219). Fuller and Brown (1975) later expand on this stage, suggesting that initially student teachers identify with the learners, and are “often

unsympathetic, even hostile, critics of the classroom teacher whom they are observing” (p. 38).

However, Fuller claims that once student teachers themselves attempt to teach, and encounter the realities of the classroom situation, their concerns shift to *their own survival*. Student teachers at this stage are primarily concerned about their ability to control the class. They also have concerns about the adequacy of their content, expectations of them and evaluation of their performance (Fuller, 1969, p. 211, p. 220; Fuller & Brown, p. 38). Fuller finds that anxieties related to the survival stage are not discussed freely and openly with university tutors. This stage is a “period of great stress”, exacerbated by complex relationships with both the university tutor and the supervising teacher; and also by “conflicting value orientations” of the university and the schools (Fuller & Brown, 1975, p. 38).

In 1975, Fuller and Brown introduce an additional stage. They suggest that once student teachers have resolved their survival concerns, they shift their concerns to the *mastery of skills* that support the teaching situation. They become concerned with “methods and materials” (Fuller & Brown, 1975, p. 39). During this stage, Fuller and Brown claim that student teachers “find they learned content well enough to reproduce it on an exam, but not well enough to explain it to someone else, to answer questions, or to give examples” (p. 39).⁵

Fuller and Brown (1975) assert that some student teachers reach a stage at which they shift their concern from the mastery of their tasks to concerns about their learners. They become concerned about the impact they are having on learners, and are responsive to feedback. (p. 217, p. 221). Student teachers become concerned with how much learning is taking place, the social and emotional needs of their learners, and relating to them as individuals (Fuller and Brown, 1975, p. 39). These teachers continually look for ways to increase their effectiveness. However, not all student teachers necessarily shift their concern to learners and

⁵ Shulman might suggest that this type of understanding is subject matter knowledge without pedagogical content knowledge. See p. 99.

learning; some settle into existing routines, becoming resistant to change or feedback (Fuller & Brown, 1975, p. 37).

The work of Fuller and Brown (1975), although dated, is extremely relevant to this study, because their model influences many current models of 'learning to teach', including that of Feimen-Nemser (1983), and Maynard and Furlong (1993, 1995).

Contribution of Maynard and Furlong (1993, 1995): 'Learning to teach' as identity development and changing conceptions

Maynard and Furlong studied the development of student teachers in the United Kingdom during TE in a one-year postgraduate certificate of education (PGCE). They contend that the development of student teachers from 'novices' to 'professional educators' depends on the "interaction between individual students, their teacher education programme and the school context" in which they undertake their TE. Maynard and Furlong find that student teachers think differently about aspects of their teaching as they 'learn to teach'. While they acknowledge that "a student's learning and progress is complex, erratic and in one sense unique to them as an individual," they do find a "discernible pattern to students' development that was reflected in their changing concerns and in their behaviour" (Maynard & Furlong, 1995, p. 70). Their model describes five broad developmental stages that student teachers pass through, although their progression over stages need not be linear.

Stage 1: Early idealism

Maynard and Furlong (1995) propose that before student teachers go into a classroom on their first TE, they have definite ideals of the kind of teacher they would like to be and the nature of their relationship they expect to have with their class. This stage documents their expectations before any classroom experience. At this stage, student teachers commonly perceive teaching to be "essentially a matter of 'telling'" and the learning process is viewed as "something that just

happen[s] without a great deal of effort on their part” (Maynard & Furlong, 1995, p. 76).

Stage 2: “Personal survival”

Maynard and Furlong (1993) found that student teachers who had embarked on actual classroom teaching “frequently become obsessed with their own survival” and their initial idealism fades (p. 69). At this stage, student teachers observe teacher actions but do not comprehend their supervising teacher’s thinking. Student teachers therefore “cannot make sense of the noise and movement around them; they do not understand the significance of the [supervising] teacher’s actions” (Maynard & Furlong, 1995, p. 72). This stage is characterised by student teachers equating teaching with class control and putting “all their effort into keeping the class quiet” (Maynard & Furlong, 1995, p. 80). Student teachers tend to rush through explanations when they do have the children’s attention. At this stage, “the content of the activities they set for their pupils were often devised, or modified, primarily as a way of keeping control” (Maynard & Furlong, 1995, p. 80). Other student teachers display a tendency to repeat instructions continually to individual learners or smaller groups. Maynard and Furlong (1993) suggest that this coping mechanism derives from a fear that the class will not respond, further eroding the (already frail) credibility of the student teacher. Student teachers at this stage tend to react to the situations defined by the learner, rather than take charge and define the situation themselves. They appear “frightened to deviate from what they had planned” (Maynard & Furlong, 1995, p. 81). During this phase, student teachers realise that contrary to their initial expectations, they cannot yet have a friendly relationship with their learners, and need to develop a professional teaching identity. This stage is characterised by the struggle for survival and feelings of powerlessness within the classroom. It is a time of great stress.

*Stage 3: “Recognising difficulties” or “Dealing with difficulties”*⁶

⁶ There are slight variations in the names of the stages between their work in 1993 and 1995.

During this stage, student teachers “focus... much of their attention on teachers’ outward teaching strategies and organisation” (Maynard & Furlong, 1995, p. 86). They attempt to adopt the actions and behaviour of a more experienced teacher, fitting in with the supervising teacher’s norms and expectations. Some even copy their supervising teacher’s style, although it may be at odds with their initial idealised image of themselves as a teacher. Compensating for their lack of knowledge, they attempt to control the class by elaborate preparation, often taking the form of “a heavy reliance on worksheets” that “keep the children occupied and in their places” and provide “visible evidence of work completed” (Maynard & Furlong, 1993, p. 86).

Although these actions mimic those of experienced teachers, they are performed without the underlying understanding of the reasons for the actions or choices. This mimicry progresses to the stage where the student teacher begins to develop a teacher identity that commands respect and conveys a sense of the right to control the class.

Student teachers tend to feel that their attempts at teaching are a performance, where every weakness is highly visible to learners, teachers and university tutors alike. More specifically, they strive to give an impressive performance that they perceive will signal competence to both the supervising teacher and the university tutor. These student teachers tend to dominate the lessons with lengthy explanations and discussions. In their pursuit of looking competent, student teachers tend not to take ownership of difficulties they encounter, passing blame to the learners, the context of the school or the lack of adequate resources (Maynard & Furlong, 1993).

Sometimes supervising teachers collude with the student teachers to present an image of competence to the university tutor, for example by removing disruptive learners from the class for the duration of the university tutor visit (Maynard & Furlong, 1993). Wanting to be seen as competent, student teachers may become overwhelmed and confused by conflicting advice and differing demands from

their supervising teachers and university tutor. Their obsession with assessment may detract from the TE as a formative learning opportunity.

Stage 4: “Hitting a plateau”

Once student teachers have “basic management and control procedures” established, they believe “they have found a way of teaching that seems to work, and they are going to stick with it” (Maynard & Furlong, 1993, p.72). At this stage, student teachers are satisfied they are teaching effectively by following an invariant lesson structure that gets learners through the work. Maynard and Furlong suggest that such mechanical teaching is a normal stage of ‘learning to teach’, and that it is the job of supervising teachers and university tutors to identify student teachers who have stagnated and challenge them to ‘move on’.

Student teachers at this stage tend to use a few teaching strategies without much variation. Stagnation in their teaching may occur when the relief of ‘getting a lesson right’ is so enormous that the student teacher clings to the particular strategy or lesson format. Student teachers take inappropriate short-cuts, give less thought to their planning, and enthusiasm to experiment seems to wane (Maynard & Furlong, 1993).

At this stage, student teachers are not yet “engaging with the quality of the learning experiences” they devise for learners (Maynard & Furlong, 1995, p. 90). They perceive a lesson to have ‘worked’ if learners “enjoyed it, or seemed interested” (Maynard & Furlong, 1995, p. 90). However, certain student teachers appear to “hold a greater understanding of the complexity of teaching and learning,” but are often unable to “achieve sufficient control over the teaching situation to be able to put their beliefs into practice” (Maynard & Furlong, 1995, p. 91).

Stage 5: “Moving on”

Once student teachers have gained a basic competence and confidence in classroom management, and have established a degree of class control, they are

ready to 'move on'. With encouragement from the supervising teacher and university tutor, they begin experimenting with various ways of organising the classroom, different subject matter, teaching strategies and techniques (including learner enquiries and investigations), and show concern for pupil learning (Maynard & Furlong, 1993, p. 73). Learners are now regarded as active participants in the lesson. The transmission of content is no longer the sole focus of the lesson – rather the content becomes a vehicle for active learning. At this stage, Maynard and Furlong (1993) suggest that student teachers feel less pressure to conform to the teaching style of their supervising teachers, and display more flexibility and initiative in planning lessons. They claim that at this stage, student teachers need to be challenged to go beyond the immediate tasks at hand. They are to consider instead the purpose of their lesson in terms of pupil learning, the relevance of the information they are teaching, the reasons behind their selection of strategy, and means of assessing that learning has happened.

Maynard and Furlong acknowledge that “when planning, interacting or responding to problems”, student teachers need to “balance considerations” of subject matter knowledge, learners, strategies, and the situation, or context of the school (Maynard & Furlong, 1993, p. 73). However, they also maintain that “in reality, [student teacher]s’ decisions will be constrained by their particular stage of development” (Maynard & Furlong, 1993, p. 74).

Autonomous teaching

Maynard and Furlong (1995) indicate that student teachers ultimately develop ‘autonomous teaching’ in which they take responsibility for their own professional development; broaden their repertoire of teaching strategies and consider the social, moral and political dimensions of their teaching.

Maynard’s subsequent research into ‘learning to teach’

In subsequent research, Maynard (1996) investigates the role of primary school teachers as mentors of subject matter knowledge. She suggests that, initially, student teachers may need to “model ‘ready-made’ tasks, and, importantly, to

explore why these are considered appropriate and effective” (Maynard, 1996, p. 8). At a later stage, student teachers may be able to construct their own activities in the subject areas in which they feel competent and confident. She finds that in terms of using subject matter knowledge in teaching, student teachers move from ‘imitation’ to ‘exploration’ to ‘transformation’ (Maynard, 1996, p. 8). Maynard links these findings to her previous research with Furlong, but does not assimilate them into their stage model, or fundamentally reconstruct that model in the light of her considerations of the role that student teachers’ subject matter knowledge plays in their ‘learning to teach’.

Contributions and limitations of existing models of ‘learning to teach’

Models of ‘learning to teach’ suggest that student teachers demonstrate changing concerns, cognition and skills as they develop their teaching practice. In the previous section, six models of ‘learning to teach’ have been examined. They will now be compared, contrasted and discussed in light of issues arising from the broader body of ‘learning to teach’ literature. From a review of the literature, I have identified five aspects of ‘learning to teach’ that developmental models should address. They should consider how student teachers develop their teaching over time; consider how the diversity of student teachers and their prior educational experiences affects the process of ‘learning to teach’; consider how the context of the school / class affects student teaching; portray the complexities involved with teaching; and consider how increasing teacher knowledge underpins teaching action. I will now review literature relating to each of these issues, and assess the extent to which the presented developmental models of ‘learning to teach’ address these issues.

(i) Consider the development of teaching over time

The developmental models that have been reviewed try to generalise the process of ‘learning to teach’, so that it can more readily be understood. However, models, by their nature, are simplifications of reality, and the linear stage models

presented here all suggest a single developmental trajectory. Each model of 'learning to teach' considers how student teachers change over time, but offers a differing conception of what constitutes development. For example, in Tomlinson's and Berliner's models, expertise in teaching is regarded as a fluid performance, in which teachers intuitively identify and respond to patterns of learner behaviour. Fuller and Brown's model suggests that effective teachers are concerned about learning, and improve their own practice through being responsive to the feedback they receive from their learners. Maynard and Furlong propose that student teachers think about aspects of their teaching in different ways as they develop. For example, they suggest that student teachers conceive of learners first as part of a group and then as individuals; they perceive content first as a means of control and then as a vehicle for learning. In Maynard and Furlong's model, development is tracked by these changes in the conceptions of student teachers over time, and is largely influenced by the professional relationships student teachers form with their learners, their supervising teacher and their university tutor.

Whereas the other models of 'learning to teach' describe developmental changes associated with pre-service teachers, Feiman-Nemser's model (1983) contends that the impact of teacher education programmes on student teachers is negligible, with the real 'learning to teach' happening during the induction and in-service phases. Berliner (1994), too, asserts that universities can do no more than "turn out educable novices and advanced beginners" ⁷(p. 173) who are able to learn from their teaching experiences. Darling-Hammond (2006a) argues that such criticism abounded during times when teacher education programmes were relatively weak interventions, and that its continued validity depends on the specific nature of the teacher education programme. A study by Entwistle, Skinner and Entwistle (2000), for example, empirically found that one such teacher education programme had little effect in changing firmly held conceptions of what the student teachers believed to constitute "good teaching practice",

⁷ Quote already used on p. 25.

although they were better able to articulate their conceptions after their teacher education courses. Other research (e.g. Wood, 2000) empirically documents the changing conceptions of student teachers during their TE sessions, whereby student teachers cease seeing teaching as an activity where they “impart knowledge”, and come to regard teaching as an activity in which they “prepare learners to use knowledge” and help learners to become “aware of their own thinking” (Wood, 2000, p. 84). In subsequent writing, both Feimen-Nemser (2001) and Berliner (2001) revise their position on what may be expected from initial teacher education programmes.

Emerging research shows that certain teacher education programmes are producing newly qualified teachers who “can act on their commitments; who are highly knowledgeable about learning and teaching and who have strong practical skills” (Darling-Hammond, 2006a, p. 5). Recent work by Darling-Hammond (2005; 2006a; 2006b) explores characteristics of ‘powerful’ teacher education programmes that produce sought-after, competent graduating teachers. She argues for tight coherence and integration between courses within a teacher education programme, and strong links between these courses and TE; extensive and intensely supervised TE sessions in which coursework is integrated and reinforced; and strong relationships with schools where teachers model good teaching practice and serve diverse learners effectively. Although pre-service education cannot fully develop the entire repertoire of knowledge, skills and attitudes required for optimal teaching, it has the potential to lay a foundation for life-long learning of how to teach (Hammerness et al., 2005a; Berliner, 2001; Darling-Hammond, 2006a).

While the concerns and thoughts of student teachers may surface during post-observation discussions, they may not be visible to university tutors during the observed lesson itself. Maynard and Furlong’s model describe how, at various stages, student teachers use teaching strategies, manage their classes and relate to their learners. To a large extent, then, models of ‘learning to teach’ are not of a form that university tutors can use to understand the student teaching they observe

during TE, although some provide insight into what student teachers may be feeling or thinking.

Some models (e.g. Maynard & Furlong, 1993, 1995; Huberman, 1992) suggest that student teachers move between broad stages of development. Other models (e.g. Fuller & Brown, 1975; Feiman-Nemser, 1983; Berliner, 1994) describe discrete linear stages, some of which have time frames attached. Fuller and Brown's model offers a linear developmental trajectory of 'learning to teach', but a divergence in the paths that teachers may take once their teaching practice has developed. Fuller and Brown suggest that during the course of their careers, teachers either become stuck in routines, or become responsive to feedback and continually look for ways to increase the impact of their teaching. Their model suggests that stages of 'learning to teach' are discrete and linear, but that the career trajectory of a teacher is not.

(ii) Consider the diversity of student teachers and their prior educational experiences

One recurring theme through the 'learning to teach' literature is the recognition that student teachers entering teacher education programmes possess pre-existing notions of what teaching entails. These deeply rooted perceptions and expectations are based primarily on their own experiences as learners; and on those life experiences during which they worked previously with children (Lortie, 1975, Tomlinson, 1995; Calderhead & Robson, 1991; Soudien, 2003).

University tutors and supervising teachers cannot, therefore, assume that student teachers know nothing about teaching, and treat them as '*tabulae rasae*'⁸ – even during their first TE session. Furthermore, the diversity of student teachers' dispositions, reasons for entering teacher education and their experiences as learners are highly varied, and so their conceptions of teaching may be similarly diverse.

⁸ Blank slates

Several challenges that face student teachers who are learning to teach have been identified by Hammerness et al. (2005a) and Darling-Hammond (2006b). Learning to teach “requires new teachers to understand teaching in ways quite different from their own experience” as learners, and to “understand and respond to the dense, multi-faceted nature of the classroom” (Darling-Hammond, 2006a, p. 35). Student teachers who perceive teaching as a series of straightforward routines misunderstand the complexities involved in teaching and learning (Hammerness et al., 2005a, p. 370). The initial challenge that student teachers encounter in ‘learning to teach’ is to overcome problematic perceptions about the nature of teaching and learning that they acquired during their own schooling.

Stage models imply that there exists a universal developmental trajectory involved in the process of ‘learning to teach’. Contesting this, Hoban (2002) argues that it is naive to think of teacher learning as a process “independent of who teachers are, the culture in their schools and the experiences they bring” (p. 2). Given the diverse nature of student teachers, Elliot and Calderhead (1993) postulate that “it is likely that some will be quite advanced in some dimensions and novices in others...Thus it is unlikely that there would be a uniform linear progression in all domains of development as suggested by the stage models. Rather, what is more likely, is development across a range of dimensions at different times for different students” (Elliot & Calderhead, 1993, p. 173). Nonetheless, Elliot and Calderhead do not suggest what these ‘different dimensions’ could be, or how ‘development across a range of dimensions’ could manifest ‘at different times for different student [teachers]’.

It is well documented that student teachers come into teacher education with vastly different dispositions, interests, academic backgrounds, communication and social skills, attitudes, perceptions and knowledge bases (e.g. Lortie, 1975; Shulman, 1987a; Calderhead & Shorrock, 1997). Feiman-Nemser’s model does consider the diversity of student teachers, and argues that it is precisely these initial conceptions of teaching that make pre-service ‘learning to teach’ especially

difficult. Her model suggests that pre-service programmes can do no more than challenge the existing conceptions that student teachers possess, and prepare them to learn from their experiences in the classroom. In comparison, the research conducted by Maynard and Furlong (1995) finds that student teachers do change their conceptions as they develop during TE, but that their rate of development “is profoundly influenced by personal factors” (p. 98). More specifically, their development is influenced by “the attitudes and beliefs they hold, and the way these interact with the attitudes and beliefs of their supervising teacher and the university tutor” (p. 98). Still, in spite of these “profound influences”, Maynard and Furlong still identify a universal series of developmental stages, although allowing student teachers to fluctuate between stages, as they ‘learn to teach’.

Other existing models of ‘learning to teach’ (such as those proposed by Huberman, Tomlinson, Berliner and Fuller & Brown) do not consider these initial differences. The linear natures of their models suggest a common developmental experience, regardless of differences in initial conceptions of teaching and learning, abilities and degrees of knowledge. The implication of single trajectory models is that these differences do not impact significantly on the developmental processes of ‘learning to teach’.

(iii) Consider how the context of the school / class affects student teaching

In many studies, both locally and internationally, it was found that a capable, encouraging and supportive supervising teacher is regarded by student teachers as one of the most important enablers of their development (Haigh, 2005; Robinson, 2003; Reddy, 2003; George et al., 2000). Robinson (1999) found that some student teachers find their supervising teachers to be “approachable, open to new ideas, willing to engage in dialogue, creative, well acquainted with their subject matter, friendly, supportive and helpful” (p. 196). On the other hand, other student teachers find that their supervising teachers “feel intimidated, and [can be] unsupportive of student teachers’ attempts to experiment with cooperative learning strategies” (Robinson, 1999, p. 196). Marais and Meier (2004) found that student teachers experience their TE sessions “positively” when they are assigned

to supportive and caring supervising teachers. They experience TE “negatively” when they have poorly behaved learners or too heavy a teaching load, when they are used as ‘substitutes’ for absent staff members, or are allocated to supervising teachers who are either incompetent or have a negative attitude towards teaching as a profession.

Quick and Sieborger (2005), through probing the perceptions of student teachers and supervising teachers, identify three factors that significantly improve the quality of supervision for student teachers during TE. They suggest that these factors are improved communication between the student teacher, university tutor and supervising teacher through formally structured arrangements; improved interactions and relations between the schools and the university; and lesson observation conducted by subject specialists. Their findings echo the conclusions of Haigh (2005), who argues that high levels of communication and discussion between student teachers and supervising teacher/university tutor generally enable student teachers in ‘learning to teach’. However, other personal factors (such as the dispositions of student teachers) will determine whether a particular experience or circumstance acts to further enable or hinder their development.

The challenges student teachers may confront during TE include: a lack of support from supervising teachers; large sizes of classes that student teachers are expected to teach; lack of university tutor commitment to the TE programme, and student teachers and university tutors alike finding TE an unmanageable workload (Lefoka et al., 2001). Another study suggests that student teachers’ progress is especially hampered when supervising teachers interfere in their lessons and do not discuss their observations or teaching with them (Boz & Boz, 2006). They stress the importance of assigning student teachers to carefully selected supervising teachers who are willing to provide student teachers with opportunities to teach, and provide feedback on their teaching.

Although Berliner’s (1994) model acknowledges that student teachers become more responsive to learners over time, it does not consider the impact of vastly

differing contexts on how student teachers develop. It also does not allow student teachers to follow different paths of 'learning to teach' that may ensue from substantially different preconceptions of what teaching entails that student teachers may possess. However, in 2001, Berliner concedes that the impact of context had been omitted in his previous work. He acknowledges that context "subtly but powerfully" affects teaching practice (p. 466). Nonetheless, he does not elaborate how such contexts might affect student teacher development.

Whereas other models (e.g. Tomlinson and Fuller & Brown) ignore the milieu of the school, Maynard and Furlong (1993, 1995) consider how the context in which the student teacher is placed affects their development. In their Stages 2 (Recognising difficulties) and 3 (Hitting a plateau), they recognise that the context of their TE placement directly impacts how student teachers 'learn to teach', as they initially adopt the attitudes and approach of the supervising teacher, even mimicking their actions to gain some measure of class control. Maynard and Furlong include the school context as one of four domains in which practical teaching knowledge develops.⁹ They assert that "when planning, interacting or responding to problems, [student teachers] need to balance considerations of these four [domains]. In reality, when planning, interacting or responding to problems, decisions or responses of student teachers during their classroom teaching will be *constrained by their particular stage of development*"¹⁰ (Maynard & Furlong, 1993, p. 74). However, the authors concede that when student teachers are placed in difficult contexts, they may revert to a previous stage of development (Maynard & Furlong, 1995, p. 98).

(iv) Portray the complexities involved with teaching

Shulman argues that teaching is "perhaps the most complex, most challenging, and most demanding, subtle, nuanced, and frightening activity that our species has

⁹ The other three domains are the students (or learners) in the class; subject matter knowledge; and knowledge of strategies (Maynard & Furlong, 1993, p. 73-74).

¹⁰ Author's emphasis

ever invented” (Shulman, 1997b, p. 504). Shulman (1997a) suggests that a teacher coping with the complexity of everyday classroom teaching is equivalent to a doctor coping in an emergency room of a hospital during a natural disaster (p. 258). Part of the complexity of teaching is that teachers simultaneously cope with diverse learners, multiple goals and ever-changing “situations, learning needs, challenges, questions and dilemmas” (Darling-Hammond, 2006, p. 39). This view of teaching means that during TE sessions student teachers need to gain knowledge of “much more than simply the practising of planning and teaching lessons” (McIntyre & Hagger, 1993, p. 94).

When student teachers perceive teaching to be a straightforward and mechanical endeavour, they do not yet understand the complexity of enabling others to learn. Student teachers at Maynard and Furlong’s Stage 4 (Hitting the plateau) “need a great deal of support and challenge” in order to ‘move on’ (Maynard and Furlong, 1995, p. 98). The authors found that only through being challenged did many student teachers “come to appreciate the complex nature of teaching and learning” and could then “begin to develop what teachers and tutors considered to be more ‘appropriate’ practical knowledge” (p. 98). Maynard and Furlong therefore argue that a conception of teaching as a complex task precedes the development or acquisition of practical knowledge for teaching.¹¹

Maynard and Furlong (1995) acknowledge the complex nature of teaching. Their stages are not discrete and linear, but rather describe “broad patterns of development” across which student teacher development is likely to be “fragmentary and erratic” (p. 98). They argue that the perception of teaching as a complex undertaking is central to a student teacher’s development.

Hoban (2002) recognises the trend of many models with traditional conceptions of teaching to regard teacher development mechanistically and simplistically as a “linear step-by-step process”, and to ignore the inherently complex and non-linear

¹¹ Student teacher misconceptions about complexities of teaching and the necessity of challenging these will be explored further in Chapter 3. See pp. 95 - 98.

nature of teaching and learning (p. 68). He suggests that a focus on *relationships between interacting elements* allows “insight into the dynamics of complexity” within a classroom context (p. 22). Attempts at educational change that involve learning how to do something new in a classroom often “have consequences for other aspects of classroom practice” (Hoban, 2002, p. 2). Although Hoban’s work focuses on in-service teacher development, rather than ‘learning to teach’, his views are nevertheless relevant to this study, in that he regards teaching as a non-linear process embedded within complex relationships.

(v) Consider how increasing teacher knowledge underpins teaching action

From the 1960s until the mid 1980s a major drive underpinning research in teaching was to establish the characteristics of an effective teacher. Cochran-Smith (2001) sums up the key questions directing this research thrust as follows: “What are the teaching strategies and processes used by effective teachers, and what teacher education processes are most effective in ensuring that prospective teachers learn these strategies?” (p. 3).

It is within this tradition that Reynolds (1992) attempts to describe “what beginning teachers should know and be able to do” (p. 1). She suggests that by the time they qualify, beginning teachers should have knowledge of the subject matter they are to teach; a disposition to find out about their learners and schools; knowledge of teaching strategies; knowledge of appropriate pedagogy and a disposition for reflection (p. 26). She, furthermore, proposes what beginning teachers should be able to do, including the capacity to plan lessons; develop a rapport with learners; establish and maintain rules and routines; maintain a conducive learning environment; assess learning and be able to reflect on learner responses (p. 26). This body of research attempts to demarcate the skills that teacher education programmes may aim to develop in their student teachers.

With reference to the studies on what constitutes *competence* in student teaching, Rath and Lyman (2003) suggest that it is equally important to define what

constitutes *incompetence* in student teaching, as many incompetent students graduate (in the USA), because “the markers to distinguish competent from incompetent student teachers are not distinct and it is difficult to make a high-stakes judgement about an individual student armed only with vague decision rules” (p. 208). They warn that the use of terms such as ‘excellent’ in student teacher TE evaluation forms may make it difficult for supervising teachers and university tutors to understand what constitutes incompetence in student teaching. They describe *incompetence* in teaching as “acts of commission or omission on the part of the teacher that interfere with the learning processes of learners or that fail to advance them” (Raths & Lyman, 2003, p. 211). They propose that such “acts of commission or omission” include a teacher’s lack of subject matter knowledge; inability to incorporate feedback from previous lessons into subsequent planning; inability to relate to learners, and not engaging learners in high-quality active learning.

In 1987, Shulman commented that most research on what constituted effective teaching “dwells on the teacher’s management of the classroom” (p. 84). His observation that few descriptions “give careful attention not only to the management of [learners] in classrooms, but also to the management of ideas within classroom discourse” (Shulman, 1987b, p. 84), led to a recognition that research on effective teaching “ignored one central aspect of classroom life, the subject matter” (Shulman, 1986, p. 194). He therefore identified subject matter knowledge and the teaching of content as “the missing paradigm” in the study of teaching (p. 195). Shulman (1987b) addressed this ‘missing paradigm’ by defining Pedagogical Content Knowledge (PCK) as a “blending of content and pedagogy into an understanding of how particular topics, problems, or issues are organised, represented, and adapted to the diverse interests and abilities of learners and presented for instruction” (Shulman, 1987b, p. 93). He describes this “special amalgam of content and pedagogy” as “uniquely the province of teachers, their own form of special understanding” and in so doing, identified a professional knowledge base for teaching (p. 92).

In the ‘learning to teach’ literature reviewed, teachers’ understanding of subject matter knowledge and teaching of content is conspicuous by its absence.¹² Certain models of ‘learning to teach’ (such as Feimen-Nemser, Huberman, Berliner, Tomlinson and Fuller & Brown) do not at all acknowledge the role that student teachers’ subject matter knowledge plays in determining how they learn to teach. Maynard and Furlong (1993, 1995) include knowledge of subject matter as one of four domains in which practical teaching knowledge develops. They argue that degree of subject matter knowledge is a dependent variable, and will be constrained by the student teacher’s stage of development. This position does not support Shulman’s assertion that a teacher’s subject matter knowledge and PCK are central to the very act of teaching itself. Maynard and Furlong’s model is largely one of generic development, which focuses on how student teachers learn to develop their identity as a teacher, manage classrooms, and use teaching strategies. However, this model does not reveal how student teachers develop and use increasingly sophisticated notions of PCK.

Critique of models of ‘learning to teach’

A two year study conducted by Calderhead and Shorrock (1997) describes the progress of twenty student teachers from two different teacher education programmes: a two-year school-based teacher training course, and a one-year PGCE followed by a year of fulltime teaching. This study offers insight into “the factors that motivated the students to come onto the course, highlighting what they extracted from their experiences in colleges and in school, and illustrating how they grappled with the everyday difficulties of learning to teach” (Calderhead & Shorrock, p. 155). Their study finds that “while some students did progress through distinct stages, others did not.”¹³ At times, the stages are not as distinct as one might imagine. And, of course, some students even at the beginning of the

¹² ‘Subject matter knowledge’ will be used to refer to broad disciplinary insights and understanding; whereas the term ‘content’ will refer to the knowledge of a topic of a lesson.

¹³ The stages referred to are those as suggested by Fuller & Brown (1975); Berliner (1994) and Maynard & Furlong (1995). See pp. 21 - 35.

course seemed to have quite advanced ways of thinking about teaching and did not report the usual teacher concerns” (p. 186). This study led its authors to conclude that “stage models are useful heuristics in highlighting the complexity of teaching and the possible routes of professional development, but the diversity of routes in becoming a teacher is wide, the people and the situations involved are different, and attempts to reduce learning to teach to a few stages inevitably remain broad generalisations” (p. 186).

Existing models of ‘learning to teach’ as reflected in the literature review do not all take sufficient cognisance of the diversity of student teachers themselves, the nature of content, the impact of the context, and complexities of teaching. It has been argued that the models of ‘learning to teach’ lack relevance to what university tutors observe when they see student teachers during TE, namely, content dimensions of teaching. I am therefore suggesting that for a model of ‘learning to teach’ to be of practical use to university tutors, it needs to consider how student teachers’ understanding of lesson content, and indeed, subject matter knowledge as a whole, informs the way in which lessons are planned and delivered. Within the ‘learning to teach’ literature,¹⁴ then, there is also a ‘missing paradigm’, namely student teachers’ consideration of subject matter knowledge, and their ability to effectively teach content.

Literature gap

Dissatisfaction with aspects of the existing models of ‘learning to teach’ mean that more research is warranted in this field. In particular, worthwhile investigation can be made into the complexities associated with ‘learning to teach’; the diverse ways which student teachers use their growing professional knowledge in the planning and execution of their teaching, and whether there are variations in the developmental trajectories that student teachers take when ‘learning to teach’.

¹⁴ The concept PCK will be further explored in the conceptual framework (Chapter 3).

The type of scholarly literature focusing on the classroom teaching of student teachers is not only scarce, but is also limited in its scope. Much of the available research into the development of student teachers during TE has focused on students who complete a one-year PGCE (e.g. Ensor, 2000; Quick & Sieborger, 2005; Reynolds, 1992; Maynard & Furlong, 1993, 1995). There is very little international or local research into the development of student teachers within a four-year teacher education programme, like a BEd programme, where opportunities to teach are provided *alongside* courses aimed at developing student teachers' pedagogical and subject matter knowledge.

Furthermore, the majority of research into 'learning to teach' has been conducted within the context of math, science, languages and early childhood education (e.g. Ensor, 2000; Gess-Newsome & Lederman (Eds.), 1999), with fewer studies focusing on teaching that specialises in learners in the Inter/Sen phase.¹⁵ This study will address this gap in the literature by conducting a systematic analysis of the development of teaching patterns displayed by a group of student teachers, primarily from the collective perceptions of a group of university tutors regarding what it takes for student teachers to 'learn to teach'.

Aim of this study

Student teachers who are doing a full-time BEd degree at the Wits School of Education spend six weeks every year observing and teaching in a classroom. Each student teacher is observed, supported, critiqued, mentored and assessed by practising supervising teachers and a university tutor. As a university tutor observing lessons taught by student teachers, I often noticed similar problems manifesting in the classroom action of different student teachers. I found myself writing similar comments to different student teachers, as I responded to their lessons. I wondered if this was because of personal biases in my perceptions of

¹⁵ Intermediate/Senior phase: Grades 4 – 9, in the South African schooling system

what it takes to 'learn to teach', or whether commonalities exist across a wider spectrum of student teachers, with other university tutors making comparable observations and comments. This thought led me to begin investigating the 'learning to teach' literature. However, existing models of 'learning to teach' are largely linear in nature. By implication they suggest one path, universally applicable to all, in learning to teach. In other words, many of these developmental models may acknowledge the complexities of teaching, the diversity of student teachers and their previous experiences, but they do not provide a systematic model on how these factors affect 'learning to teach'. My greatest concern, as a subject area specialist, is that the existing models divorce 'learning to teach' from student teachers' understanding and comprehension of the content they are teaching. Furthermore, although the models provide enlightening insights into what student teachers are thinking, and their concerns and perceptions about their teaching, they provided me with limited understanding of how meaningfully to analyse the development of student teachers during TE. The aim of this study is therefore to investigate the teaching of a group of students who are 'learning to teach', and empirically to identify patterns associated with the process of 'learning to teach'.

The research question

Conceptually, the study will explore existing developmental theories with a view to delineating the ways in which student teachers 'learn to teach' during their periods of TE. The teaching practices of a particular cohort of student teachers at Wits School of Education will be investigated as they develop from their first TE session (in April 2003) to their final TE session (in September 2006).

The following research question is addressed in this study:

To what extent and in what ways is it possible to model developmental processes as student teachers learn to teach?

In order to answer this question, a number of critical questions will be explored in relation to the aims. These sub-questions are:

1. What facets of the teaching process are necessary for student teachers to develop as they ‘learn to teach’?
2. Within each facet, at what levels of competence do student teachers demonstrate during their TE sessions?
3. What factors account for the similarities and differences in how students teach?
4. What conditions enable and/or constrain student teachers in developing their teaching as ‘pedagogically reasoned action’?
5. What implications do the notions of ‘facets’ and ‘levels’ have for understanding the process of ‘learning to teach’?

This research project rests on the following assumptions about teaching:

1. Teaching is a highly complex, multi-faceted process, and ‘learning to teach’ is a developmental process.
2. Teaching is a profession that has pedagogical content knowledge (PCK) as its unique knowledge base.
3. PCK requires teachers to integrate other types of teacher knowledge, including subject matter knowledge, general pedagogical knowledge and knowledge of learners and their context.
4. Teacher knowledge informs teacher thought, which in turn informs teacher action within the classroom.
5. University tutors and supervising teachers can better support student teachers during TE if they understand how student teachers ‘learn to teach’.

Rationale for this study

In 1987, Shulman suggested that research into case studies of people ‘learning to teach’ could “contribute to an almost totally missing research literature on learning to teach... [and] it has such an extraordinary positive impact on those of us who teach teachers” (Shulman, 1987a, p. 117). More recently, research on how student teachers and teachers learn to engage in successful practices is described as being “in many ways, the newest area of research” and although “there is foundational knowledge about teacher development, many applications of this

knowledge are still being worked out” (Bransford et al., 2005a, p. 29). I have shown that there exist concerns with current understandings of ‘learning to teach’ and so more research in this field is warranted.

Shulman (1992) challenges future researchers in education to “contribute to the increased professionalisation of teaching by rendering teachers [including university tutors, and student teachers] full partners in the making of research” (p. 380). He calls for the establishment of a “scholarship of teaching”, a mechanism in which teaching becomes “community property” through opening up the practice to critical review. He argues that such a scholarship advances the profession of teaching, so that “teaching can be something other than a seat-of-the-pants operation, with each of us out there making it up as we go” (Shulman, 1999b, p. 12).

Building on Shulman’s argument, I would argue that student teaching and TE are perceived largely as practical endeavours, lacking a firmly established conceptual foundation. As such, there is a need to reposition the development of student teaching within a *scholarship of teaching*. Presently, university tutors are, in the words of Shulman, ‘flying by the seat of their pants’ when observing and critiquing student teachers during TE, as there is little clarity regarding how university tutors could assess student teaching developmentally.

Furthermore, Shulman (1987b) suggests that studying student teacher development “highlights the complex bodies of knowledge and skill needed to function effectively as a teacher. The result is that the error, success and refinement – in a word, teacher-knowledge growth – are seen in high profile and in slow motion” (p. 88). This perspective implies that the findings of studies like this one may have implications beyond their immediate relevance for initial teacher education programmes. This study should, therefore, contribute to an understanding of the development of practical teacher knowledge and pedagogically reasoned action.

The conceptual contribution of this study

Shulman (1992) proposes that researchers in teaching should not entirely forgo the “search for generalisations about human learning, teaching and classrooms, for generalisation and simplification are essential to the understanding of our work” (p. 380). He urges researchers in teaching to focus on “a search for meaning and worthwhile improvement in the practice and profession of education” (p. 380).

This study hopes to make a contribution towards the “search for generalisations” with respect to the learning of student teaching, which may in turn facilitate a “worthwhile improvement in the practice” of university tutors in their observation and critique of student teaching (Shulman, 1992, p. 376). By considering complexities involved in ‘learning to teach’, the study will propose a model for analysing student teaching that takes subject matter knowledge into account, is non-linear in nature and context sensitive.

Importance of this study for teacher education in South Africa

Although there are some international studies about how student teachers ‘learn to teach’, they are scarce within the South African literature. There have been two influential South African studies involving TE and student teaching conducted by Ensor (2000) and Robinson (1999, 2000). While their research has some commonalities with this study, there are differences in the foci.

The study that Ensor (2000) conducted was similar to this study in that it considers the classroom practices of a group of South African student teachers over time. However, there are fundamental dissimilarities. Apart from some contextual differences,¹⁶ the major disparities lie in the focus of the research. Whereas Ensor’s research investigates the influence of a teacher education programme on the perceptions by newly qualified teachers of their practice and

¹⁶ Ensor’s study focuses on seven FET student teachers completing a one-year PGCE and embarking on their teaching career, whereas this study considers a group of 66 Intermediate/Senior student teachers completing a four-year BEd programme.

their actual observed classroom practice, this study is focusing on changes in the classroom practice of student teachers over the course of their BEd programme. Ensor's conceptual framework is grounded on the work of Bernstein; while this study will be considered with reference to the work of Shulman.

Robinson (1999) has studied the nature of student teaching during TE with students from the University of the Western Cape. Like Ensor, she found a discrepancy between what student teachers say, and how they teach. She observes that in many cases, student teachers "lack the ability to perceive that their teaching is reinforcing a style of learning that they themselves have criticised" (p. 197). Another study by Robinson (2000) investigates the potential of a mentorship model of TE within the South African context. She focuses on the relationship and dynamics between the supervising teacher, student teacher and university tutor. In contrast, this study focuses on what can be learnt about the process of 'learning to teach' from the development of student teachers over a four year period.

This study is particularly significant for teacher education in South Africa. Firstly, the post-Apartheid educational system is attempting to redress the inequities of the past, and to rectify the philosophies associated with education under Apartheid. Since the first democratic elections in 1994, the educational system in South Africa has been subject to immense changes, especially over the past decade. A radically different philosophy of education has been adopted by the National Department of Education, and implemented in schools with varying degrees of success. Secondly, there have been numerous curricular revisions during this time.¹⁷ Consequently, student teachers in South Africa are faced with many unique classroom challenges. Robinson (1999) cites some of these differences as large class sizes; diversity of languages and cultures within a class; a ban on corporal punishment; the introduction by the new curriculum of continuous assessment and a shift in the curriculum towards the use co-operative teaching methods (p. 192). There has been very little other research done on how

¹⁷ These changes will be discussed in more depth in Chapter 2.

South African student teachers teach in classrooms that differ substantially to the ones they experienced as learners.

University tutors face challenges in preparing student teachers to teach Outcomes Based Education (OBE), a system radically different to the school systems in which many of them had taught. These challenges were compounded when Curriculum 2005 was replaced on 15 April 2002 with the revised National Curriculum Statement (NCS), in response to concerns expressed by the Review Committee on Curriculum 2005 (2000). During this transition stage, student teachers were being prepared at South African universities to teach within a system that was not yet being fully implemented in the schools. This led to a number of frustrations. Firstly, the university tutors had to grapple with, and envisage how to prepare student teachers to teach a newly released curriculum that was not yet fully understood by teachers. Secondly, student teachers worked with the new curriculum during lectures, but found the old curriculum still in place in schools during TE sessions. Thirdly, supervising teachers expressed frustration in working with student teachers who were not familiar with the old curriculum with which the schools were working.

While the legacy of the Apartheid education system will be explored in some depth in Chapter 2, it is important to note here that the transformation of the education system was to be driven by the establishment of the National Qualifications Framework (NQF). At present, higher education institutions are required to assess students' performance during TE at NQF level 5 and NQF level 6. This requirement has been a source of confusion for higher education institutions offering teacher education as there does not exist clarity about what teaching at NQF 5 and NQF 6 may look like in terms of student teaching competence. In Chapter 5, it will be shown that attempts by higher education institutions (like Wits School of Education) to define criteria have been vague and confusing, and subsequently largely ignored by university tutors. By conducting a longitudinal study of the teaching of a large group of student teachers, I hope to

clarify the levels of teaching competence that university tutors could typically expect from student teachers as they 'learn to teach'.

Organisation and implementation of TE

This study investigates the processes involved in 'learning to teach' within a particular context: a group of students who enrolled in a particular teacher education programme, within a transforming education system, in a post-Apartheid South Africa. In order to understand if and how the national teacher educational policies affect teacher education programmes, it is necessary to briefly review the way in which different universities organise their TE programmes and how university tutors mediate their roles during TE. In this review, I will arrange the literature according to those studies that deal with TE on a macro level (such as the way in which government policies affect teacher education and TE programmes); a meso-level (dealing with the way in which institutions organise TE) and a micro-level, in which I review how university tutors may facilitate 'learning to teach' during TE sessions.

1. Government policies and teacher education (Macro-perspective)

The United States of America's National Council for Accreditation of Teacher Education (NCATE) uses a standards-driven certification system to ensure well-qualified teachers (Raths & Lyman, 2003; Cochran-Smith, 2001; Darling-Hammond, 1997). Beginner teachers are awarded their teaching certificate after meeting the standards defined by NCATE, rather than after completing a teacher education programme. Concern has been expressed that requiring graduating teachers to display proficiency in terms of prescribed standards or competences may significantly alter the nature of TE assessment from formative to predominantly summative (Martin & Cloke, 2000). They argue that any reduction in formative assessment of student teachers during their studies will be detrimental to their professional development.

However, Darling-Hammond (1997) examines the interplay between professional judgement and teacher education policies. She suggests that, “what ultimately happens...is less related to the intentions of policy makers than it is to the knowledge, beliefs, resources, leadership and motivations that operate in local contexts,” (p. 214). She maintains that responses of teachers (and teacher educators) to new policies “depend on the degree to which policies permit flexibility or impose constraints on their ability to meet what they perceive to be the needs of their students” (p. 70).

A study in New Zealand similarly finds that during TE very few university tutors made comments about the performance of student teachers in relation to the published criteria, but rather relied on their “professional judgements about what they personally believed to be the important elements of a performance against standards they personally deemed appropriate” (Hawe, 2002, p. 103). Queries about a particular assessment were perceived as a challenge to the personal integrity or professional judgement of the teacher educator, rather than as a discrepancy between the stated criteria and the performance of their student teacher (Hawe, 2002). Hawe finds that institutional rhetoric within the context of changing policy structures “does not automatically result in a change to the norms, habits, skills and beliefs” of assessors during TE (p. 101).

A detailed review and consideration of the way in which national policies affect the organisation of teacher education and TE in the South African context will be examined in Chapter 2.

2. Studies about the organisation of TE (Meso-level perspective)

There is a great variety in the organisation of TE sessions, not only between different countries, but also between different higher institutions offering teacher

education. Research into some of the organisational models of TE, and how they affect the quality of the TE experience, will be reviewed here.

A four-year programme of research called the Multi-Site Teacher Education Research Project (MUSTER) reviews the state of teacher education in five developing countries, namely South Africa, Ghana, Lesotho, Malawi and Trinidad/Tobago. A number of these studies review the means of organisation and value of TE in various countries and at various teacher education institutions (Reddy, 2003; Robinson et al., 2003; Samuel & Pillay, 2003; Lefoka et al., 2001; George et al., 2000).

One MUSTER discussion paper, for example, details the organisation of TE in Lesotho's National Teacher Training College. In this institution, TE is structured around an internship. Second-year student teachers (registered for a three-year teaching diploma) spend a ten-week period (called Teaching Practice Preparation) making a weekly visit to a nearby school. Afterwards, intensive campus-based micro-teaching¹⁸ sessions are given to groups of peers and university tutors and followed by reflective feedback. Between July and November, second-year student teachers select a school at which to intern for four continuous months, during which time they are visited and graded four times by university tutors (Lefoka et al., 2001).

At the time of writing this paper, South African teacher education institutions vary in their organisation of TE. A number of South African universities are teacher education providers (including University of the Witwatersrand; UNISA: University of Johannesburg; University of the Western Cape; Cape Peninsula University of Technology; University of KwaZulu Natal and others). Most offer a four-year BEd degree.¹⁹ TE sessions vary in length from two sessions of three

¹⁸ Micro-teaching: A simulated presentation of a prepared lesson to a small group of peers.

¹⁹ The University of Cape Town does not offer a four-year BEd. Student teachers wishing to specialise in the Inter/Sen phase complete a bachelor's degree followed by a one-year post-graduate Certificate in Education (PGCE). Student teachers complete two four to six-week TE sessions during their PGCE year.

weeks in every year of the BEd (e.g. at the University of the Witwatersrand) to one continuous ten-week period per annum (e.g. at the University of the Western Cape). Some teacher education institutions (e.g. at the University of KwaZulu Natal and the University of the Western Cape) offer TE programmes that oscillate between campus-based micro-teaching of peers, with reflective discussions, and observing and teaching in the classroom (Robinson, 2003; Samuel & Pillay, 2003). Other institutions (e.g. the University of KwaZulu Natal and the University of the Witwatersrand) have sessions of campus-based lectures, followed by discrete sessions of school-based TE (Reddy, 2003). The University of the Western Cape has tried and subsequently discarded a 'serial day' model of TE (where student teachers visit a class once a week throughout the year) in favour of a 'block' structure of TE (where student teachers are placed in a school for several weeks at a time) (Robinson, 2003). It was found that unpredictability in school timetables and difficulties in obtaining lesson topics a week in advance made the 'serial day' model unworkable (Robinson & Vergnani, 2001, p. 72).

There are also variations in the stage of the degree course at which student teachers are first sent to schools. For example, first and second year BEd students at the University of KwaZulu Natal do not go into schools, but instead attend campus-based micro-teaching activities and workshops; whereas at the University of Johannesburg and the University of the Witwatersrand, student teachers are sent to schools within four months of starting the course.

The University of the Western Cape conducted a pilot mentorship programme (as an extension of the TE programme) with five volunteer schools supervising student teachers (Robinson, 2000). This mentorship programme was intended to bridge pre-service and in-service teacher development strategies by allowing teacher mentors to play an active role in guiding student teachers. It was envisaged that this arrangement would also contribute to the development of supervising teachers' professional practice by providing opportunities for them to articulate and reflect on their own practice in consultation with a university tutor. It was found that the mentorship model worked extremely successfully in one out

of the five schools. In analysing why the mentorship programme was not equally effective across all five schools, Robinson argues that one of the most important challenges for sustaining mentoring programmes is the creation of “material and cultural conditions that encourage and enable teachers to function as critical inquirers in their schools” (p. 214). Implementing and sustaining a meaningful mentoring programme within South African schools depends on a symbiotic relationship between personal factors (such as the commitment and motivation of teacher educators), institutional factors (such as a culture of ongoing professional development and reflective practice within school communities, and support from universities) and contextual factors (such as enabling policies for ongoing professional teacher development) (Robinson, 2000, p. 220).

Debate around the placement of student teachers during TE

There is debate about whether student teachers should be placed in classrooms in which the supervising teachers model what the university regards as good teaching practice, or the kinds of schools where student teachers are likely to find a job. In the USA, Hammerness et al. (2005b) argue that (especially initially) student teachers should preferably be placed within school contexts where the philosophy, vision and practice of teaching is consistent with that presented by their teacher education programme. Consistency and coherence between theory and practice are important, and student teachers need reinforcement from their supervising teachers to form a strong vision of good practice (Hammerness et al., 2005b, p. 414; Darling-Hammond, 1997). Imig and Imig (2006) suggest that American teacher educators would prefer their students to follow ‘a just path’ in ‘learning to teach’, in which they are placed at schools with “fair expectations, vast learning opportunities and much personal growth” (p. 287). However, they argue, “economic demands, political pressures and the education profession itself have conspired to make the just path too often an anomaly – found sparingly in exceptionally progressive and often affluent school districts” (p. 287). They suggest that teacher education institutions should become “agents of change by preparing teachers steeped in the realities of modern schools, but aware of the power of an individual teacher to impart change” (p. 286).

Placement of student teachers during TE has particular relevance within the South African context, where a review of the state of schooling in South Africa concludes that it “leaves much to be desired” (Taylor & Vinjevold (Eds.), 1999, p. 131). Reddy (2003) therefore questions whether student teachers should be actively directed to schools which model good classroom practice, or whether students should be exposed to ‘typical’ South African schools – with all their problems. It is clear that the NSE Report²⁰ requires that graduating teachers be able to “teach in authentic and changing South African contexts” (NSE Report, p. 22).

Meier (2005) identified a variety of negative perceptions still existing among UNISA student teachers towards race groups other than their own; both as peers and in the classes they teach. This is of particular concern in light of Grossman’s (1991) finding that student teachers tend to use themselves as implicit models for the learners they will encounter, and may not be naturally sensitive to other cultures. Meier argues that within the context of a post-Apartheid South Africa, teacher education programmes should contain a comprehensive theoretical component dealing with multiculturalism, and that student teachers should also be placed in schools that expressly expose them to learner diversity during their TE sessions.

3. Studies on the relationship between teacher education programmes and student teaching (Micro-level perspective)

Feiman-Nemser (2001) argues that the “pedagogy of teacher education often mirrors the pedagogy of higher institutions” so that lectures, discussions and seat-based learning are typically the dominant teaching strategies modelled for student teachers (p. 1020). A Norwegian empirical study found that when teacher

²⁰ The NSE Report is the Norms and Standards Report that governs the provision of teacher education in South Africa at the time of this study.

educators present a progressive pedagogic ideology, but do not model *progressive teaching styles*, student teachers tend to revert to conservative teaching practices during their TE sessions (Riksaasen, 2001, p.56). Bransford et al. (2005b) contend “having prospective teachers memorise facts about how to teach is limiting...[whereas] *learning in ways they are expected to teach* may be the most powerful form of teacher education” (p. 76).²¹ In the light of similar concerns, Fletcher (1997) urges teacher educators to reflect on their own teaching practice and “consider the credibility of their own teaching in the teaching world”, a process that may be neglected because of the time demands of conducting research and writing (p. 238).

In view of South Africa’s shift towards outcomes-based teacher education (OBE),²² Schulze (2003) makes similar calls for teacher educators to use the transformations in teacher education as an opportunity to move away from traditional teaching methods (such as lecturing) and model the pedagogies they would like to see student teachers adopting (p. 11). Steele (2003) contends that “committed, professionally competent teacher education institutions” can promote professional teacher transformation in South Africa, because at the heart of the process of producing teachers is “the matter of instilling principles and values of professionals, by teacher educators who are themselves models of these principles” (p. 108).

However, Ensor (2000) contends that modelling of desirable pedagogical practices is not enough to ensure integration of learning in a pedagogical course. She investigates the link between the nature of teacher education and the resultant classroom practice of graduating teachers. In a two-year longitudinal study of seven PGCE mathematics student teachers in South Africa, she looks at the explicit and tacit pedagogies offered to student teachers in a maths pedagogy course. In one case, she focuses specifically on the disjunction between a beginner

²¹ Emphasis in italics is mine.

²² OBE: A system where a predetermined outcome (or end product) is regarded as evidence of learning having taken place, irrespective of the path taken to achieve that outcome.

teacher's description of his teaching practice and his actual teaching. She studies the tacit ways in which a particular course transmits a '*privileged teaching repertoire*' and vision of '*best practice*' of mathematics teaching to student teachers. Drawing on the work of Bernstein, Ensor argues that the degree to which student teachers are able to enact such a repertoire depends on their acquisition of both *recognition* rules and *realisation* rules (p. 188).²³ Student teachers are attempting to acquire practices, from their experience of learning in university classes, for use in a substantially different context (namely the classroom). Ensor argues that when the site of teacher education is removed from the site of practice, teacher educators are engaging student teachers in a "pedagogical relationship of *relay*" rather than "*apprenticing* pedagogic action" (p. 181). This allows them to *recognise* and articulate a vision for 'best practice', but not necessarily to *realise* it in their own teaching practice (p. 188). Using Bernstein's terminology, she argues that for student teachers to enact a vision of 'best practice', teacher education courses need to provide 'visible pedagogy', where 'best practice' is not just demonstrated tacitly, but involves teacher educators "drawing out explicitly the implications for student learning" embedded in a task (p. 183) and minimising the boundaries between teacher education and classroom teaching.

The role of university tutor as both judge and mentor

Certain studies focus on the practices of university tutors. A few studies suggest that effective university tutors perform certain functions when observing student teachers (Tomlinson, 1995; Gess-Newsome, 1999b). For example, effective university tutors find openings to discuss fruitful topics that lead the student teacher to key insights about the nature of teaching and learning. They pinpoint problems pertinent to the student teacher, helping them to see how their actions (such as poorly conceptualised tasks or poorly articulated instructions) are aggravating problems (such as discipline). Effective tutors probe the student teachers' thinking, and help students to articulate their thoughts, thereby developing reflective practice. They also recognise signs of growth and provide a

²³ Ensor's work will be further explored in the conceptual framework (Chapter 3).

“considered balance of support and challenge” (Calderhead & Shorrock, 1997, p. 197).

A number of studies have acknowledged the inherent conflict a university tutor experiences in having to be both a *development facilitator* (in assessing formatively) and a *gatekeeper* to the profession (when assessing summatively) (Calderhead & Shorrock, 1997, p. 196). There exist inequalities in the power relations between the student teacher and the university tutor. By virtue of the university tutor’s role as assessor, student teachers are obliged to implement all of the tutor’s advice – even if it conflicts with their own teaching style or with the advice given to them by their supervising teacher (Yule et al., 1990). This conflict can undermine the learning process of student teachers, who are being urged to acknowledge their weaknesses and reflect on them by the same person who will ultimately assess their teaching performance.

Mentoring of student teachers by supervising teachers

Much literature, associated with the classroom teaching of student teachers and newly graduated teachers, focuses on the process of mentoring (e.g. Maynard & Furlong, 1995; Tomlinson, 1995; Elliot & Calderhead, 1993; McIntyre & Hagger, 1993). Many of these studies have emerged from the United Kingdom, where student teachers are assigned to a mentor teacher after completing their pre-service teacher education. The research is designed to help teachers who act as mentors to support newly graduated teachers more effectively. Maynard and Furlong argue that different types of mentoring might be appropriate for student teachers at different stages of their development. In the following review of the mentoring literature, I will consider literature related to mentoring as modelling; coaching; providing critical feedback; and establishing a community of practice.

1. Modelling and coaching

Novices cannot ‘learn to teach’ well “by imagining what good teaching looks like, or by positing the opposite of what student teachers see” (Darling-Hammond, 2006a, p. 153). ‘Learning to teach’ in a community of professional practitioners

enables student teachers to formulate a vision for what is possible and desirable in their teaching practice (Hammerness et al., 2005a, p. 386). Hammerness et al. (2005a) consequently argue for a *cognitive apprenticeship* of student teachers, whereby supervising teachers on the one hand model good practice and on the other also make their classroom observations, intentions and thinking more explicitly *visible* to the student teacher through ongoing commentary and discussions. LePage, Darling-Hammond and Akar (2005) contend, “learning alone from trial-and-error is not at all the same as learning through supervised practice from a co-operating teacher who can demonstrate how to organise productive learning activities and respond to both predictable and unexpected problems that arise in the classrooms” (p. 353).

During early stages of learning to teach, beginner teachers crave “step-by-step instructions” on how to manage a classroom, and in many cases “request a heavy dose of ‘how to’ techniques and are much less interested in theory and explanation about the ‘whys’ and ‘whens’ of the strategies they are taught” (Bransford et al., 2005b, p. 77). Support for student teachers involves helping them “enact practices consistent with the knowledge base and with empirically certified best practices” (Cochran-Smith & Lytle, 1999, p. 259) through coaching of teaching strategies. Several researchers (such as Maynard & Furlong, 1995; Tomlinson, 1995; Berliner, 1994) propose that at this initial stage of teacher development, an *apprentice model of mentoring* may be appropriate, where craft knowledge is constructed by student teachers while observing, discussing and copying lessons that an experienced teacher has modelled.

Tomlinson warns that although an apprenticeship model of mentoring may be initially appropriate for student teachers, it should not continue indefinitely. There is a danger that with an extended period of apprenticeship training, student teachers may develop a teaching practice that is reduced to a repertoire of mindless actions (Tomlinson, 1995). Without university-based teacher educators, mentoring of student teachers by supervising teachers alone may cause professional teacher education to degenerate into an apprenticeship training that

inculcates dominant ideas of what currently constitutes ‘good’ practice. However, Calderhead warns that the value of modelling routines should not be dismissed, as this may very well be an essential stage in learning to become a reflective teacher (Calderhead, 1991).

Tomlinson (1995) argues that appropriate support should be offered to student teachers in the form of *reflective coaching* (rather than apprenticeship training), largely because it has been shown that in these early stages of learning to teach, it is extremely difficult for student teachers to monitor their own thinking. Appropriate support might involve a combination of assisting student teachers with planning, direct assistance during their lessons when absolutely necessary, monitoring lessons and providing feedback, and encouraging active reflection and strategy adjustments (Gess-Newsome & Lederman, 1999b; Tomlinson, 1995).

2. Providing critical feedback

Student teachers are often duped into obtaining *false feedback*, presuming their teaching is effective when learners are quiet, paying attention and completing their work (Joram & Gabriele, 1998, p. 188). When such student teachers assess the success of a lesson (within their framework of transmission learning and teaching within a well-managed classroom), they deem their lesson to have been a success, regardless of the quality of learning opportunities provided. Hammerness et al. (2005b) consequently stress the importance of providing feedback to student teachers through which their classroom experiences can be interpreted, so that they do not infer wrong conclusions from their early attempts at teaching. Grossman, Schoenfeld and Lee (2005 p. 205) contend that although making errors are a part of the learning process, being able to learn from one’s mistakes “often takes an experienced other to provide the necessary feedback and perspective”. The purpose of such feedback is to “enhance teachers’ own understandings of their own actions – that is, their assumptions, their own reasoning and decisions, and their own inventions of new knowledge to fit unique and shifting classroom situations” (Cochran-Smith & Lytle, 1999, p. 267).

3. Facilitating reflective practice

Schön (1987) suggests that sometimes an unanticipated or problematic situation presents itself as a surprising unique case that falls outside the teacher's existing store of professional knowledge. In order to deal with this unexpected situation competently, a teacher is forced to improvise by "inventing and testing, in the situation, strategies of her own devising" (Schön, 1987, p. 5). In contrast to a technical training view of professional knowledge (which applies facts, rules and procedures to encountered situations), a view of professional knowledge as *reflection in action* allows professionals to make sense of uncertain situations, where they need to "construct and test new understandings, strategies of action and ways of framing the problem" (p. 39). Calderhead and Shorrock (1997) build on Schön's notion of a reflective practitioner and offer relevant advice when they suggest that university tutors periodically need to review the balance of support and challenge they offer to student teachers during TE, as emotional support alone will be insufficient (p. 197). They suggest that student teachers need to face new situations, consider alternatives, and begin to reflect on their practices, if they are to progress in their learning. LePage et al. (2005) propose, "Through reflective practice, [student] teachers can move beyond the trial-and-error stage quickly" (p. 354).

Shepard et al. (2005) suggest that teachers who are reflective about their practice "use data systematically to make judgements about the specific aspects of instructional strategies that may be hindering learning" (p. 292). LePage et al. (2005) similarly propose that student teachers who "have reflective dispositions are less likely to blame children for lack of progress. They are more likely to engage in critical self-assessment in order to change their strategies" (p. 354). In the same vein, Feiman-Nemser (1983) submits that teachers (who are attempting to consolidate what they have learnt about teaching), "want practical assistance, but they also need the encouragement to look closely at what they are doing and why" (p. 164).

Organisation of the post-lesson discussion

Another aspect of the organisation of TE concerns the post-lesson discussion. Differences in perceptions of what constitutes good teaching and learning by different university tutors come to the fore during TE sessions (Marais & Meier, 2004; Reddy, 2003; George et al., 2000; Yule et al., 1990). These differences can affect the way in which post-lesson conferencing sessions are conducted. A study in Trinidad and Tobago found many the university tutors “still dominated the sessions” with their perceptions of what student teachers did right and wrong during the lesson (George et al., 2000, p. 36). Concern has been expressed that student teachers sometimes feel overwhelmed and confused by the conflicting interpretations of teaching and learning on the part of tutors, which can undermine credibility and perceptions of quality within the teacher education programme (Marais & Meier, 2004; Reddy, 2003; Samuel & Pillay, 2003).

A recent study investigates the benefits of delaying the post-lesson discussion for a short while, as opposed to conducting immediate post-lesson discussions. With second-language speakers, Williams and Watson (2004) found a greater depth of reflection evident when post-lesson discussions were delayed for an hour or more, providing student teachers beforehand with an opportunity to conduct a self-reflection task in a journal. In such cases, student teachers participated in more advanced forms of “reasoning talk” during the post-lesson discussion (p. 94).

Studies of the experiences of student teachers during TE

A few recent studies have given student teachers a voice, by examining their views, anxieties, opinions and experiences related to TE.

Ria, Seve, Saury, Theureau and Durand (2003), for example, investigated the emotions experienced by a group of PGCE student teachers during a TE session. They found that student teachers feel secure when they are able to stick to their planned lesson steps, and maintain learner activity. However, if the context poses

obstacles to these two conditions, student teachers experience feelings of discomfort, doubt and anxiety. They argue that when ‘learning to teach’, student teachers are discovering the patterns of their own emotional responses to learners, and act in such a way as to “avoid unpleasant situations or at least learn to anticipate them and thereby minimise their effects” (p. 231).

In a study of South African student teacher anxiety during TE, Ngidi and Sibaya (2003) found male student teachers to be in general more anxious about the evaluation of their lessons, whereas female student teachers are more anxious about class control. They attribute this difference to the tendency of males to be more performance driven, whereas females pay more attention to the formation of professional relationships.

A study of the experiences of Trinidad and Tobago student teachers on their initial TE suggests that the stress and anxiety of TE may derive from the physically tiring nature of teaching (which student teachers are not used to) and the stress of being assessed by a university tutor (George et al., 2000).

Summary

The process of ‘learning to teach’ does not happen within a contextual vacuum, but is influenced by the teacher education policies in place at the time; the way that university institutions have interpreted these policies; how TE is organised; and the extent to which student teaching is supervised by university tutors and supervising teachers. In this section, I have reviewed literature that suggests that in order to understand the process of student teachers ‘learning to teach’, it is essential to fully review the context of national policies governing teacher education at the time, and the way that these policies have affected the BEd programme and TE. I turn to that in Chapter 2.

Structure of this dissertation

This dissertation is divided into five sections.

Section A introduces the study. Chapter 1 reviews existing ‘learning to teach’ literature, establishes a literature gap, introduces the research question and outlines the structure of the dissertation.

Section B locates the study historically and conceptually. This study takes place during a time when the teacher education system in post-Apartheid South Africa is undergoing significant restructuring, both at national and institutional levels. In Chapter 2, the model of teacher education adopted by the policies governing teacher education during the duration of this study is reviewed and critiqued. It is necessary, in particular, to consider the implications of the current state of teacher education in South Africa for student teachers doing their TE.

In Chapter 3, this study establishes a conceptual framework for the study. Literature relating to the professional knowledge bases for teaching, and how these are enacted through pedagogically reasoned action establishes a theoretical framework on which this study rests. Shulman’s contributions to understanding processes involved in teaching, and his concept of pedagogical content knowledge (PCK), are paramount to this study.

Section C will present the research design. Chapter 4 will detail the sources of data and collection methods and show how the data were organised and analysed. Chapter 5 will provide an institutional context, by examining the specific Teaching Experience programme within the BEd degree, at the Wits School of Education.

Section D will comprise the data analysis. This will be presented in three chapters. Chapter 6 will discuss the broad trends of student teaching practice as found in the data. In particular, it will describe the levels of teaching practice over five facets, as observed by university tutors. Chapter 7 will closely examine the individual teaching portraits of five (out of 66) student teachers whose progress was monitored during this study. Chapter 8 will focus on the relational nature of the process of ‘learning to teach’, by considering the relationships between the

various facets of pedagogical action. I will suggest that the model of ‘learning to teach’ emerging from this study marks development according to shifts in the knowledge base used by the student teacher to inform his/her pedagogical action in classroom teaching.

Section E will consist of Chapter 9, which will conclude the study by considering implications of the findings for teacher education in general, for teacher education in South Africa, and in particular, for TE within a BEd programme.

SECTION B: LOCATING THE STUDY

CHAPTER 2: TEACHER EDUCATION IN SOUTH AFRICA

Education in South Africa has historically been characterised by “segregation, fragmentation, authoritarian and bureaucratic control of the curriculum, institutions and governance, inefficiency and inequity” (Welch, 2002, p. 18). By the time South Africa’s first democratic elections took place on 27 April 1994, there were 19 different governance systems controlling teacher education - including the different provincial and national departments, (each one divided further along racial lines) and the so-called independent Homelands (Parker, 2003). These elections ended 46 years of rule by the Nationalist Party and their policy of racial segregation and discrimination, Apartheid, which had produced “a grossly unequal society and damaged the essential fabric of society” (Adler, 2002, p. 7).

Teacher education under Apartheid

Fragmentation of Teacher education

Because of the policies of Apartheid, through which access to resources and opportunities were largely determined by racial classification, teacher education in South Africa had a particularly fragmented history. Universities and technikons (largely responsible for producing *secondary* school teachers) were a concern of the *national* Department of Education. In contrast, colleges of education (largely responsible for training *primary* school teachers) were run by *provincial* Departments of Education (Parker, 2003). Under Apartheid, teacher education was further divided along *racial and ethnic lines*, leading to a multiplicity of curricula and qualifications, and a lack of quality assurance and accountability across the programmes (Parker, 2003). The fragmented nature of teacher education precluded an overall national strategic planning of teacher demand and supply. This has led to teacher surpluses in some areas and subjects, and shortages in others (Soudien, 2003; Steele, 2003; Robinson, 2003). Furthermore, student teachers were required to complete their TE sessions, and later obtain jobs, within racially similar schools (Carrim, Postma & Christie, 2003; Soudien, 2003). In this

way, teachers were actively prevented from teaching across racial divides in public schools.

The dominance of Fundamental Pedagogics

During the Apartheid era, *Fundamental Pedagogics* was a dominant theoretical discourse at many (but not all) teacher education institutions throughout South Africa. It emphasised transmission of knowledge and rote learning, in a manner that was inherently authoritarian, and actively discouraged critical reflection, analysis and the development of innovative teaching strategies. Enslin (1990) further argues that Fundamental Pedagogics provided “little illumination of the [then] present social order, of possible alternatives to that order, or how teachers might contribute to transformation. By excluding the political as a legitimate dimension of theoretical discourse, Fundamental Pedagogics offer[ed] neither a language of critique nor a language of possibility” (p. 78). South African teacher education and teacher practice have therefore not been rooted in cultures of inquiry or reflective practice.

Initiatives to undermine segregated teacher education

Certain universities (providing teacher education) and colleges of education formed partnerships during the 1980s, offering an integrated professional and academic teaching qualification, with more progressive ideologies (Carrim et al., 2003). One such endeavour led to the creation of the Bachelor of Primary Education (BPrimEd) degree, offered by a university but located on a college campus and taught by staff from both institutions. This degree provided a pathway through which students of colour could become teachers within otherwise racially segregated “whites only” colleges of education. However, the degree did not do much to improve the access of disadvantaged communities (especially black African) to an alternative model of teacher education, as the degree was subject to university fee structures and hence much more costly than a college teaching diploma (Carrim et al., 2003). Access to this degree was consequently limited to those who could pay their own studies, or obtain a bursary or loan. Consequently,

the BPrimEd student teachers were mostly white, middle-class females (Carrim et al., 2003). In spite of its inability to streamline teacher education in South Africa meaningfully and provide an alternative to Fundamental Pedagogics, the BPrimEd degree is significant in that it can be regarded as a forerunner of the similarly integrated post-Apartheid BEd programme (Carrim et al., 2003). It was only in 1994 that an open admission policy was introduced throughout the South African education system, including the colleges of education (Meier, 2005).

In light of the “pressing needs for redress and repair” within teacher education nationally and within educational institutions (Adler, 2002, p. 6), the post-Apartheid government began a process of restructuring the education system. A priority was to streamline teacher education into a coherent system, and uproot the philosophy of Fundamental Pedagogics in favour of a system that encouraged teachers to follow participative classroom practices (Taylor & Vinjevold, 1999).

Transition to Outcomes-Based Education

New government, new educational philosophy

In 1996, the National Education Policy Act (Act No. 27 of 1996) was passed. Although this policy did not effect much change within the classroom, it put into place the principles and frameworks for South African education at all levels (Parker, 2003). Through the formation of the National Qualifications Framework (NQF, 1995), the National Education Policy provided the structure in which qualifications could be recognised and endorsed. The NQF was also intended to recognise and accredit those with knowledge and skills gained outside formal learning institutions, based on their ability to demonstrate proficiency in stipulated outcomes. It was argued that the implementation of the NQF could only be effective if all education in South Africa changed from the former *content-based* educational system to an *outcomes-based* system of education “which has as its starting point the intended outputs” (Dept of Ed, 1997, p. 17). An outcomes-based educational system would enable learners to move between one learning path and another, and allow for the recognition of prior learning at particular NQF levels (Schulze, 2003; Parker & Deacon, 2005).

Through this system, the aim of the NQF was to provide access to education for those to whom it had previously been denied. It was also through the NQF that the State would seek to ensure quality education by establishing eight levels of competence, as shown in Table 2.1. In South Africa, the NQF regulates the provision of all education and training, including that offered by higher education institutions.²⁴

Table 2.1: Table showing the eight NQF levels divided into three bands of education²⁵

NQF level	Name	Corresponding educational level
NQF 5 - 8	Higher Education (HE)	University or technikon
NQF 2 - 4	Further Education and Training (FET)	Grades 10 – 12
NQF 1	General Education and Training (GET)	Grade R - Grade 9 level.

A statement of learning outcomes, called a *unit standard*, defines the outcomes of a learning programme. Qualifications are clusters of particular learning programmes that achieve a particular group of unit standards. The NQF assumes that the same outcomes can be achieved through a variety of different learning programmes. To supervise the establishment of the NQF, the SAQA Act No. 58 of 1995 established the South African Qualifications Authority (SAQA).

Outcomes-based learning

The South African Schools Act (Act 84 of 1996) acknowledges that the “past system of education...was based on racial inequality and segregation” and legislates a “unified framework for organisation, governance and funding of schools...[in order to] redress past injustices in educational provision, provide an education of progressively high quality for all learners, advance the democratic transformation of society, combat racism and sexism and all other forms of unfair discrimination and intolerance, contribute to the eradication of poverty and the

²⁴ This contrasts to the NQF in New Zealand, which does not include higher education.

²⁵ Draft descriptors for each NQF level were published by SAQA in 2005 for public comment (Government Gazette No. 28141, 21 October 2005). At the time of this study, they were yet to be finalised.

economic well-being of society, protect and advance our diverse cultures and languages, uphold the rights of all learners” (Dept of Ed, 1996). The new curriculum was designed “to reflect the values and principles of our new democratic society” (Dept of Ed, 1997, p. 1). The restructuring of the education system within South Africa (both at school level, and within teacher education) therefore had a political agenda aimed at social transformation. Although teachers were to be “active inventors of a new educational vision”, there also was to be “an equally powerful message that what teachers knew and had learned was an inadequate base from which to proceed and grow in a post-Apartheid South Africa” (Adler, 2002, p. 8).

An alternative educational discourse, Outcomes Based Education (OBE), was introduced in Curriculum 2005, in 1997, to replace Fundamental Pedagogics and the curriculum of the past that “perpetuated race, class, gender, and ethnic divisions and emphasised separateness rather than common citizenship and nationhood” (Dept of Ed, 1997, p. 1). The common idea behind OBE is a focus on “the achievement in terms of clearly defined outcomes, rather than teacher input in terms of syllabus content” (p. 17). This “requires a shift from focusing on teacher input to focusing on the outcomes of the learning process” (p. 17). The transmission of content knowledge alone is no longer the teacher’s primary focus, as teachers are required to pay attention to the “holistic development of competence, encompassing learner knowledge, skills and attitudes/values” (p. 17). The OBE approach requires learners to take control of their own learning, and the role of the educator changes from being *presenter of information* to *facilitator of the learning process* (Jansen, 2003). The focus of the learning is on enabling access to knowledge, the *outcome*, irrespective of the time taken to reach that outcome. In this model, there is no failure - simply differences in the time required for achieving competence, largely depending on the external obstacles in a particular learner’s path (Taylor & Vinjevold, 1999). As during Apartheid, race had largely influenced students’ opportunities, success and perceived competence, it is understandable that this philosophy would be embraced as a means of neutralising racial stereotypes.

Introduction of learning areas

Curriculum 2005 clustered a number of subject disciplines together, to form eight ‘learning areas’ of study for intermediate and senior phases. The eight learning areas were defined as:²⁶

- Language, Literacy and Communication
- Maths Literacy, Mathematics and Mathematical Sciences
- Natural Sciences
- Human and Social Sciences
- Technology
- Life Orientation
- Arts and Culture
- Economic and Management Sciences

Through this process, certain disciplines like geography and history lost their autonomy as distinctive subjects, as they were required to be taught together as “Human and Social Sciences”, whereas other disciplines, such as Mathematics, kept their autonomy as discrete learning areas.

The tenacity of Fundamental Pedagogics

Post-Apartheid studies on education in South Africa indicate that the legacy of the Christian National Education system and Fundamental Pedagogics continues to be prevalent, despite the policy shifts towards OBE. Mattson and Harley’s (2003) study showed that teachers in rural KwaZulu-Natal adopted the policy changes in a superficial and mechanical way in an attempt to look competent, while lacking in genuine understanding. Mattson and Harley term the shift ‘strategic mimicry’. In another study on teaching OBE to large classes, it was found that black school children in a cross-section of schools in KwaZulu-Natal were still spending about 80% of their time listening to their teacher. Class participation was largely limited to the chanting back of memorised facts (Dachs, 1999, p. 275).

²⁶ The names of the learning areas were revised and simplified in the Revised National Curriculum Statement

In their review of post-Apartheid teaching and learning in South Africa, Taylor and Vinjevold (1999) acknowledge “broad consensus that teaching and learning in the majority of South African schools leaves much to be desired” (p. 131). Their findings show that in spite of the policy changes to OBE, classroom practice in the vast majority of South African classrooms continues to be dominated by: teacher talk with a low level of learner participation; rote learning; a lack of meaningful questioning; lessons having a lack of structure and an absence of engaging activities; little group work or meaningful interaction between learners; and relatively few tasks requiring reading/writing (Taylor & Vinjevold, 1999). Robinson (2000) suggests that the continued prevalence of Fundamental Pedagogics coupled with South Africa’s “history of authoritarianism, inspections and hierarchy in schools” has “actively discouraged [teachers] from engaging in any form of dialogue about why they were doing what they were doing, what the alternatives might be in their teaching and how their interactions with learners and colleagues might be different” (p. 214). This has “severe implications for the depth of inquiry offered by [supervising] teachers to student teachers” during sessions of Teaching Experience (Robinson, 2000, p. 216).

OBE stays, Curriculum 2005 goes

Mattson and Harley (2003) assert that while the South African educational policies may look modern, and are in line with international trends, they are “distressingly out of touch with [South African] school and classroom realities” (p. 284). Adler, too, asserts that while the new South African curriculum shares goals of “high-level skills, flexible and integrated knowledge and participative practice” with other countries internationally, South Africa does not share their “material, cultural and knowledge resources” (Adler, 2002, p. 18). A review by the ministerial-appointed Chisholm Commission found that Curriculum 2005 was poorly designed and poorly understood, with “a wide gap between what teachers say they know and what they actually do” (Review Committee on C2005, 2000, p. 78). Although there was widespread support for OBE, teachers “embraced the form rather than the spirit and content of the ideas. Teachers may be aware of the need to make learners participants in the learning process. However, this was

understood more in procedural terms rather than as something which promotes learning” (Review Committee on C2005, 2000, p. 78). The Chisholm Commission found that “learners in the classes observed still do not participate fully in the learning process since teachers are still providing a great deal of direct instruction and are still pre-occupied with content coverage” (Review Committee on C2005, 2000, p. 78).

The main claim made by these texts is that OBE was being implemented superficially and mechanically, leading to a loss of the essence of teaching and learning. Curriculum 2005 was replaced by a revised National Curriculum Statement (NCS, 2002), which kept the principles of OBE, but made the aims and the content of curriculum more accessible to teachers. The NCS also renamed the learning areas more concisely.

Teachers in South Africa are generally experiencing a poor public image and low morale due to poor pay and inadequate working conditions, as well as stress at being required to adjust to a radically different teaching philosophy and curriculum (Marais & Meier, 2004). This was acknowledged by the Chisholm Report, which notes, “teachers are working under conditions that are not conducive to their own learning and development. Indications are that teachers, in particular, feel overwhelmed by a ‘barrage’ of changes, some of which are perceived to be threatening their professional status, job security and deeply held beliefs” (Review Committee on C2005, 2000, p. 81). Some argue that this situation has contributed to falling enrolments in teacher education institutions across South Africa (Samuel & Pillay, 2003). Such negativity from within the profession may also influence the interactions that supervising teachers have with student teachers during their TE sessions, although that is not the focus of this study.

Teacher education policy development

It has been argued that the current policies governing teacher education in South Africa emerged as a reaction to the educational philosophies of Fundamental

Pedagogics and the political fragmentation of the governance of education. It represented an attempt to bring cohesion, accountability and quality assurance to the realm of teacher education.

In September 2000, the (then) Minister of Education, Kader Asmal, signed a national policy governing the provision of teacher education programmes in South Africa. This was called the *Recognition and Evaluation of Qualifications for Employment in Education based on the Norms and Standards for Educators Report (Notice 82 of 2000)* (henceforth called the NSE Report). This report extended implications of the outcomes-based approach to teacher education. A competence-based model of teacher education was adopted, where the competence of a graduating student teacher is determined through an ability to perform pre-defined tasks satisfactorily. To this end, lists of *performance criteria* or *competences* describe what student teachers are required to do in order to demonstrate teaching competence. The policy envisages that these lists will enable teacher educators to judge competence, and allow student teachers to know what levels of competence are expected of them.

The policy aims at contributing to the implementation of OBE in schools by training educators who have the knowledge, skills and values needed to make learning more relevant to the economic and social needs of South Africa (Parker, 2003). The NSE report specifies that teacher education curricula should ensure that teachers in South Africa display a set of *practical, foundational* and *reflexive* competences in a way that is integrated and removes the dichotomy between theory and practice.

- *Practical competences* refer to the teacher's "ability, in an authentic context, to consider a range of possibilities for action, make considered decisions about which possibility to follow and to perform the chosen action" (Department of Education, 2000, p. 4).
- *Foundational competences* are said to exist when the learner "demonstrates an understanding of the knowledge and thinking which underpins the action taken" (Department of Education, 2000, p. 4).

- *Reflexive competence* refers to the “ability to integrate and connect performances and decision making with understanding and with the ability to adapt to change and unforeseen circumstances and explain the reasons behind these actions” (Department of Education, 2000, p. 4).

The emphasis on the integrated approach appears to draw on the strong practical emphases of the historical colleges of education, as well as the theoretical orientations of the university-based teacher education programmes (Parker & Deacon, 2005). By integrating practical, foundational and reflexive competences, the NSE Report defined seven roles that the State expects a competent educator to fulfil. These roles are:

1. Learning mediator
2. Interpreter and designer of learning programmes and materials
3. Leader, administrator and manager
4. Scholar, researcher and lifelong learner
5. Community, citizenship and pastoral role
6. Assessor
7. Learning area/subject/discipline/phase specialist

Student teachers completing their initial teacher education programmes are required to display competences in all seven roles. The listed competences present a generic picture of the skills, knowledge and values that a competent and professional educator is expected to demonstrate within each defined role. The list of *Roles of the Educator* reflects the state’s perception of the work of a professional educator.

Within each specified *Role of an Educator*, the Standards Generating Body (SGB) for Educators has identified Exit Level Outcomes that stipulate the knowledge, skills and values that a professional and competent beginning educator should have acquired by the end of his/her training. The Exit Level Outcomes have been registered with SAQA as the defining outcomes of the particular teaching qualification.

The Exit Level Outcomes are grouped into four areas of competences:

1. Competences relating to fundamental learning
2. Competences relating to the subject and content of teaching
3. Competences relating to the teaching and learning processes
4. Competences relating to the school and educator profession (SGB for Educators, 2001, p. 6).

For each of these Exit Level Outcomes, there is a list of performance-based competences. The implication is that teacher educators consider these lists of competences when judging whether a prospective graduate sufficiently meets the levels required for qualification.

Reorganising teacher education

The National Education Policy Act (Act 27 of 1996) and Higher Education Act of 1997 (Section 21) placed teacher education under the sole authority of the National Department of Education. Teacher education in South Africa is now located wholly within the *higher education sector*, with all public providers of teacher education being accountable to the Council on Higher Education (CHE). It is envisaged that quality assurance of teacher education programmes can be monitored through a process of funding to accredited institutions. For public providers of teacher education to obtain funding from the National Department of Education, their programmes must be reviewed and accredited by the CHE's Higher Education Quality Committee (HEQC).

When teacher education was made a national concern, provincial Departments of Education relinquished control of 150 colleges of education, many of which then closed down. The remaining colleges of education were incorporated into either a university or a technikon. Unlike many former decentralised colleges of education, the universities and technikons that offer teacher education programmes are located within urban centres. To allow for supervision of student teachers by university tutors, schools used for TE generally tend to be in close

proximity to the university. Consequently, there now exists an inherent bias towards the use of *urban schools* for TE sessions (Samuel & Pillay, 2003).

In response to tighter government expenditure and budget constraints, a number of universities were undergoing rationalisation and restructuring at the time when colleges of education were being incorporated. Whereas teacher education had been formerly located within a discrete university faculty, rationalisation resulted in many Faculties of Education being downgraded to a school within an overarching faculty (such as happened at the University of the Witwatersrand). For teacher education, this resulted effectively in a loss of political bargaining power and increased invisibility in relation to the top management structures of higher education institutions (Samuel & Pillay, 2003). Steele (2003), too, contends that reform of the educational system in South Africa, including teacher education, has been driven largely by political transformation and fiscal constraints, rather than the inherent needs of teacher education. This has resulted in the introduction of widespread rationalisation and redeployment policies. Steele (2003) suggests that teacher education policies have largely ignored the “nature of teacher preparation and the institutional capacity to deliver such preparation” (p. 117).

Organisation of the BEd degree

Within the framework of the Norms and Standards for Educators Report (2000), all pre-service student teachers (who choose to qualify as professional teachers through an integrated programme) are required to enrol in a four-year Bachelor of Education (BEd) degree, to be completed at NQF 6. The NSE report describes the BEd qualification as “a focused teaching degree with strong subject and educational theory competence” (Department of Education, 2000, p. 17). The SGB for educators describes the BEd “as [an] initial professional qualification...[that] provides a deeply grounded basis for professional practice... catering particularly for those wanting an educational focus from the outset of their studies” (SGB for Educators, 2001, p. 13). Welch (2002) questions whether a “long initial degree is the best route for reaching the goal of professional

education for teachers in a country which for some time will be faced with a severe rural/urban divide and severe teacher shortages” (p. 27). She argues that the length of the BEd might discourage teaching candidates, whose families would have to support them for a further four years before they generate an income. Alternatively, they might use their degrees “for mobility out of the rural contexts which need them” (Welch, 2002, p. 27).²⁷

The NSE report does not prescribe teacher education programmes for the higher education institutions, but gives institutions the “freedom and responsibility” to design teacher education programmes in any way that leads to the “successful achievement of outcomes” (Dept of Ed, 2000, p. 6). Teacher education institutions are therefore expected to use the list of roles of the educators, exit level outcomes and notions of competences to inform the design of a new curriculum. Parker and Deacon (2005) argue that while the NSE Report allows for some institutional autonomy, there is little description of depth, pacing, sequence and progression of teaching knowledge, skills and values. The NSE Report has been criticised in that it gives “no sense of progression through the outcomes over a period of years” (Robinson, 2003, p. 30). It has been left up to institutions providing teacher education to develop this progression. However, there is very little research in South Africa focused on student teaching and how student ‘learn to teach’. This study attempts to address this problem by empirically investigating the developmental patterns involved in the process of learning to teach.

Specialisations within the BEd

For the BEd qualification, the NSE report requires that all student teachers specialise in a subject/learning area, as well as a phase. Grades are grouped into four phases, namely Foundation Phase (Grade R or 0 – Grade 3); Intermediate Phase (Grade 4 – Grade 6); Senior Phase (Grade 7 – Grade 9) and Further Education and Training, FET, (Grade 10 – Grade 12). The Standards Generating

²⁷ Conceptually, however, it may take an extended period of time for student teachers to construct a deep understanding of teaching, and construct the professional and content knowledge required for competent teaching. See pp. 94 - 98.

Body for educators requires that in all phases student teachers complete “a study of the learning programmes as prescribed by the national curriculum (including) disciplinary bases of content, knowledge, methodology and relevant pedagogic theory” (SGB for Educators, 2001, p. 6). The role of learning area, subject or phase specialist is positioned as the “over-arching role”, in which competence is ultimately assessed. The SGB requires that students have at least half of their credits within their area of subject, learning area or phase specialisation. Intermediate phase student teachers should be primarily *phase specialists*, with a subject specialisation. They are required to display competencies across all eight learning areas, with expertise in developing reading, numeracy and life-skills.

Teaching experience

The NSE report recognises TE as an “essential feature” of all educator programmes, through which all seven roles of the educator should be developed and assessed. The workplace (such as, but not limited to, classrooms) should be regarded as the “authentic context within which student educators experience and demonstrate the integration of competences developed in the entire curriculum.” (Department of Education, 2000, p. 5). The SGB for Educators motivate strongly for TE as “an integral part of all professional qualifications...to ensure that the candidate gradually develops actual teaching skills” (SGB for educators, 2001, p. 37). The importance of TE within the BEd programme is that it allows a unique opportunity whereby students can demonstrate their ability to integrate their performance of important teaching actions (practical competence), with their understanding of the theoretical basis for these actions (foundational competence) and their ability to reflect on and make changes to their teaching practices (reflective competence) (p. 37). In order to ensure that student teachers “gradually develop actual teaching skills”, during their initial training, the SGB stipulates that BEd candidates undertake a period of TE in all years of their studies (p. 37).

Organisation of TE

The NSE report does not specify how the TE should be organised, and so there is great variation in the way in which TE is managed among providers of teacher education in South Africa (Reddy, 2003; Robinson et al., 2003; Marais & Meier, 2004; Samuel & Pillay, 2003; Quick & Sieborger, 2005)²⁸. The NSE report specifically requires TE to be “integrated into the programme” with some form of “observational assessment” (Department of Education, 2000, p. 22). However, there are no prescribed guidelines according to which university tutors can make a valid judgement about a student’s readiness to enter the teaching profession. Matters of judgement are much more difficult to assess than a list of discrete mechanical skills (Fraser et al., 2005). It is only during their final TE in fourth year that BEd student teachers can be evaluated against the Exit Level Outcomes, in a final summative assessment. The summative TE assessment of final year student teachers aims to measure “the extent to which candidates can teach competently and effectively in South African schools” (SGB for Educators, 2001, p. 37). The challenge for teacher educators is how to gauge acceptable levels of student teacher development within earlier years of the BEd programme, where appropriate levels of competence are not spelt out.

Critical studies on teacher education in SA

Morrow (2001) suggests that in the context of a post-Apartheid society, OBE has been widely regarded as the antithesis of Apartheid education, so that any critique of it has been incorrectly perceived as an expression of support for Apartheid educational policies (p. 87). While acknowledging the strides taken in reforming the Apartheid educational system, it is important to recognise that the structure of the current educational system has far-reaching implications and needs critical consideration and review. These issues will be explored in this section.

²⁸ For discussion, see pp. 56 – 59.

Undermining the professional practice of teaching

In the NSE Report, the state attempts to provide a formal definition for what is expected from a competent educator on completion of an initial teaching qualification. This provides “a high level ‘job description’ for newly qualified teachers” (Morrow, 2005, p. 98). The definition of an ‘educator’ provided in the NSE Report does not focus exclusively on those who work as teachers to enable learning; it encompasses all employees of the Department of Education, including principals, systems managers and district managers, whose daily tasks differ substantially from those of classroom teachers (Morrow, 2005). The NSE Report therefore specifies roles for educators that deflect attention away from the essence of teaching. In conflating all these various roles and packaging them as “roles of an educator” Morrow argues that the NSE Report makes greater demands on teachers that any individual could possibly fulfil. This leads to teacher burnout and guilt at not being able to manage their workload. It also promotes unrealistic expectations for what student teachers need to achieve by the time they graduate from their initial teacher education qualification.

Proponents of competence-based teacher education suggest that a list of competences (like those contained in the NSE Report) may help student teachers to visualise the ultimate goal of their teaching practice, and to clarify which aspects of their teaching performance are not yet adequate. Shalem and Slonimsky (1999) refute this claim, arguing that the assumption (inherent in the NSE Report) that a weak educator will be able to access better teaching practice by the State’s provision of a list of criteria is inherently flawed. They argue that educators who “do not see the internal connection between knowledge, learners, language and context” cannot have the fabric of their professional understanding fixed by being given criteria for competent practice (p. 18). The problem that manifests in cases like this is a conceptual one of not being able to grasp the internal goods of the practice, rather than a lack of information about what constitutes good teaching.

Morrow (1996) argues that a professional practice “is shaped and guided by the theory that informs it, and by the concepts, beliefs and principles of those who

participate in it. In this sense, a professional practice is ‘cognitive’ and socially constructed and maintained” (p. 77). On these grounds, he argues that the quality of a professional practice, like teaching, is dependent on the quality of thought of its practitioners. By stipulating decontextualised outcomes for teachers, the NSE Report disregards the role of professional judgement and thought of practitioners as a basis for constituting the internal goods of a practice. This undermines the professional status of teaching as it encourages the realignment of practice with the legislated criteria in a technocratic and decontextualised manner.²⁹ Shalem and Slonimsky (1999) assert that while the state has an obligation to regulate standards of delivery of teacher education, it should not assume the position of “a pedagogue who teaches the goods of a practice” (p. 27). Legislation cannot create consensus amongst South African educators about what constitutes good practice, and hence the NSE Report is unlikely to create a common culture of teacher education.

Quality assurance based on delivery against unit standards

Within the framework of the NQF, quality assurance is essentially a technical process whereby evaluators assess the extent to which providers assist learners in achieving outcomes stipulated in the defined unit standards. Shalem, Allais and Steinberg (2004) maintain that it is highly problematic to evaluate the quality of an educational course based on the extent to which it meets outcomes that have been created independently of the course itself. Such a system of evaluation means that the course should align with, and be accountable to, a list of specifications, rather than to “schemes of perceptions and appreciation, key procedures, and concepts that together inform the logic of a field of knowledge and the practices it adopts for socialisation of practitioners” (Shalem et al., 2004, p. 64). The result is that the disciplinary-based content knowledge of the course is reduced in importance. The “selection and sequence of a body of knowledge, its contextualisation and the pedagogy” become irrelevant for quality assurance

²⁹ In Chapter 5, I will explore how the NSE Report led to a conflict between professional judgement and legislated outcomes with respect to the assessment of TE at the University of the Witwatersrand.

purposes (Shalem et al., 2004, p. 65). Unless courses are judged by the core concepts of their disciplinary knowledge base, it is impossible to compare the quality of one course against another. This tension results in a “conceptual misalignment” whereby “epistemological difficulties that affect academic learning are addressed primarily by bureaucratic processes of regulation” (Shalem et al., 2004, p. 71). They claim that in the absence of academic knowledge as a central feature of accountability, it is extremely difficult for evaluators to make “meaningful judgements” about the quality of a course (p. 73).

Many goals of education (such as knowing, understanding, appreciating, valuing and thinking) are unable to be expressed in terms of observable outcomes (Morrow, 2001, p. 89). In education, neither the product, nor quality of a course, is directly measurable or tangible (Allais, 2003). Ensor (2003) argues that the NQF is doomed to failure because it attempts to apply the same controls to both pre-tertiary training and formal tertiary education, where these two have fundamentally different notions of knowledge. In higher education, there is an emphasis on the mastery of content; whereas in pre-tertiary training, the emphasis is on the acquisition of generic competence (Ensor, 2003, p. 341). She contends that the “one-size-fits-all” approach of the NQF, while suitable for use in pre-tertiary training, is inappropriate for use in the higher education sector (p. 344).

Tendency towards reductionism

Competence-based models of teacher education assume that the key dimensions of good teaching can be seen as observable behaviours. Clearly defined criteria by which qualifying students can be assessed are therefore assumed to ensure greater transparency and public confidence in the delivery of teacher education (Schulze, 2003; Lewin, 2003; Robinson, 2003; Fraser et al., 2005). It is envisaged that competences that are defined in a way that is easy to understand, and that permit direct observation, leading to the ‘clarity of focus’ necessary for preparing teachers. Furthermore, such criteria would assist schools in clarifying what a newly qualified teacher should be capable of doing (Fraser et al., 2005). However, the widely varying contexts that teachers face daily in the classroom require the

integration of action with professional insight, morality-based judgements and reflection (Robinson, 2003; Martin & Cloke, 2000). Teacher education is a complex endeavour as “producing teachers is more than simply accumulating a compendium of skills and competencies, no matter how impressive the articulation of the theory supporting these competencies may be” (Steele, 2003 p. 108). Lists of competences can therefore be criticised on the grounds that they reduce the practice of teaching to a list of discrete, observable and habitual routines that fail to recognise the complex situations that teachers face and respond to within classroom environments.

One could argue that the NSE Report has attempted to address the potential reductionism in OBE by stressing the importance of *reflective* competences (being able to adapt and change to unforeseen circumstances), in addition to *practical* competences (being able to consider alternatives and justify a chosen action) and *foundational* competences (demonstrating an understanding of knowledge underpinning an action). Furthermore, the exit level outcomes describe competences in higher order cognitive processes, requiring the teacher to: “[m]ake judgements ...”; “[j]ustify ...” and “[e]valuate ...” (SGB for Educators, 2001). Such exit level outcomes imply that an observable assessment of a student teacher’s performance during TE, without consideration of the student teacher’s insight into and understanding of his or her teaching actions, is an inadequate determinant of teaching competence. While the NSE report makes an attempt to emphasise applied and integrated competences, the list of exit level outcomes and associated competences are still presented as discrete elements of teaching. This approach does not encourage holistic and integrated assessment of graduating student teachers.

There exists debate regarding how useful a list of competences actually is when assessing student teachers during TE. Fraser (2005) argues that it is unlikely that teacher educators can deem a student teacher to be competent without systematic and sustained observations of student teaching. Fraser et al. (2005) maintain that the competence graduating teachers should be able to display would ideally be

defined “in terms of what [graduating] teachers do with their learners in their classroom” (p. 256). Opportunities for student teachers to display competence across the full range of activities may be limited within a given context. However, they suggest that competence could denote *potential*, rather than the *observed performance* of a candidate on a particular occasion. A student teacher may therefore be in possession of a ‘competence’ even if it is not explicitly observed in a given lesson. Given time and cost constraints, Fraser et al. (2005) argue that it is impossible for university tutors to observe student teachers displaying every competence listed in the NSE Report. They suggest that to meet the requirements of the NSE report, all courses within teacher education programmes could link to a practical school-based assignment, where an applied competence may be assessed, even if it is not directly observed.

Summary

Within the South African context, gross inequalities and fragmentation have characterised all spheres of life under Apartheid, including education. Teacher education in South Africa currently has a transformation agenda, attempting to eliminate residual practices related to Fundamental Pedagogics through the implementation of Outcomes Based Education. In defining roles of an educator such as the “community, citizenship and pastoral role,” the NSE Report highlights the responsibility the state expects teachers to fulfil in bringing about social transformation in South Africa. The NSE Report therefore, rests on an assumption that teacher education programmes are able to produce qualified teachers who display such competences and who can act as agents of change.

The NSE Report positions TE as a core component of teacher education programmes, in which practical, foundation and reflective competences can be integrated, applied and assessed within an authentic context. The NSE Report (and associated exit level outcomes) describes in great detail what the State expects a competent graduating teacher to be able to do.

While acknowledging the conceptual problems associated with the NQF and the NSE Report, critique of these policies is not the main focus of this study. Yet, these policies have created demands that highlight gaps in the knowledge of teacher education institutions. These missing elements give rise to difficulties in evaluating the teaching of student teachers during TE. The policies, for example, do not provide teacher educators with a sense of progression, or indications of what may constitute appropriate classroom practice from student teachers *during the course* of their teacher education programme, other than a vague notion that the final TE session should be evaluated at NQF 6. It has been left up to teacher education institutions to develop their own criteria, and to determine how teaching at NQF 5 may be different to teaching at NQF 6. And yet, very little research has been conducted into the classroom teaching of student teachers, both within the South African context, and internationally. South African research into classroom teaching has focused primarily on three areas, namely, the impact of teacher education programmes on classroom practice (e.g. Ensor, 2000; Adler & Reed, 2002); how teachers' understanding of OBE affects their practice (e.g. Mattson & Harley, 2003; Taylor & Vinjevold, 1999); and the organisational aspects of teacher education programmes (e.g. the MUSTER studies). The President's Education Initiative Research Project (Taylor & Vinjevold, 1999) concludes that the most critical challenge facing education in South Africa is the limited conceptual understanding many teachers have of the subjects they teach. By investigating patterns of teaching as student teachers 'learn to teach', I hope to make a contribution to the understanding of how student teachers may develop their teaching practice over the course of their studies and what implications can be drawn for the ways they could be assessed.

Subsequent developments in teacher education policy

Current Minister of Education, Naledi Pandor, is about to gazette the "National Policy Framework for Teacher Education and development in South Africa" (Department of Education, 2007). This policy framework recognises that teachers "work in extremely complex conditions, largely due to the pervasive legacies of Apartheid, but also as a result of the new policies needed to bring about change in

education” (p. 4). The BEd degree will continue to be one of two paths towards obtaining a professional teacher qualification.³⁰ The structure of the BEd must now include “the equivalent of a year’s supervised practical teaching experience” pegged at NQF 7 (p. 13). These periods of TE may be taken “in short periods during the programme, or be undertaken by student teachers or serving teachers in school under supervision by a mentor” (p. 14). Under this policy framework, teachers will be required to earn a target number of professional development points, over a three-year cycle, by undertaking a variety of professional development activities.³¹ The policy framework declares that the “norms and standards for educators will be amended and aligned with new policy developments” (p. 13). This policy framework requires that in future, graduating student teachers will be required to teach at a higher NQF level than what is presently expected. The implications of this policy decision will be further critiqued in Chapter 9.

³⁰ The other route being a one-year PGCE following a bachelor’s degree

³¹ Although the policy framework does not explicitly state it, it seems that teachers may earn professional development points by undertaking the supervision and mentoring of student teachers during TE sessions.

CHAPTER 3: THEORETICAL FRAMEWORK

This study rests on the assumption that teacher knowledge informs teacher thought, which in turn informs teacher action within the classroom. This chapter explores what is meant by professional teacher knowledge, and how this differs from the knowledge about teaching that student teachers possess on entering their teacher education programme. I will then consider processes involved in teaching in which expert teachers use their professional teacher knowledge for pedagogically reasoned action.

Shulman (2002) argues that regardless of post-modern criticism of taxonomies, they are useful in that “educators need a language, a set of terms for making sense of the general world” (p. 38). He maintains that, “one of the central ways we make sense of experience is by making differences...Distinction and taxonomies are tools for thought [that we use] to make the world more manageable” (p. 36). Two of Shulman’s taxonomies have particular relevance for this study, namely his categories of teacher knowledge (1987b), and his model of pedagogical reasoning and action (1987b). In this chapter, these taxonomies will provide tools for understanding how *common-sense knowledge* about teaching differs from *professional teacher knowledge*. I will argue that ‘learning to teach’ may be considered as the development of pedagogically reasoned action that teachers use to enable learning.

The beginning knowledge base of student teachers

Lortie (1975) argues that student teachers are different to students entering any other profession because they already have spent a considerable amount of time in classrooms, which will be their future work environment. He describes this time as an *apprenticeship of observation* during which student teachers acquire various conceptions of the nature of teaching and learning through observing their own teachers. These deeply rooted informal theories regarding their teaching are based primarily on their own experiences as learners, and life experiences where they worked previously with children (Tomlinson, 1995; Calderhead & Robson, 1991;

Soudien, 2003). Lortie argues that experiences of schooling thus form the beginnings of socialisation of student teachers into the teaching profession (p. 61). Shulman (1987a) describes these informal models of teaching as having been “assiduously and often emotionally acquired” through twelve to fifteen years of observing teaching (p. 119). While student teachers may have been exposed to the practices of many outstanding teachers through their schooling, they may also have developed some problematic conceptions about the nature of teaching. These can hinder the development of their teaching practice (Joram & Gabriele, 1998).

While learners may be adept at mimicking their teachers, the limitations of their vantage point lead to superficial imitation that is substantially different to actually obtaining insight into the “private intentions, goals, reasoning behind decisions and post-lesson reflection that support teacher actions” (Lortie, 1975, p. 62). The kinds of teacher knowledge, skills and professional commitments that allow a teacher to “purposefully move a group of learners from one set of understandings to quite another” are invisible from the learners’ perspectives (Bransford et al., 2005a, p. 1). Shulman (1987a) suggests that student teachers need to overcome the “pedagogical immunity” of their apprenticeship of observation before they can truly make the adjustment from being an ‘expert learner’ to a ‘novice teacher’ (p. 119).

Common misconceptions held by student teachers

I have argued that during their experiences as learners, student teachers acquire some deeply entrenched beliefs about teaching. Some of these beliefs about teaching that may impede their development in ‘learning to teach’. Student teachers can be “absolutely confident that they understand something, but they don’t” (Shulman, 1999a, p. 12). Because new learning is grounded on previously held beliefs and understanding, a “strategically held misconception can interfere with significant amounts of later good teaching” (Shulman, 1999a, p.12). The notions of teaching and learning acquired from their apprenticeships of

observation do therefore serve as “filters for making sense of the knowledge and experience they encounter” (Feiman-Nemser, 2001, p. 1016).

Two misconceptions commonly held by student teachers will be considered here:

(i) Quality of teaching is determined by teacher-learner relationships

The image that student teachers hold of an effective teacher is often modelled on particular teachers who stand out in their memories (Tomlinson, 1995; Calderhead & Robson, 1991). Studies show student teachers have expectations regarding the nature of the relationship they hope to form with their learners (Maynard & Furlong, 1995; Feiman-Nemser, 1983). Student teachers tend to judge the quality of teaching they observe on the basis of the quality of the *relationship* (or lack thereof) the teacher has with learners, rather than on the extent to which they enable learning. This may lead to a misconception, as student teachers assume that the *relationship* they have with learners is essence of effective teaching.

Arising from this misconception, student teachers may focus on developing friendly relationships with learners as a means of developing effective teaching practice. However, relating well to the learners does not, in itself, result in effective teaching and learning. This misconception results in student teachers seeking popularity with learners rather than considering how to teach their lesson topics for systematic learning.

(ii) Teaching is the transmission of information

Misconceptions gleaned from their apprenticeship of observation may lead student teachers to believe that teaching merely involves mechanical *transfer of information* from the teacher to the learner. Learning, on the other hand, may be misperceived as the memorisation of information told by the teacher (Tomlinson, 1995; Maynard & Furlong, 1993; Elliott & Calderhead, 1993). Student teachers then typically teach by lecturing, or telling learners the information they know. Darling-Hammond (1997) suggests that such transmission teaching involves straightforward classroom routines, and gives teachers a “sense of their own accomplishment” when they have been able to ‘get through’ the content (p. 13).

TE as a time for cementing or challenging misconceptions

When student teachers go into schools, they soon discover that the “real mysteries of teaching were hidden to them as children, as they were never involved in the intensive planning that is required for even one day of teaching, much less several weeks and months” (Darling-Hammond et al., 2005, p. 169). During TE, student teachers are often assigned to proficient or expert supervising teachers, whose teaching performance is flexible and intuitive (Berliner, 1994, p. 166). Such teaching looks effortless to an uninformed observer (like a beginning student teacher); therefore the professional thinking behind the actions and recognition of complex learner behaviour patterns is often invisible to student teachers. They thus often fail to glean the true complexities associated with teaching and learning, leading to the student teacher to demonstrate what Hammerness et al. (2005a) refer to as a ‘the problem of complexity’ (p. 375).

Calderhead (1988) argues that mere observation (without reflective discussion) may represent wasted opportunities for teacher learning, as at first, student teachers may not be able to make real sense of the *busyness* happening in the classroom. Consequently, when student teachers ‘teach’ by mimicking a teacher they remember from their own schooling, they are replicating behaviour without a full understanding of the professional knowledge and thinking that informs teaching practice (Maynard & Furlong, 1993). By imitating the most easily observable part of teaching, student teachers reinforce the misperception that teaching is easy, and that it simply involves the execution of a number of mechanical tasks. Under this misapprehension, they adopt the superficial appearance of teaching actions, while deeper insights and understandings that underpin the actions remain rudimentary.

Tomlinson (1995) asserts that while direct observation of good teaching promotes and strengthens the acquisition of action strategies, there is the danger that mere observation will simply serve to reinforce the student teachers’ initial preconceptions of teaching. These initial conceptions of teaching are resilient, and

influence what student teachers perceive to be relevant and useful in their coursework, as well as affecting their analysis of their own teaching and the teaching of others (Calderhead & Robson 1991).

Maynard and Furlong (1995) argue that “helping student teachers to evaluate their beliefs about the nature of teaching and learning is fundamental if students are to develop into fully professional teachers” (p. 9). A number of researchers recommend that initial teacher education programmes explicitly scrutinise and challenge the multitude of understandings of teaching and learning that student teachers possess upon entering their initial teacher education programmes (Calderhead & Robson, 1991; Tomlinson, 1995; Hammerness et al., 2005a). Bransford et al. (2005b), for example, articulate how “people’s assumptions about learning can be considered to be tacit theories that affect their behaviour, but tacit theories typically remain unexamined. By making tacit theories explicit, people can think more critically about them. This allows us [as teacher educators] to improve upon ideas and assumptions that may be partially true, but far from complete” (p. 41). Shulman (1987b) believes that teacher educators may be able to “do some very powerful things if we can surface the underlying preconceptions students have” (p. 119). Teacher educators could use student teachers’ preconceptions as a springboard from which conceptual change can proceed, rather than to ignore their existence (Bransford et al., 2005b).

Summary

The ‘problem of complexity’ in student teachers is characterised by a belief that teaching involves the acquisition of a routine of skills. This belief may have been acquired during the apprenticeship of observation, but may be further cemented when student teachers ‘teach’ by simply mimicking what they see their supervising teachers do, without understanding the knowledge and thinking that underpins those actions. ‘Learning to teach’ is not about classroom action alone, but also about the acquisition of professional teacher knowledge, and making pedagogical judgements and choices based on that knowledge.

Shulman's categories of teacher knowledge

This study rests upon the assumption that teacher knowledge informs teacher thought and teacher action. An examination of the knowledge bases of teaching is therefore central to this analysis. Shulman (1986) describes seven categories of knowledge that he suggests form the professional knowledge base for teaching. Shulman's seven categories of knowledge are as follows:

1. Subject matter knowledge³²

Subject matter knowledge can be described as knowledge and understanding of the central concepts, factual information and organising principles that make up a discipline; an understanding of the big ideas and productive patterns of thought within the discipline, and understanding how new knowledge in the field is acquired, analysed and interpreted (Grossman, Wilson & Shulman, 1989).

2. General pedagogical knowledge

General pedagogical knowledge is defined as the “broad principles and strategies of classroom management and organisation that appear to transcend subject matter”, and is applicable across the grades (Shulman, 1986, p. 92). Such knowledge includes ways of maintaining appropriate discipline, using class time efficiently, and communicating instructions / expectations clearly.

3. Curriculum knowledge

Shulman (1986) maintains that curriculum knowledge and its associated materials provide the “pharmacopoeia from which the teacher draws those tools of teaching that present or exemplify particular content and remediate or evaluate the adequacy of student accomplishments” (p. 204).³³

4. Pedagogical content knowledge (PCK)

Shulman (1986) describes pedagogical content knowledge (PCK) as “subject matter knowledge for teaching” (p. 203). He argues that knowledge of subject

³² Shulman uses both the terms ‘content knowledge’ (e.g. 1986, 1987b) and ‘subject matter’. In other texts, (e.g. Grossman, Wilson & Shulman, 1989) the term ‘subject matter knowledge’ is used. In this study, ‘Subject Matter Knowledge’ will refer to a discipline-based understanding, whereas ‘content knowledge’ will refer to the knowledge pertaining to a particular lesson.

³³ Shulman draws comparisons between teaching and the medical profession.

matter alone does not make one a teacher. The difference between teachers and subject specialists is that teachers need to know the subject matter *as well as* how this content knowledge can be *transformed into representations* that are comprehensible to a group of learners with diverse interests and abilities (Shulman, 1987b, p. 98). Shulman defines PCK as a ‘blending of content and pedagogy into an understanding of how particular topics, problems, or issues are organised, represented, and adapted to the diverse interests and abilities of learners and presented for instruction’ (Shulman, 1987b, p. 93).

5. Knowledge of the learners

This category of knowledge enables a teacher to relate their teaching to the prior knowledge of the learners; formulate representations that link with their interests; and possess an understanding of their diverse abilities and ways of learning.

6. Knowledge of educational contexts

Shulman (1987b) suggests that educational contexts range from “the workings of the group or classroom, the governance and financing of school districts, to the character and communities of culture” (p. 93).

7. Knowledge of educational ends, purposes, and values, and their philosophical and historical grounds.

These seven knowledge bases are important in learning to teach, as “teachers must learn to use their knowledge base to provide the grounds for choices and actions... the usefulness of such knowledge lies in its value for judgement and action” (Shulman, 1986, pp. 99-100). Shulman asserts that PCK is of special interest because it delineates “the distinctive bodies of knowledge for teaching” (p. 93).³⁴ Four categories of ‘teacher knowledge’ are especially relevant to the construction of PCK, and therefore also to the process of ‘learning to teach’ during TE. These are subject matter knowledge; general pedagogical knowledge; pedagogical content knowledge; and knowledge of the learners.

³⁴ The identification of a body of knowledge that is uniquely the providence of teachers strengthens the status of teaching as a profession.

Types of knowledge for teaching

Cochran-Smith and Lytle (1999) assert “teachers who *know more* teach better” (p. 249). They suggest that there are three conceptions of teacher learning, each with different implications for what it means to ‘know more’ and ‘teach better’. These have been termed knowledge *for* practice, knowledge *in* practice and knowledge *of* practice. Each conception of teacher learning has “radically different views of what ‘knowing more’ and ‘teaching better’ mean” (Cochran-Smith & Lytle, 1999, p. 249). These three conceptions of teacher learning will be examined in terms of their implications for ‘learning to teach’.

Teacher learning as knowledge *for* practice

Teacher education programmes assume inherently that there is a body of formal teacher knowledge that student teachers need to acquire and then “implement, translate, or otherwise put into practice” when they ‘learn to teach’ (Cochran-Smith & Lytle, 1999, p. 255). The knowledge base provided by teacher education institutions attempts to formally demarcate what teachers “need to know about their subjects as well as what they need to know in order to choose, construct, use, and evaluate representations of subject matter in ways that are teachable for diverse student populations” (Cochran-Smith & Lytle, 1999, p. 256). Within this conception of teaching, student teachers are expected to use their knowledge base (acquired in university courses) and apply the knowledge in the context of the classroom during TE sessions.

Within the conception of teacher learning as ‘knowledge *for* practice’, effective teachers are those with a good grasp of the *pedagogical content knowledge* (PCK)³⁵ of their discipline, which enables them to identify appropriate outcomes (skills, knowledge and values); carefully select teaching strategies to obtain their goals; structure subject knowledge in ways that are accessible to learners and

³⁵ PCK was introduced in Chapter 1 as a “blending of content and pedagogy into an understanding of how particular topics, problems, or issues are organised, represented, and adapted to the diverse interests and abilities of learners and presented for instruction” (Shulman, 1987b, p. 93).

relate new knowledge to their learners' prior knowledge; assess and monitor learning; and provide constructive feedback to their learners (Shulman, 1987a; Zembal-Saul et al., 1999; Gess-Newsome, 1999a; Morine-Dersheimer & Kent, 1999). Cochran-Smith and Lytle (1999) suggest that PCK has become "a central construct" of knowledge *for* practice (p. 256).

Teacher learning as knowledge *in* practice

In this conception of teacher learning, it is believed that student teachers learn through opportunities to examine and reflect on the "ongoing actions of expert teachers as they choose among alternative strategies, organise classroom routines, and make immediate decisions as well as set problems, frame situations and consider/reconsider their reasoning" (Cochran-Smith & Lytle, 1999, p. 262). During TE sessions, student teachers have opportunities to become embedded within the 'craft knowledge' of a practicing teacher. Within an authentic context, student teachers are able to observe how supervising teachers "deal with classroom situations that are inherently indeterminate" (Cochran-Smith & Lytle, 1999, p. 268). According to the conception of teacher learning as knowledge *in* practice, discussion with the supervising teacher aims at providing student teachers with "opportunities to enhance, make explicit, and articulate the tacit knowledge embedded in experience and in the wise action of very competent professionals" (Cochran-Smith & Lytle, 1999, p. 263). It is this tacit knowledge embedded in practice itself that Shulman refers to as 'the wisdom of practice'. He maintains that teachers, as practitioners "know a great deal that they have never even tried to articulate" (Shulman, 1987b, p. 98).

In the conception of teacher learning as 'knowledge *in* practice', teaching is understood as "the process of acting and thinking wisely in the immediacy of classroom life: making split-second decisions; choosing among alternative ways to convey subject matter; interacting appropriately with an array of [learners], and selecting and focusing on particular dimensions of classroom problems" (Cochran-Smith & Lytle, 1999, p. 266). This conception of teacher knowing, too,

relates closely to PCK, and is directly relevant to the experiential learning that student teachers acquire in the classrooms during TE sessions.

Teacher learning as knowledge *of* practice

The third conception of teacher learning involves teachers “actively initiating and carrying out research in their own schools and classrooms”, characterised by attempts, throughout their careers, to “make teacher learning more critical, including strategies that prompt prospective teachers to investigate their own autobiographies” (Cochran-Smith & Lytle, 1999, p. 283). University tutors and supervising teachers with this conception of teacher learning would actively confront and challenge their own and their student teachers’ perceptions and assumptions about teaching and learning that underpin their practice. The conception of teacher learning as ‘knowledge *of* practice’, places the teacher as an agent of change, not only within the classroom, but also within the wider social and political context. This conception of teacher learning may manifest when university tutors prompt student teachers to investigate their own practice, and connect it to the impact of the social conditions of schooling on learners’ understandings of subject matter.

Summary and implications for this study

Cochran-Smith and Lytle (1999) argue that each of these conceptions of teacher learning lead to particular notions of what facilitating professional practice might entail. The conception of teacher learning as ‘knowledge *for* practice’ is specifically relevant to this study, as the BEd is touted as an integrated teacher education programme in which practice develops alongside theory. Much of the university coursework is intended to culminate in the application of theory during TE. However, Calderhead and Shorrock (1997) contend that there is a long-standing tension within teacher education between the need for student teachers to *understand* the changing nature of their teaching (theory, largely within the culture of a university), and *perform* their teaching effectively (practice, largely within the domain of the school).

Student teachers draw on these accumulated experiences to recognise and respond to classroom situations that arise. The conception of teacher learning as ‘knowledge *in practice*’ is therefore relevant to student teacher learning during TE sessions themselves.

This study is concerned primarily with the application of ‘knowledge *for practice*’ (in particular, the knowledge that Shulman calls PCK), and how this relates to the ‘knowledge *in practice*’ that student teachers acquire from their experiences of interacting with experienced teachers and their own attempts at teaching during TE sessions.

The central role of PCK in ‘knowledge *for practice*’ and ‘knowledge *in practice*’

Pedagogical Content Knowledge (PCK), as described by Shulman, is a “blending of content and pedagogy into an understanding of how particular topics, problems, or issues are organised, represented, and adapted to the diverse interests and abilities of learners and presented for instruction” (Shulman, 1987b, p, 93). Grossman et al. (2005) explain PCK as the knowledge that enables teachers to “anticipate and respond to typical learners’ patterns of understanding and misunderstandings within a content area, and the ability to create multiple examples and representations of challenging topics that make the content accessible to a wide range of learners” (p. 201).

In particular, Shulman (1986) suggests that it is this unique knowledge that allows a teacher to understand “what makes the learning of specific topics easy or difficult: the conceptions and preconceptions that [learners] of different ages and backgrounds bring with them” (p. 203). He argues that PCK allows teachers to know which teaching strategies are “most likely to be fruitful in reorganising the understanding of learners” (p. 203). PCK draws particularly on the integration of certain of Shulman’s (1987b) categories of teacher knowledge, namely,

1. Subject matter knowledge
2. General pedagogical knowledge
5. & 6. Knowledge of learners, their characteristics and their context³⁶

The concept of PCK is useful in recognising the complexities involved in both teaching and ‘learning to teach’. Shulman (1987a) argues that ‘learning to teach’ is particularly difficult because “unlike the other professions where you use disciplines as a basis for your practice, in teaching, the disciplines play a dual role. They are both the basis *for* practice and *what* you practice....If I’m a teacher...I’ve got to understand [the topic] enough to explain it to somebody else. And it is much more difficult to teach somebody something than merely to know that something” (Shulman, 1987a, p. 117).

Researchers in effective teaching are now paying more attention to the role of PCK and subject matter knowledge in teaching. For example, Horowitz et al. (2005) make extensive use of Shulman’s ideas of teacher knowledge (in particular subject matter knowledge, PCK and knowledge of learners) when they describe effective teachers as being “able to figure out not only what they want to teach, but also how to do so in a way that students can understand and use the new information and skills. They know what learners are ready for and need to learn so they choose tasks that are productive, and they organise these tasks in a way that builds understanding. Finally, they monitor students’ growth and progress so they can address specific needs and keep learners learning productively” (p. 88). PCK enables teachers to anticipate and respond to typical patterns of learners’ misunderstandings, and to create a multiplicity of examples and representations of challenging topics in order to make subject matter knowledge accessible to learners (Grossman et al., 2005, p. 205).

Cochran-Smith and Lytle (1999) maintain that unlike other forms of knowledge for teaching, PCK is neither exclusively ‘knowledge *for* practice’, nor ‘knowledge

³⁶ See pp. 97 – 98. Although Shulman (1986) separates these into two categories of teacher knowledge, from the definition of PCK knowledge of learners and their specific context can be grouped together as one of three dimensions of PCK.

in practice’, but rather it provides a bridge between the two. They suggest that perhaps “the problem is with the application of the formal-practical divide and *not* with notions of knowledge for teaching that are not easily subsumed by the distinction” (Cochran-Smith & Lytle, 1999, p. 256). PCK is a unique form of teacher knowledge as it encompasses both practical and theoretical professional teacher knowledge.

Challenges of remembering and enacting teacher knowledge

The acquisition of teacher knowledge is not useful unless it is remembered and used by student teachers to inform what they do in the classroom. Without the acquisition and enactment of professional teacher knowledge, student teachers would continue to teach from the conceptions of what it means to teach that they obtained during their own schooling. I have argued for a conception of ‘learning to teach’ that encapsulates informed and thoughtful teaching action, underpinned by PCK. This study focuses on the links that exist between student teachers’ growing knowledge for teaching and their classroom actions, based on their developing practical teacher knowledge. However, it cannot be assumed that just because student teachers have acquired teacher knowledge, they are able to use it for teaching. Shulman (1999a) addresses this issue when he asks, “What does learning look like when it’s not going well?” (p. 10). He describes three manifestations of problematic learning: forgetting acquired knowledge (*amnesia*); misunderstanding knowledge (*fantasia*); and an inability to enact acquired knowledge (*inertia*) (Shulman, 1997c, p 556; Shulman, 1999a, p. 10). I have already discussed misconceptions of teaching held by student teachers that stem from the conceptions of teaching that they acquire during their own schooling.³⁷ These misconceptions correspond to what Shulman calls the ‘learning pathology’ of *fantasia*. I will now consider the two other ‘learning pathologies’ identified by Shulman, namely student teachers forgetting what they have learnt (*amnesia*), and being unable to enact their teacher knowledge (*inertia*).

³⁷ See pp. 94 - 98.

Amnesia

Shulman (1999a) describes amnesia as a “malfunction of memory” where learners cannot recall what they have been taught (p. 10). This type of ‘learning pathology’ undermines the capacity of student teachers to apply their knowledge when teaching, because they have forgotten either what they have learnt previously or what has been taught to them. Likewise, forgetting what worked and what did not work in previous lessons means that the learning cannot be integrated into new lessons. Shulman (1997c) therefore argues that, “amnesia is the great enemy of learning from experience” (p. 556). In order for student teachers to learn from experience, it is essential that they reflect on and remember what they have learnt and integrate this new learning into their existing practice. Shulman (1997b) suggests that *pedagogical amnesia* can afflict even experienced teachers, as “there is a large difference between learning from experience and simply having experience” (p. 506). He suggests that amnesia may be at the root cause of recurring mistakes in teaching, as teachers “fail to incorporate what [they] have learned into [their] new practices” (Shulman, 1997b, p.506). He claims that teachers, in particular, suffer from “chronic pedagogical *amnesia*” because of the “pedagogical isolation of teaching...and because of [their] own lack of adequate discipline in documenting and reflecting on [their] own practice” (Shulman, 1997b, p.506).

To challenge amnesia, student teachers need to identify accurately the consequences of various actions or strategies. Shulman (1987a) suggests that an ability to reflect and learn from teaching experiences requires that student teachers have *accurate access* to what they did, or did not do during their lesson. There often exists a mismatch between what student teachers *thought* they did, and what they *actually did* during their lessons (p 119). In the absence of feedback, when their lesson goes unexpectedly well, student teachers may misinterpret their success as evidence that they have achieved proficiency (Tomlinson, 1995; Grossman, 1992). They may deduce that they have established their teaching

practice, and consequently use a limited repertoire of generic teaching strategies repeatedly, effectively stagnating their teaching development.

Inertia

Shulman (1999a) refers to ‘inert’ knowledge, and ideas that “simply lie there, doing nothing...not in a form that lends themselves to any useful purpose beyond being remembered” (p. 13). Studies cited in the literature review found that student teachers had difficulty in linking theory offered at university and actual practice of teaching (Ensor, 2000; Calderhead & Shorrock, 1997; George et al., 2000, Reddy, 2003; Robinson et al., 2003; Quick & Sieborger, 2005).

While Shulman argues that *inertia* is a manifestation of problematic learning, Ensor (2000) draws on Bernstein’s work to explore inertia in new teachers. She, too, observed a newly graduated teacher whose classroom teaching differed radically from his demonstrated degree of teacher knowledge (in his practice as a student teacher) and his articulation about his own teaching. Her analysis suggests that *inertia* is a symptom of teacher education being inherently bound to a particular context, resulting in student teachers acquiring *rules of recognition* (of what may constitute good practice) but not necessarily *rules of realisation* (where they are able to replicate the practice they recognise as being privileged).³⁸

Summary

Problems in acquiring and using knowledge for teaching manifest as (i) a failure to learn from experience (*amnesia*); (ii) misplaced confidence in a misunderstanding or preconception (*fantasia*) or (iii) an inability to enact an idea in practice (*inertia*). These three ‘learning pathologies’ are particularly relevant to this study, in that they highlight problems in teaching that commonly affect student teachers as they ‘learn to teach’ and enact their professional teacher knowledge.

³⁸ See p. 52 and p. 61 for a more detailed review of Ensor’s study.

Shulman's (1987b) *Model of Pedagogical Reasoning and Action* shows how highly experienced, expert teachers "use their knowledge base to provide the grounds for choices and action" (p. 99). This model identifies teaching as a multifaceted process, and provides a framework for linking the knowledge that teachers possess, their thinking and their classroom actions.

Shulman's Model of Pedagogical Reasoning and Action

Shulman (1987b) suggests, "Teaching necessarily begins with a teacher's understanding of what is to be learned and how it is to be taught. It proceeds through a series of activities during which the [learners] are provided specific instruction and opportunities for learning...Teaching ends with new comprehension by both the teacher and the [learner]" (p. 92). The conception of teaching as *enacted practical knowledge* culminates in Shulman's Model of Pedagogical Reasoning and Action, in which he suggests that teaching takes place in a cycle that involves comprehension, transformation, instruction, evaluation, reflection. This cycle ultimately leads to new comprehension about teaching and learning. He based his study on the teaching practices of veteran high school³⁹ teachers whose practice is considered to be 'expert'. These processes, and the knowledge bases upon which they draw in executing these actions, are summarised in the following table:

³⁹ Equivalent to the South African Senior/FET phase

Table 3.1: Summary of Shulman’s Model of Pedagogical Reasoning and Action and the relevant knowledge bases

Name of pedagogical process	Description of pedagogical action	Categories of teacher knowledge
Comprehension	Subject matter ideas and structures; educational purpose of discipline	Subject matter knowledge
Preparation	Purpose of lesson; interpretation and analysis of texts	Subject matter knowledge
Representation	Choosing appropriate analogies, representations, examples	PCK
Selection	Choice of instructional mode for teaching	PCK; general pedagogical knowledge
Adaptation	Adjusting lesson to suit characteristics of learners	PCK; knowledge of learners
Transformation	Generation of a plan (or set of strategies) to present lesson	Learner knowledge; subject matter knowledge and PCK
Instruction	Classroom management; Presenting clear explanations in the lesson; Issuing learning activities	General pedagogical knowledge; PCK
Evaluation	Checking for learner understanding during and after lessons	PCK
Reflection	Reviewing and critically analysing teaching and learning	PCK General pedagogical knowledge
New comprehension	Learning from experience	

Shulman argues that comprehension of subject matter knowledge alone is not enough for teaching, as “the usefulness of such knowledge lies in its value for judgement and action” (Shulman, 1987b, p. 100). The Model of Pedagogical Reasoning and Action suggests how various categories of teacher knowledge can inform both pedagogical thinking, and classroom action during instruction. The processes within this model will now be explored in more detail.

Comprehension

In describing the process of pedagogical reasoning and action, Shulman (1987b) acknowledges that although “the sequence of instruction can be quite different” (p. 244), “some sort of comprehension (or self-conscious confusion, wonder or ignorance) will always initiate teaching” (p. 245). This position is encapsulated in his statement, “To teach is first to understand” (Shulman, 1987b, p. 235). Shulman suggests that before teachers can embark on the act of teaching (in which ideas are exchanged), they first become learners themselves, as an “idea is grasped, probed, and comprehended by a teacher, who must turn it about in his or

her mind, seeing many sides of it” (Shulman, 1987b, p. 99). Teachers should comprehend not only the content and texts they intend teaching, but also the purposes and goals of the discipline itself. During this process of comprehension, Shulman suggests that teachers would draw on their subject matter knowledge as well as their knowledge of educational goals, purposes, and values and the philosophical and historical grounds on which these goals are based (Shulman, 1986).⁴⁰

Transformation

Shulman’s writings are based on the assumption that a teacher needs to do much more than comprehend a topic and transmit knowledge to learners. Shulman (1987b) argues that the “key to distinguishing the knowledge base of teaching lies at the intersection of content and pedagogy, in the capacity of a teacher to transform the content knowledge he or she possesses into forms that are pedagogically powerful and yet adaptive to the variations in ability and background presented by [learners]” (p. 102). Transforming the content culminates in a pedagogically reasoned “plan, or set of strategies, to present a lesson, unit or course” (Shulman, 1987b, p. 104). It is particularly the process of transformation that requires teachers to construct PCK, using their subject matter knowledge; general pedagogical knowledge; and knowledge of learners and their educational context.

There are four parts to transforming the content for teaching: preparation; representation; selection; and adaptation. These will now be examined more closely:

(i) Preparation

The process of ‘preparation’ involves “examining and critically interpreting materials of instruction” in order to detect errors and restructure the material into a form that is suitable for teaching (Shulman, 1987b, p. 102).

⁴⁰ From Shulman’s categories of teacher knowledge (see pp. 99 - 100)

(ii) Representation

The process of representation involves deciding what multiple forms of “analogies, metaphors, examples, demonstration, simulations and the like” would best represent the ideas to learners (Shulman, 1987b, p. 103). This again requires the teacher to draw on PCK, or subject knowledge for teaching.

(iii) Selection

The teacher draws on his or her repertoire of instructional modes to select an instructional form or strategy that would be appropriate in the teaching of the particular lesson. Shulman (1987b) suggests that such a repertoire could include “not only the more conventional alternatives such as lecture, demonstration, recitation, or seatwork, but also a variety of forms of cooperative learning, reciprocal teaching, Socratic dialogue,⁴¹ discovery learning, projects methods, and learning outside the classroom setting” (p. 103). In this case, the teacher is drawing on general pedagogical knowledge and subject matter knowledge.

(iv) Adaptation and tailoring

The final steps in transforming the content for teaching involve “fitting the represented material to the characteristics of [learners]”. In adapting the represented material to learners, the teacher may consider “aspects of [learner] ability, gender, language, culture, motivations, or prior knowledge and skills” (Shulman, 1987b, p. 103). A teacher may further tailor the content to the characteristics of a particular learner, if tutoring an individual rather than a class (Shulman, 1987b, p. 103). These processes require teachers to draw on PCK, in particular, knowledge of learners and their educational contexts.

⁴¹ Socratic dialogue: A teaching strategy whereby the teacher poses questions, and probes learners’ answers with deeper, more penetrating follow-up questions.

Instruction

This refers to “observable forms of classroom teaching”, in which the prospective plan is enacted (Shulman, 1987b, p. 101). It includes classroom management as well as presentation of content, interaction with learners, and assigning of work. Shulman argues that behavioural aspects of teaching and use of modes of instruction “[are] bound up with comprehension and transformation of understanding” (p. 105).

Evaluation

During the process of evaluation, the teacher checks for learner understanding while teaching interactively. Shulman (1987b) argues that for a teacher to comprehend what a learner understands requires a “deep grasp of both the material taught and the process of learning” (p.106). In Shulman’s model, this again requires that teachers draw on PCK.

Reflection

Shulman (1987b) defines reflection as “the set of processes through which a professional learns from experience” by reviewing the lesson in relation to the purpose that the teaching intended to achieve (p.106). It takes place when a teacher “looks back at the teaching and learning that has occurred, and reconstructs, re-enacts, and/or recaptures the events, the emotions and the accomplishments” (Shulman, 1987b, p. 106).

New comprehension

Shulman (1987b) suggests that as a result of thorough ‘reasoned’ teaching, the teacher comes to a “new comprehension” of the “purposes and of the subjects to be taught, and also of the [learners] and of processes of pedagogy themselves” (p. 106).

Summary

I have presented literature that suggests that ‘learning to teach’ involves student teachers in acquiring teacher knowledge *for* practice, knowledge *in* practice and knowledge *of* practice. ‘Learning to teach’ requires both the acquisition and enactment of such knowledge. I have considered Shulman’s conception of teaching as a multifaceted process of pedagogically reasoned action, informed by PCK. Applying this model to student teaching suggests a conception of ‘learning to teach’ as the process whereby student teachers learn to understand and think about how their classroom actions enable or constrain learning, and how they could organise more systematic learning. This requires that student teachers’ shift their knowledge base on which their teaching is based from that acquired during their apprenticeship of observation to professional teacher knowledge, including PCK. Shulman’s (1987b) Model of Pedagogical Reasoning and Action provides a tool for analysing links between teachers’ knowledge, thinking and classroom practice. This model also provides a tool that enables classroom practice to be analysed, placing emphasis on the “intellectual basis for teaching performance, rather than on behaviour alone” (Shulman, 1987b, p. 107). Shulman presents the processes involved with teaching as an enactment of practical knowledge. However, other ‘learning to teach’ literature suggests that on entering their teacher education programme, student teachers base their classroom actions on their common-sense notions of teaching acquired during their experiences of schooling as a learner. They do not yet possess any substantial professional teacher knowledge (in particular, PCK). Alternatively their classroom actions may merely be mimicking their supervising teacher, without consideration of the pedagogically reasoned basis for such action.

Although Shulman bases his research on the work of qualified and experienced teachers, whom he regards as ‘experts’, his findings have some important implications for student teaching. If PCK is the specialised knowledge of professional teachers, then student teachers who are entering their teacher education programme do not yet possess PCK. The question arises, therefore, on what knowledge do student teachers base their practice, and how does their

growth of professional knowledge and understanding manifest in their teaching? This question is especially relevant for TE, where student teachers are presumably attempting to apply some of their knowledge *for* practice (from university), and the knowledge *in* practice (from their own experience, and through observing the teaching of their supervising teacher) in their own attempts at teaching. Shulman (1987b) argues that a goal of teacher education should be to “provide student [teachers] with the understandings and performance abilities they will need to reason their ways through and enact a complete act of pedagogy” (p. 107).

A model of ‘learning to teach’ based on the acquisition and enactment of PCK?

I have drawn on ‘learning to teach’ literature to argue that student teachers enter their teacher education programmes already possessing a conception of what it means to teach, based on their apprenticeships of observation. These perceptions are highly personalised, and determined by a variety of personal and contextual factors. Models of ‘learning to teach’ should consider the diversity and complexity of student teachers, and differences in their prior conceptions about teaching and learning. In particular, these include (i) challenging and dealing with misconceptions about teaching stemming from their apprenticeships of observation; (ii) understanding the complexities associated with teaching and (iii) being able to enact their acquired teacher knowledge.

Models of ‘learning to teach’ all show some aspects of how student teachers develop over time. The changes in ‘learning to teach’ models will vary depending on researchers’ conceptions of what it means to teach. To a large extent, most existing models of ‘learning to teach’ describe changes in the concerns and ways of thinking of student teachers at various stages of their development. The critique of existing models of ‘learning to teach’ showed that most did not take into consideration the concepts of PCK and the reasoned action of teacher knowledge

in teaching; teaching as a complex activity; the inherent diversity within groups of student teachers; and the impact of contextual factors.⁴²

Calderhead and Shorrock (1997, p. 192) contend that it is “simplistic and unhelpful” to distinguish between *teacher training* (involving the mastery of well-defined and known routines and procedures) and *teacher education* (aiming for the all-round development of professional teachers with well-informed reflective judgement). Both might be required to produce teachers who are both “competent actors in the classroom, [and] also, practitioners capable of understanding what they are doing, why they are doing it and how they might change their practice to suit changing curricula, context and circumstances” (Calderhead & Shorrock, 1997, p. 195). There is a sense in the literature that ‘learning to teach’ includes a *cognitive dimension* as well as the way in which this translates into informed and considered *classroom action*.

In his Model of Pedagogical Reasoning and Action, Shulman acknowledges the role that PCK plays in leading to reasoned pedagogical action. PCK’s influential contribution to teacher education is acknowledged by many other researchers, including Darling-Hammond (1997), who states that the “*sine qua non*”⁴³ of education is whether teachers know how to make complex subjects accessible to diverse learners” (p. 294). If Shulman’s concept of PCK is indeed at the centre of teaching, then the construction of PCK must be a core feature of the process of ‘learning to teach’. Within the context of TE, student teachers are expected to use their subject matter knowledge, and acquire some knowledge of learners, knowledge of educational contexts, and general pedagogical knowledge during their placement at schools. During TE, student teachers theoretically have an opportunity to blend these differing knowledge bases into PCK, although this happens neither easily, nor automatically (Gess-Newsome, 1999a).

⁴² See Chapter 1, pp. 35 – 46.

⁴³ From the Latin, meaning “without which it cannot happen”.

This study assumes that PCK occupies a central role in teaching. It follows that the acquisition and enactment of PCK should also occupy a central role in 'learning to teach'. However, if Shulman's assertion is true that PCK is a type of knowledge that is "uniquely the province of teachers, their own form of special understanding" (p. 92), then student teachers at the beginning of their teacher education programme would not yet possess PCK. Shulman (1987b) describes how teachers (and I would include student teachers) need to "learn how to use their knowledge base to provide the grounds for choices and actions" (p. 99). His work suggests that there could be another notion of 'learning to teach', namely, 'learning to teach' as the construction of PCK and its use for pedagogically reasoned action. It is on these grounds that I believe that the existing models of 'learning to teach' do not offer a complete account of the development of student teachers during TE. This thesis will develop of a model of 'learning to teach' in which the development in 'learning to teach' is considered to involve the construction of PCK, which leads to teaching that is pedagogically reasoned. My model will therefore address a number of the gaps identified within existing models of 'learning to teach'.

SECTION C: RESEARCH DESIGN & TOOLS OF ANALYSIS

CHAPTER 4: INVESTIGATING THE QUESTION

This study will address the following research question:

What developmental patterns are involved in the process of ‘learning to teach’?

This research project requires a *qualitative* research design that can describe and understand human behaviour inductively (Babbie & Mouton, 2001, p. 270). More specifically, the research seeks to describe and analyse how a group of student teachers learn to teach during their eight TE sessions within the South African context. This, in turn, requires analysis of their experiences and the changes in their teaching. The focus of analysis includes the meanings that student teachers attach to their experiences and the specific difficulties that they encounter. Most importantly, it also includes the aspects of teaching and of ‘learning to teach’ that university tutors identify and commonly focus on, thus indicating their perception of what it takes to ‘learn to teach’.

Research design: Case study

The research design of this study will take the form of a case study of the teaching practices of a group of student teachers registered for the BEd degree (specialising in the Intermediate/Senior phase) at the Wits School of Education.

A case study is described as “an intensive description and analysis of a social unit” (Merriam, 2002, p. 8). The ‘social unit’ in this study is a large, but bounded, group of 66 student teachers (specialising in the Intermediate/Senior phase), studying a particular degree (BEd) at a particular teacher education institution (Wits School of Education), at a specific time (2003 – 2006). In addition, this group is bounded by the condition that they completed their BEd degree within the prescribed four-year period. This type of case study, therefore, may be classified as a social group study (Babbie & Mouton, 2001, p. 281). As the social unit is “rarely isolated and unaffected by factors in the environment in which it is embedded”, it is essential that the context of the study is considered in some detail

(Babbie & Mouton, 2001, p. 282).⁴⁴ This study took place at a time of institutional restructuring at the university, within the political context of a society in a state of transformation, striving to overcome vast social, educational and economic inequalities inherited from the legacy of Apartheid. However, the aim of this case study is not a sociological study of societies in transformation, but rather a study of how student teachers ‘learn to teach’ within a specific context. While Babbie and Mouton (2001) assert that, “it is not uncommon for case study researchers to look at a few variables measured over time and to virtually ignore context” (p. 281), this study will acknowledge context, and the role it plays in shaping student teachers’ perceptions, but will place more focus on developmental changes over time.

Developmental learning studies examine changes in complexity resulting from increased knowledge and skill over time. There are three main designs that are appropriate when conducting a developmental study (Smith & Cowie, 1991). Longitudinal development designs study certain subjects over a period of time in order to observe, document and measure the changes in complexity of functioning that occur. In comparison, a cross-sectional developmental design studies different subjects who represent a range of developmental levels at a single point of time. This study draws on aspects of cross-sectional and longitudinal developmental study designs to follow a *cohort developmental study design*. My study examines a series of eight cross-sections of student teaching sampled at regular intervals. The study has a longitudinal element in that I follow a cohort of student teachers over a period of four years.

According to Adler (2002), researchers in teacher education need to make a trade-off between the rich insights offered by *in-depth* studies of specific exemplars, and broad *generalised* patterns from large samples. She argues that “capturing the complexity of teaching, and indeed the ways this is shaped over a period of time, requires in-depth, qualitative research approaches. These enable rich descriptions

⁴⁴ This will be presented in Chapter 5, pp. 157 - 179.

of learning by a particular teacher in a particular context” (p. 10). However, on the other hand, teacher education research also needs to “investigate practices that extend across diverse contexts and conditions” (Adler, 2002, p. 10). Qualitative research into the complexity of teaching, she reasons, should “enable description and comparison across a range of teachers and classrooms, and with sufficient teachers within the range for patterns of practice to be identified” (p. 10). This research project will both analyse levels of teaching demonstrated by the group of 66 student teachers in this study, and conduct an in-depth analysis of the developmental teaching of five student teachers from the group.

While my research design limits the transferability of the findings, there may be enough diversity in the group of 66 student teachers to offer some broader insights into the development of teaching practice, beyond the specifics of this context. To enhance the transferability of this study, care was taken to ensure diversity within the sources of data, sampling methods and selection of participants for deeper investigation. I would argue that since this study focuses on a clearly bounded social unit, using multiple perspectives, sources of data and collection methods, it meets the criteria for a case study design.

Wits School of Education, ‘Class of 2006’

The student group that was selected for this study began their BEd degree (specialising in the Intermediate/Senior phase) at the Wits School of Education in 2003 and graduated in 2006. These student teachers were mostly in Grade 3 during the first democratic elections of South Africa in 1994. Many have therefore spent most of their schooling in a post-Apartheid society, in circumstances of varying degrees of transformation. Many, but not all, the teachers they probably encountered during their schooling would have been trained in the discourse of Fundamental Pedagogics. OBE was introduced into the primary schooling system from 2000, when most of them would have been in Grade 10.⁴⁵ The vast majority of their schooling was therefore before the introduction of OBE, and as shown in

⁴⁵ See pp. 75 -77.

the literature review, in many schools the implementation of the new policies was mechanical rather than conceptual (Mattson & Harley, 2003).

Exclusion of student teachers from the study

A total of 91 students began the BEd specialising in the Intermediate/Senior phases⁴⁶ in 2003. Of these, 19 failed or dropped out during/after their first year of study. A further 6 students did not carry on past their second year, leaving a core group of 66 student teachers who proceeded to their fourth year of study during 2006. The student teachers who dropped out of the BEd programme are specifically excluded from this study, which aimed to track developmental progress through four years. Student teachers who failed a year, and needed more than four years to complete their BEd were also eliminated from the study. Amongst these are students who dropped out of the teaching course because they were unable to cope with the cognitive demands of the course, as well as those who discovered that they were no longer interested in becoming a teacher. The rules of the BEd programme stipulate that a student teacher should obtain an overall pass for TE in order to be promoted to the next year of study. The elimination of student teachers who received a “No Credit” result for their TE ensures that the findings do not reflect the teaching practice of students who find that teaching is an unsuitable profession for them to pursue. The conditions of selection for the study also had the unintended effect of eliminating those students who dropped out of the course for other reasons, unrelated to their teaching potential, such as financial difficulties; problems adjusting to an urban context; difficulties experienced with English as the language of instruction; or schooling that did not prepare them adequately to cope with the challenges of a university programme.

⁴⁶ This specialisation will henceforth be called (Inter/Sen).

Diversity within the group

The group of 66 student teachers is predominantly female, with only 20% of the being male, as reflected in Table 4.1. These figures indicate a gender bias in the students who study teaching in the Inter/Sen phase.

Table 4.1 Diversity in terms of race and gender of the 66 BEd (Inter/Sen) student teachers in this study⁴⁷

	White	Black	Asian	Coloured	TOTAL
Female	26 (39%)	9 (14%)	18 (27%)	1	54 (82%)
Male	5 (8%)	4 (6%)	2 (3%)	1	12 (18%)
TOTAL	31 (47%)	13 (20%)	20 (30%)	2 (3%)	66 (100%)

There is racial diversity in the group, although its racial composition does not reflect the national statistics, according to which 80% of the population is classified as Black African, 9% as White, 9% as Coloured and 2% as Asian (Statistics SA, 2003). The deviations from the national norm may be attributed to a number of factors, including statistics of racial diversity in the province of Gauteng⁴⁸ that vary from the national, and the limited amount of financial aid available to teaching students at this time.⁴⁹

Of the 66 students who proceeded in successive years through the BEd programme, all passed their summative TE in their fourth year of study. The marks ranged from 55% to 90%. Out of the 66 student teachers, 31 attained a level of teaching practice in their final TE session that university tutors recognised as distinctive, achieving a mark of 75% or higher. The spread of final TE marks across the group is as follows:

⁴⁷ I follow the racial classification terms as used by Statistics SA in providing census data. The racial classification information is only significant in looking at the experiences of schooling student teachers have had, which historically has been tied to their racial classification.

⁴⁸ Black Africans make up 74% of Gauteng's population, whereas Whites make up 20%. The proportion of Coloured people is less than the national average, comprising only 3% of Gauteng's population.

⁴⁹ The vast majority of student teachers in this group were either self-funded, or had been able to fund their tuition through a student loan. Some student teachers in the group had received funding through NSFAS, the National Students Financial Aid scheme. Service-contract (Fundza Lushaka) bursaries were introduced from 2007, but were not available to this cohort of student teachers.

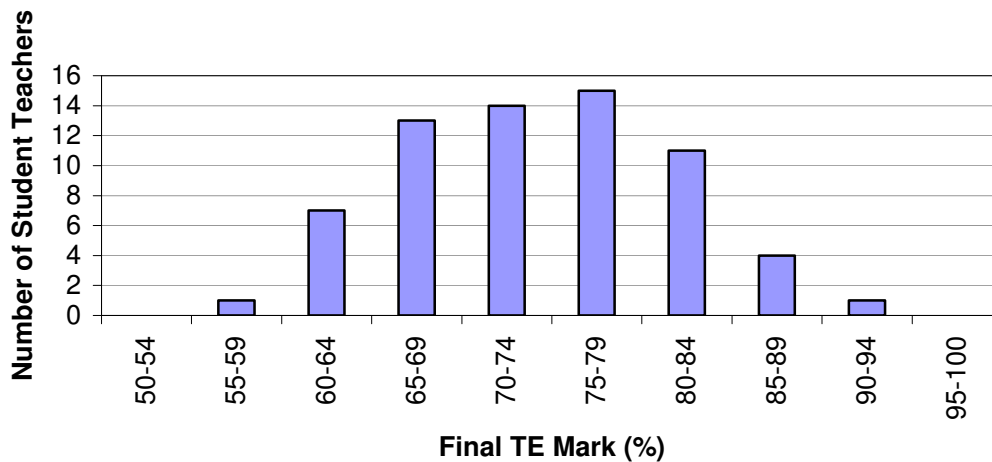


Figure 4.1: Distribution of final TE marks achieved by 66 student teachers

The group of student teachers who obtained distinctions was diverse with respect to race and gender.⁵⁰ Table 4.2 shows that 50% of male student teachers and 46% of female student teachers received distinctions, values vary close to the norm of the group (where 47% of student teachers were awarded distinctions).

Table 4.2: Table showing the percentage of student teachers within each racial and gender division who were awarded a mark of 75% or higher during their summative TE assessment

	White	Black	Asian	Coloured	TOTAL
Female	17 (65%)	2 (22%)	6 (33%)	0 (0%)	25 (46%)
Male	2 (40%)	2 (50%)	2 (100%)	0 (0%)	6 (50%)
TOTAL	19 (61%)	4 (31%)	8 (40%)	0	31 (47%)

However, a different trend emerges across racial groups. Whereas 65% of White females in the group were awarded distinctions, only 22% of Black females were awarded distinctions. These values diverge from the 46% of the total female group who received distinctions.

⁵⁰ Neither of the two coloured student teachers obtained a distinction for their final TE.

When I selected student teachers to participate in focus group discussions, I purposefully approached a group that represented the diversity within the student cohort.

Sources of data

For the purposes of a qualitative case study, I used sources of data that would best describe the developmental pattern(s) enveloped in the actions, behaviour and decisions of student teachers, as the “social actors” in this study, in the setting of the classrooms in which they ‘learn to teach’ (Babbie & Mouton, 2001, p. 270). A variety of collection methods generated empirical evidence that could be correlated and triangulated in an attempt to “reduce the risk of...systematic biases due to a specific method and allow [for] a better assessment of the generality of the explanations that are developed” (Maxwell, 1996, p. 93). The use of multiple perspectives, using multiple methods and sources of evidence, will enhance the potential to be able to describe thoroughly the process of learning to teach. To this end, data were collected from three sources, namely:

1. Documentation generated during TE sessions (such as lesson observation reports and assessment forms)
2. Focus group discussions with university tutors and with student teachers
3. Written reflections by student teachers in response to their experiences during TE sessions

These sources provide the observations of university tutors and supervising teachers, and their perceptions of the development of student teaching. The voice of student teachers was used to explore their perspectives on difficulties and successes in their teaching. Each source of data will now be discussed in more depth.

1. Documentation: Lesson observation reports

In a study of this size, it was not possible for me directly to observe all 66 student teachers in any one TE session. The three-week duration of each TE session

enables each university tutor to observe between 12 and 16 student teachers at a time. The scope of the observations required for this study and the time constraints involved, necessitated that I obtain data from sources other than direct personal observation. One means of doing this was to consult lesson observations conducted by other university tutors. In this way, certain lessons of all 66 student teachers were observed during TE and aspects of their teaching documented over a four-year period.

(i) The voice of university tutors

The primary source of evidence was TE lesson observation reports written by 48 university tutors as they observed lessons taught by the 66 student teachers. The lesson observation reports referred to were written over a four-year period between 2003 (when the student teachers were in their first year) and 2006 (in their fourth year of study).

During lesson observation visits, university tutors write comments documenting what they perceive student teachers do well. In addition they provide support and offer suggestions and encouragement when the student teacher is experiencing difficulties or challenges.

At the end of each three-week TE block, these observation notes, together with a formative assessment form, detail the individual progress each student teacher has made. The complete record of TE documents for this cohort of 66 student teachers would theoretically contain 462 packs of lesson observation reports (over seven TE sessions). However, there were only 406 lesson observation reports written by university tutors (containing observations of 893 lessons), and 132 summative assessment reports for fourth-year student teachers (one for each TE session), available in the archives. Therefore, 88% of the total potential documentation was acquired and consulted for this study. I speculate that this incomplete record may have been due partly to misfiling of records, student teachers completing deferred TE sessions, and removal and non-return of documents from the archives.

Quotes taken from lesson observation reports (LO) written by university tutors (UT) will be acknowledged with a code (UT LO X), where X denotes the student teacher's year of study.

(ii) The voice of the supervising teachers

Supervising teachers do not have exposure to a wide variety among the student teachers in this study, but rather they work intensely with one student teacher per TE session. Because of the limited range of student teachers they see, the voice of supervising teachers was not widely considered in describing broad levels of student teaching practice (Chapter 6). However, their voice became extremely useful when I was examining in depth the portraits of how five specific student teachers developed their teaching practice (Chapter 7). Whereas the university tutors would have observed these student teachers three or four times, the supervising teachers would have been with them for most of the three-week TE period.

The voice of supervising teachers was obtained from three places. Firstly, in some cases lesson observation reports written by the supervising teacher were available in the TE archives, although the submission of these reports is not a university requirement. There were only 87 of these available, so this did not provide a large sample. Secondly, supervising teachers and university tutors complete an assessment form for each student teacher after every TE session. There were 406 of these assessment forms available for scrutiny. Each one contains a paragraph of general comments from the supervising teacher about the student teacher, and the teaching development they have demonstrated over the TE session. These comments were used as evidence. Thirdly, supervising teachers of fourth year student teachers write a detailed report on the teaching practice of their student teacher, according to a list of criteria.⁵¹ There were 132 of these reports available – for each of the 66 student teachers in their two TE sessions in their fourth year. These reports provided the bulk of the evidence obtained from supervising

⁵¹ These criteria will be scrutinised in the following chapter (pp. 171 - 172). Also see the Assessment tool, Appendix C, p. 461.

teachers, and were extensively drawn on for the construction of the developmental portraits of a sample of five student teachers in Chapter 7.

Comments from the supervising teachers (ST) are acknowledged by a code (ST X), where X denotes the student teacher's year of study.

2. Focus group discussions

(i) The voice of the student teachers:

A sample of 11 student teachers from the group of 66 BEd (Inter/Sen) students was invited to participate in a focus group discussion. These student teachers were purposefully selected to “maximise the range of specific information” and therefore promote transferability of the findings beyond the specifics of this context (Babbie & Mouton, 2001, p. 277). The group of student teachers represented a range of experience in their own schooling (in township, suburban and rural schools); had taught in a multiplicity of contexts during TE sessions. The final TE marks for the student teachers who participated in the focus group discussions varied from 60% to 80%. Their marks almost span the range awarded to the whole group of 66 student teachers. There was a wide range of teaching practice represented in the focus group discussions – from top achievement to struggle with aspects of classroom action. All participants passed their final TE, and therefore met this study's requirement of completing their BEd degree within a four-year period.

Table 4.3: The profiles of the eleven students participating in the focus group discussions⁵²

Student teacher	Date of interview and year of study	Gender	Race	Final mark during final TE	Experience of own schooling
Amos	2005-08-08: 3 rd year	Male	Black	68%	Township school
Maggie	2005-08-08: 3 rd year	Female	Black	64%	Rural school
Sarah	2005-08-08: 3 rd year	Female	Black	67%	Rural school
Zanele	2005-08-08: 3 rd year	Female	Black	65%	Township school
Joseph	2005-08-10: 3 rd year	Male	White	60%	Suburban school
Pumla	2005-08-10: 3 rd year	Female	Black	76%	Suburban school
Brenda	2005-08-10: 3 rd year	Female	White	75%	Suburban school
Amina	2006-03-09: 4 th year	Female	Asian	78%	Muslim school
Tamaryn	2006-03-09: 4 th year	Female	White	80%	Suburban school
Fatima	2006-03-09: 4 th year	Female	Asian	68%	Muslim school
Katherine	2006-03-09: 4 th year	Female	White	80%	Suburban school

These 11 student teachers participated in one of three semi-structured focus group discussions, in groups of three or four. A focus group discussion was selected as the most appropriate methodological tool in this context, as I believe that the group situation is substantially less intimidating for students than to a one-on-one interview with me. Two of the focus group discussions were conducted during 2005, when the student teachers were in their third year of study, and the other took place during their fourth year of study, in 2006.

The insights from the focus group discussions were used to flesh out the perceptions of student teachers about teaching, learning and reflective practice, and to identify reasons why students sought to become teachers. This is in line with a qualitative researcher's attempt "to understand the actions of participants in context of the actor's own beliefs, history and context" (Babbie & Mouton, 2001, p. 271). Student teachers' perceptions of events could often be correlated against the observations of the university tutors and supervising teachers, as obtained from lesson observation reports.

During the focus group discussions, student teachers were asked the following questions:

⁵² Not their real names

- Why did you choose to study to be a teacher?

The purpose of this question was to investigate whether the adoption of a teacher identity differed according to whether the student teacher was extrinsically or intrinsically motivated.

- Describe your own schooling, how you were taught and how you learnt.

I wanted to probe the nature of the teaching and learning that student teachers had observed during their schooling. These experiences may have shaped the conceptions that student teachers hold regarding teaching and learning.

- Before you came to Wits School of Education, how did you imagine you would be as a teacher? Do you still feel that way? If not, what has made you change your idea? What difficulties did you encounter as you made the adjustment from being a learner to a teacher?

These questions aimed at establishing insight into the development and progression of students' identities as teachers, and their perception of what teaching entails. They were designed to expose perceptions of teaching from the students' apprenticeships of observation; the way the student teachers understand their own teaching, their challenges and their coping strategies.

- What difficulties have you experienced on Teaching Experience? What has helped you deal with these difficulties? How did you cope?

These questions were intended to provide insight into the nature of difficulties that this sample of students had experienced while learning to teach. More importantly, this information could be correlated with difficulties recorded in lesson observation forms, and give further insights into how the student perceived the situation at the time. The latter might also reveal strategies for effective intervention and student teacher support.

The focus group discussions were audio-taped and transcribed, in an attempt to minimise researcher bias and maximise validity. Quotes from the focus group

discussions will be denoted with the code (S X FGD) where X indicates the student teacher's year of study.

(ii) Voice of the university tutors

A semi-structured focus group discussion was held on 15 August 2005, to gain deeper insight into perspectives of certain university tutors regarding issues pertaining to TE. A focus group was chosen as the most suitable method for this data collection, as it would allow the university tutors to discuss or debate issues, and allow me, as researcher, to probe further and ask for further clarification or expansion when appropriate.

Three experienced university tutors were invited to this focus group discussion. This selection was not random, but was based on the following criteria:

- These university tutors were mentioned during focus group discussions with student teachers, who highly appreciated their tutoring during TE sessions.
- They represent diversity, in terms of their areas of expertise within the Wits School of Education. The group comprised:
 - A methodologist: A black female who has 11 years of experience teaching in the Intermediate phase. She has been involved in teacher education at various institutions and NGOs for 18 years, and also has experience within a publishing company. She lectures in the field of curriculum, in courses that are designed to introduce student teachers to teaching and general classroom practice.
 - A subject specialist: A white female who has had eight years of classroom teaching experience at high school level, and 24 years of experience as a TE tutor to student teachers of all phases. She has, furthermore, taught courses in subject methodology to student teachers in her specialist discipline.
 - A language specialist: A white female, who has 10 years of experience teaching languages in a high school. She had been a TE

tutor for four years, and lectures both academic language and the methodology of teaching languages to student teachers.

During this focus group discussion, the following issues were discussed at length:

- The role and responsibilities of the university tutor during TE, and the process of observing lessons and giving support/feedback to student teachers;

The purpose of this discussion was to probe the university tutors' understanding of what they perceived their role during TE to be. It is assumed that their perceptions of what it means to be a university tutor affects how they carry out their duties.

- The characteristics of first year teaching students, and the skills/attitudes expected of them during their beginning stages of learning to teach;

This discussion drew forth the vast experience of these university tutors, in what they inductively have come to expect from first year students. It also gave them an opportunity to discuss the criteria they use for assessment, and whether they rely on personal professional judgement or on the criteria as determined by the State and documented in the Exit Level Outcomes.

- Typical difficulties they have observed student teachers experiencing during their TE sessions;

In probing this issue, the aim was to investigate whether these university tutors recognised broad patterns of learning to teach, and problems that could be regarded as typical. The discussion also gave insight into what these typical problems could be – to be correlated against evidence found in the lesson observation reports and the students' recollections.

- The catalysts of growth and development in student teachers they have tutored, and the abilities of student teachers to reflect and the development of reflective practice.

This issue was raised for discussion with the aim of discovering what methods experienced university tutors were using to promote the development of teaching abilities in the student teachers under their supervision.

- The grounds upon which they have failed student teachers during TE, and deem student teachers to be ‘competent’ or ‘distinctive’.

This set of questions was designed to reveal the perceptions of university tutors regarding what constitutes competent and incompetent student teaching. I also use these responses to compare the professional judgement of experienced university tutors with the officially listed criteria in TE policy documentation.

The focus group discussion was audio-taped and transcribed verbatim, to allow for complete access to data gathered. Quotes taken from this focus group discussion is indicated with a code (UT FGD).

3. Reflections on TE

Written reflections by student teachers regarding their TE sessions provide the third source of data. At times, their reflections refer to specific incidents that happened during lessons their university tutors were observing, or comments made to them by their university tutors during the post-lesson discussions. It was in many cases possible to consult the original lesson observation report and see the university tutor’s perspective on such incidents. In this way, issues arising from the focus group discussion could, to some extent, be clarified. The reflections I used were obtained from reflective journals and self-assessment essays, detailed as follows:

(i) Reflective journal entries

Twenty-five Inter/Sen students from this group registered in 2006 for a fourth-year course I co-presented called *Learning Area Studies (Social Science)*. During this course, student teachers were required to keep a reflective journal for six months. As a reflective task, they were asked to compare what they regarded as ‘*effective teaching*’ in the past with what they currently perceived as ‘*effective teaching*’ - in their fourth year of study. Permission was obtained from the student teachers to use their reflections and insights as data for this research project.

The purpose of this exercise was to determine whether or not there had been a fundamental shift in the students' understanding of what constituted effective teaching over their four years of study. Insights here could be correlated with the comments written by university tutors in lesson observation reports. The insights about what drove their behaviour in first year and then in fourth year could aid the interpretation of why a student teacher plans and conducts lessons in a particular manner.

Quotes taken from reflective journals have been denoted by the code (S X RJ), where X denotes the student's year of study.

(ii) Self-assessment essays

In their second year, I asked this group of student teachers to write down the challenges they faced during TE, how they coped, and what they learnt from the experience. This was done as part of the Social Science methodology course that I co-lecture. Their responses form part of the data that I use to obtain the perceptions, experiences and challenges these student teachers had during their second year of study.

In their fourth year, student teachers write an essay in which they assess their teaching. These assessment essays were scrutinised for information that may reveal student teacher thinking behind the classroom practice and teaching actions as observed by university tutors and supervising teachers. The essays contain insights about how the student teachers perceive teaching and learning, their motivation for selecting certain teaching strategies, and the difficulties and challenges they experienced in their fourth year TE session. Such reflections draw on student teachers' "knowledge of practice".⁵³

⁵³ Refer to pp. 103 - 104.

The quotes obtained from these self-assessment essays will be denoted by (S X RTE), where X indicates the student teacher's year of study.

By combining these data collection methods, and collecting information from different perspectives, thus overcoming some of the biases that stem from a single group of perspectives, or single methodology, it is hoped that I can promote credibility in the findings.

Limitations of the data

In hindsight, limitations of this data became evident: university tutors have a limited knowledge of the learners and school context in which student teachers are teaching; and no data exists regarding the post-lesson discussion where student teachers reflect on their teaching and university tutors provide feedback to the student teacher. These limitations will be discussed here.

While university tutors may have generic understandings of the state of education and schooling within South Africa, they often possess limited knowledge of the specific school context or of a particular class of learners. However, the insights of university tutors into observed lessons may be grounded in deep subject matter knowledge and general pedagogical knowledge. I therefore expect that the findings of this study will be inherently inclined toward the impact that *subject matter knowledge* plays on student teachers 'learning to teach', with less emphasis on the specific *contextual factors*, which may be somewhat invisible to outside observers such as university tutors. A different result might be obtained by using perspectives of supervising teachers, who have an intimate knowledge of the learners and the context of the school and wider community.

Another limitation of the data is that there is no evidence from post-observation discussions. The lesson observation reports are used as a basis for post-observation discussions, but the student teachers' reflections on their own teaching are not extensively documented. Insights have been obtained from their journal entries, reflective essays and their views as expressed during the focus

group discussions. While these supply some reflections, there does not exist a lesson-by-lesson account of the student teachers' critical analysis of their own performance. The lesson-by-lesson data during the actual teaching time are therefore limited to the observations and perceptions of university tutors and supervising teachers. Post-lesson reflection is arguably a critically important stage of the teaching process, but how student teachers engage in this process is beyond the scope of this study.

However, Shulman argues that even experienced teachers find it extremely difficult to articulate the nature of their practice (Shulman, 1987b, p. 98). The university tutors in this study indicate that student teachers find it "really difficult" to reflect on their practice, although there is a level where student teachers "know if they did well or not but are not yet able to put it into words" (UT FGD). Grossman et al. (2005) similarly acknowledge that it "often takes an experienced other to provide the necessary feedback and perspective" (p. 205). Such feedback "enhances teachers' own understandings of their own actions – that is, their assumptions, their own reasoning and decisions, and their own inventions of new knowledge to fit unique and shifting classroom situations" (Cochran-Smith & Lytle, 1999, p. 267). It may very well be, then, that the perspectives of university tutors and supervising teachers reveal more about the nature and understandings of student teaching than beginning student teachers themselves are able to articulate.

My involvement as a researcher

My position as a university tutor at the Wits School of Education has enabled me to conduct this research project. I have been able to access both archived and current documentation from the university relating to TE, including the lesson observation reports between 2003 and 2006.

I have personal experience of being:

- (i) a BPrimEd student teacher specialising in the Intermediate phase (albeit under different political and educational contexts, 18 years ago);

- (ii) an Intermediate Phase school teacher for seven years, during which time I supervised and mentored student teachers doing their TE;
- (iii) a university tutor to approximately 250 student teachers over the past ten years. I have observed student teachers from Foundation phase to FET phase, across all years of study. I have similarly observed lessons in the Intermediate and Senior phases across all learning areas, and in a number of subjects at FET level, including geography, maths, physical science, economic and management sciences;
- (iv) a lecturer in the disciplines of physics and geography, and a methodologist in the teaching of these subjects. I therefore have a particular interest in how student teachers learn to teach lessons that develop conceptually strong understandings of the subject they are teaching.

In my capacity as a university tutor, I personally observed 14 (out of the 893) lessons taught by 5 (out of 66) student teachers in this study. I wrote the reports on these in 2003 and 2004, before embarking on this research project. I did not discount these observation forms on the grounds that I had authored them. I chose to include them, as they, too, document difficulties that student teachers within this group were encountering. I analysed the reports according to the same criteria as all the others.

I have access to colleagues who themselves are university tutors, experienced in observing student teachers during TE sessions. I found them to be interested in my research project, and willing to share their insights with me. During the focus group discussion, I took particular care to act as a facilitator, and refrain from presenting my own perspectives or sharing my own experiences. It was important to have the conversation transcribed verbatim, so that I would not have to rely on my own recollections and biases for data analysis.

The student teachers I invited to participate in the focus group discussions had all previously been in my class, either as Geography majors, or in the Social Science methodology course that I teach to all Inter/Sen second year students. My general

perception was that the students were enthusiastic about having an opportunity to make their voices heard, to share some of their frustrations and challenges and thoughts about how they (or future cohorts of students) could be more effectively tutored and supported during TE sessions.

Possible sources of bias

I was at all times very aware of the power relations regarding my position as a university tutor with the student teachers. There was certainly a potential here for bias in terms of the so-called researcher, or *Hawthorne effects*, where the researcher may have an influence on the data generated (Babbie & Mouton, 2001, p. 209). There was a danger that student teachers would say what they thought I wanted to hear, rather than what they truly believed. To minimise the impact of this type of bias, I used their views in collaboration with those of university tutors as expressed in lesson observation forms. Their right to withdraw was emphasised, and reassurances were given in writing that their identities, as well as that of anyone they referred to in the discussion, would be protected. In many cases, the student teachers shared experiences without naming other university tutors or students, but other than that, I felt they had been surprisingly forthcoming and eager to share their experiences, challenges, insights and perceptions.

Developing a language of description

The lesson observation forms record the thoughts and comments of university tutors as they observe a student teacher teaching a lesson. Initially, I scrutinised the lesson observation forms for evidence that would allow me to identify the student teacher's stage of development according to the stages proposed by Maynard and Furlong (1993, 1995).⁵⁴ I was looking for evidence of a 'struggle for survival' during observed lessons; instances where the student teacher had 'hit a plateau' and appeared to be teaching according to a formula; instances where the student teacher was 'moving on' and clearly experimenting with explorative

⁵⁴ See pp. 30 – 35.

teaching strategies, and so on. Occasionally, I did find evidence of these types of lessons. However, this line of investigation quickly proved to be inadequate as only a small number of the student teachers in the study could be neatly associated with a particular stage of development described by Maynard and Furlong (1993, 1995). It became clear that I would need to develop my own analytical tool, based on recurring themes that emerged from the lesson observation reports.

I began to record comments in which university tutors identified what student teachers were able to do in each year of study. However, this analysis yielded highly biased and inconsistent data, as some university tutors consistently looked for and commented on particular aspects of the teaching practice, as standard procedure. I therefore abandoned that line of investigation, and began again, this time scrutinising lesson observation reports for evidence of the *difficulties* that the student teacher was experiencing. This yielded a lot more insight, as university tutors intuitively interpret the teaching practice of the student teachers and respond accordingly. The decision to use the challenges encountered by student teachers, rather than their abilities, was confirmed when university tutors commented during a focus group discussion: “We tend not to notice when something goes right” and “I go into the classroom with very few expectations. I note down only the things that really do not work” (UT FGD). Some lesson observation forms contained pieces of advice that alluded to the manifestation of certain problems during the lesson. In other lesson observation reports, a problem was described. At times, the root cause of such problems was diagnosed and suggestions for remediation were made. A preliminary exploration of the lesson observation reports revealed that some university tutors described problematic aspects of the student teacher’s teaching practice more consistently, and in more detail, than the aspects in which the student teacher coped well. A focus on the difficulties experienced by the student teacher, rather than what they were deemed to be capable of, thus yielded more insight into the nature of student teaching.

The following fourteen broad recurring themes emerged from the classification of student teachers’ difficulties as pointed out by university tutors in the lesson

observation reports. I refer to these areas as ‘themes of concern’, since the university tutors mentioned them together with suggestions for improvement:

- Communication
- Confidence and assertiveness
- Teaching strategies and learner activities
- Relationship with learners
- Learner involvement in the lessons
- Sustaining learner interest
- Monitoring learning
- Class control
- Class management and routines
- Knowledge of lesson topic
- Linking lesson to learners’ lives
- Formulating outcomes
- Planning lesson steps
- Teaching resources

Once the above themes were identified, the lesson observation reports were scrutinised again to record specific issues or concerns raised within each theme, and to note the number of lesson observations that contained references to each theme or area of concern. The frequency of concerned comments was recorded on a spreadsheet *per student teacher per TE session*. Each pack of documents generated during each TE session (containing two to three lesson observation reports and an assessment form) for each student teacher, was considered as a single unit. This was done to avoid a disproportionate representation from a single student teacher who experienced the same difficulty in several lessons within a particular TE session. In order to make meaningful comparisons between student teachers and between years of study, this information is presented as a percentage of TE sessions considered. This is because the number of packs of lesson observation reports varies slightly, from year to year, for reasons previously discussed.⁵⁵

The presence of a concern in a particular theme was assigned a value of ‘1’ on the spreadsheet. A ‘zero’ value was entered where that particular theme was not a

⁵⁵ See page 126.

concern. From the entries of concerned comments in each category, the data could be tallied to show which problems manifested most significantly in the different years of study. The Microsoft Excel spreadsheet format also enabled me to display the profile of university tutor concerns for any of the 66 student teachers over the course of the four years of their BEd. The frequency of occurrences in each theme was tallied. The data could be sorted in a number of ways:

- i. Sorting of data by 'student teacher' allowed me to see how any one of the student teacher's areas of difficulties changed or remained the same over his or her four years of study.
- ii. Sorting by 'year of study' allowed me to look at the macro trends of student teachers in their first year, for example, compared to other years of study.
- iii. Sorting the data by 'final TE %' allowed me to compare the nature of difficulties experienced by student teachers who went on to receive distinctions, with those who did not.

The Table 4.4 shows a summary table of *the percentages of lesson observation* reports that contain references to a student teacher *experiencing a difficulty with teaching practice* in each year of study.

Table 4.4: The percentage of difficulties documented in lesson observation reports for the different years of study

Year of Study	Communication	Confidence and assertiveness	Teaching strategies & learner activities	Relationship with learners	Learner involvement in the lessons	Sustaining learner interest	Monitoring learning	Class control	Class management & routines	Knowledge of lesson topic	Linking lesson to learner's lives	Formulating outcomes	Planning lesson steps	Teaching resources
% 1 st Year LO Reports	5	13	17	1	42	23	35	43	59	33	19	30	16	22
% 2 nd Year LO Reports	7	7	17	7	50	28	28	28	40	33	19	29	10	9
% 3 rd Year LO Reports	6	4	18	5	33	16	28	19	40	33	18	17	15	21
% 4 th Year LO Reports	2	7	20	1	43	30	19	31	43	31	11	24	7	16

From Table 4.4, it can be seen that the highest clusters of the university tutors' comments are on themes of class management and routines; class control; and involving learners in lessons. These data may suggest that student teachers who are finding it difficult to manage and control their classes are using teaching strategies that exclude learners from the learning process. However, another interpretation of the high frequency of such comments may be that university tutors respond to the most visible manifestations of challenges faced by their student teachers – those relating to learner behaviour. Table 4.4 shows, too, how certain themes (such as student teachers' confidence and assertiveness) are more problematic for student teachers in their first year, since more such comments were made to student teachers in their first year than in other years of study. The gradual reduction of advice suggests that, for the most part, student teachers learnt to resolve these issues satisfactorily, so that these issues did not require as much attention in subsequent years. In other themes, the frequency of comments stayed fairly constant across all years of study. Concerns regarding degree of knowledge of the lesson topic, for example, were consistently expressed in 31% - 33% of

lesson observation reports, through all years of study. This is to be expected at Inter/Sen level, where student teachers are expected to teach over a wide range of Learning Areas- whether or not they have yet studied them. The gradual decrease in concern relating to monitoring of learning may suggest that student teachers monitored learning more actively as they progressed through their course. An in-depth study of the empirical evidence would be necessary to interpret this data with confidence.

Interpreting the data

It is necessary to assign an arbitrary cut-off percentage in order to identify which problems can be regarded as *significantly prevalent*, and which problems can be regarded as *negligible* in the group of student teachers who were able to complete a BEd in four years. I chose this cut-off level as 15%, corresponding to a proportion of one in six student teachers who experienced a particular difficulty.

From Table 4.4, it can be seen that less than 15% of lesson observation reports contained comments pertaining to difficulties related to the following themes:

- Communication in the language of instruction
- Confidence and assertiveness
- Relationship with learners

These themes were therefore not the main areas of concern for student teachers who completed their BEd within a four-year period, but manifested more significantly for students who were excluded from this study. For example, of the student teachers who failed or dropped out of the BEd programme after their first year of study, 9% had problematic relationships with learners (compared to 2% of the group who completed the BEd). Thirty-two percent experienced difficulties in communication in the language of instruction (compared to 6% of first year student teachers who proceeded). However, problems with confidence and assertiveness were not significantly different, manifesting in 14% of candidates who failed or dropped out, compared with 13% of those who proceeded.

After discarding the three themes that manifested in less than 15% of lesson observation reports, 11 themes remain. These 11 themes can therefore be considered to pose significant challenges to the student teachers who completed a BEd degree within the stipulated four-year period. They also represent the areas where university tutors focus their efforts in assisting student teachers as they ‘learn to teach’.

Developing a conceptual tool for analysing data

In Chapter 3, PCK is positioned as the unique knowledge base of teachers. PCK should then be central to the professional knowledge that student teachers develop and use during their TE sessions.

Within the conceptual framework of Shulman’s Model of Pedagogical Reasoning and Action, I grouped and structured the 11 themes (emerging from lesson observation reports) into five *facets of teaching practice*. Although these themes are generated empirically, they have clear links to Shulman’s model: University tutors comment on the plans that student teachers draw up during the *transformation* process preceding their lesson; they comment on student teachers’ action during processes of *instruction*, and on the *evaluation* that happens during the course of lessons; and finally, during post-lesson discussions, they invite student teachers to *reflect* on their teaching and the learning that has occurred. Since the reflections that students make have not been documented in the lesson-observation report, which is written as the lesson is progressing, they are beyond the scope of this study.

Table 4.5: Links between the themes that emerged from lesson observation reports, Shulman's Model of Pedagogical Reasoning and Action, and Shulman's categories of teacher knowledge

Name of process	Processes of pedagogical reasoning and action	Themes emerging from lesson observation reports ⁵⁶
Comprehension	Subject matter structures; educational purpose of the discipline	Knowledge of the lesson topic
Transformation	Clarifying purpose of the lesson Critical interpretation & analysis of texts Choosing appropriate analogies, representations, examples Choice of instructional mode for teaching Adjusting lesson to suit characteristics of learners Generation of a plan (set of strategies) to present lesson	Formulating outcomes ⁵⁷ Selecting teaching resource material Teaching strategies & learner activities Linking lesson to learners' lives Planning lesson steps
Instruction	Classroom management Presenting clear explanations in the lesson Assigning learner work	Classroom management and routines Class control Teaching strategies & learner activities Using teaching resource material Learner involvement in the lesson Sustaining learner interest
Evaluation	Checking for learner understanding during and after lessons	Monitoring learning

From Table 4.5, it can be seen that there are links between Shulman's representation of what is involved in the process of pedagogical reasoning and action, and what university tutors perceive as important in 'learning to teach'. These similarities empirically justify the adaptation of Shulman's model as a conceptual framework for investigating 'learning to teach'. However, Shulman's model of pedagogical reasoning and action cannot be applied directly to student teaching without modification.

Whereas Shulman's model considers the teaching of experienced 'expert' teachers, Berliner's (1994) studies show that significant differences exist between

⁵⁶ In this table, the selection of teaching resources has been linked to Transformation, whereas the way in which student teachers use these resources has been linked with Instruction.

⁵⁷ Shulman's model refers to understanding the educational goals of a subject or discipline as part of the act of comprehension. In this study, 'formulating outcomes' refers to defining a purpose for a specific lesson or series of lessons being planned.

the way that expert teachers and novices observe, think and teach.⁵⁸ One major difference that is immediately evident is the significance of classroom management – whereas university tutors pay considerable attention assisting student teachers in dealing with their classroom management, for expert teachers' classroom management prevents most problems arising in the first place (Berliner, 1994, p. 167). In his model, Shulman groups classroom management and the delivery of the lessons into a single process of instruction. However, in my study I have created two separate facets, Classroom Management and Teaching Strategies. I have done this because analysis of lesson observation reports reveal that university tutors paid significant attention to both helping student teachers manage their classrooms more effectively and their use of teaching strategies. This type of guidance is very different from the guidance that deals with their use of teaching strategies. My analytical framework hence diverges from Shulman's model. This divergence arises out of the differences that exist between student teaching, and the teaching of expert teachers, upon which Shulman's model is based.

The 11 significant themes emerge from the analysis of lesson observation reports can be clustered into the following five *facets* of student teaching:

- Knowledge & understanding of content
- Preparation
- Classroom management
- Teaching strategies
- Monitoring learning

Figure 4.2 (p. 147) shows how the themes that were identified from lesson observation reports link into the processes Shulman describes in his model. I classified the 11 themes according to Shulman's model, but found that his processes did not match student teaching entirely. There exist some differences

⁵⁸ See pp. 25 - 28.

between the processes Shulman proposes in his Model of Pedagogical Reasoning and Action, and the five facets that emerge empirically from this study.

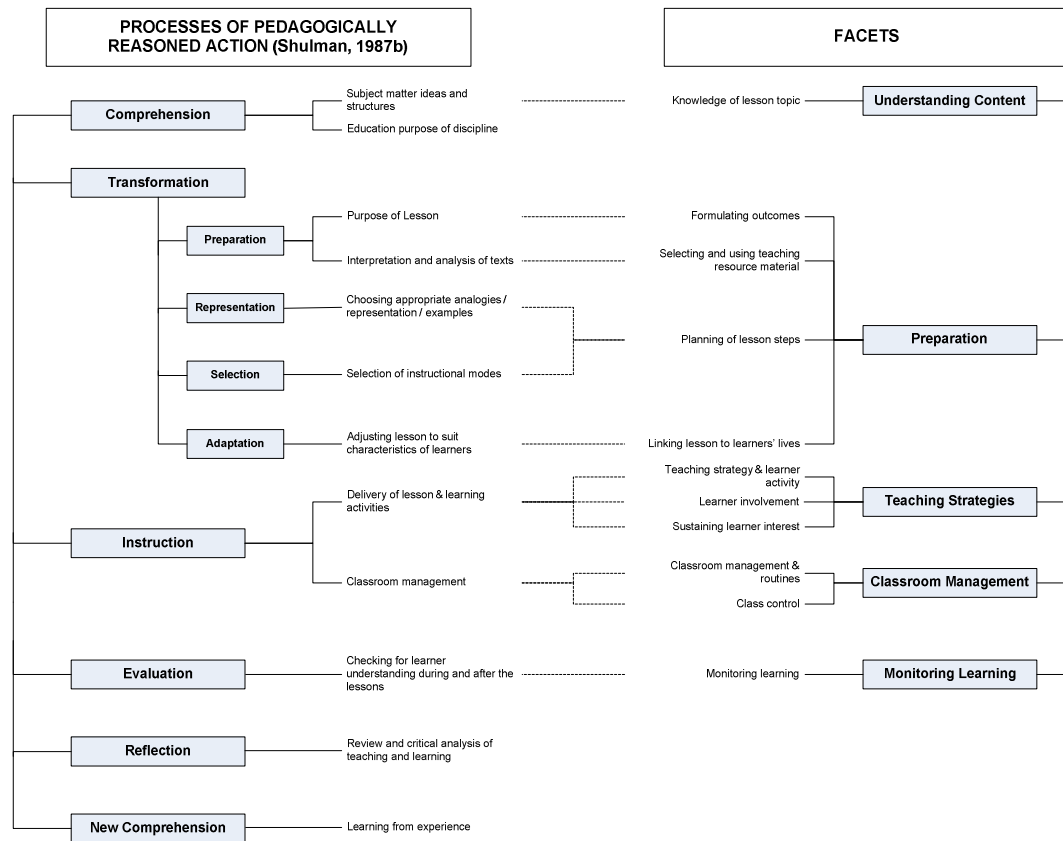


Figure 4.2: Diagram showing how Shulman's Model of Pedagogical Reasoning and Action links with the five facets of teaching practice in this study

Furthermore, the facets under consideration in this study are limited to those processes of teaching that university tutors comment on while observing student teaching. It has been shown that the 11 themes that emerge empirically from this study can all be related closely to Shulman's Model of Pedagogical Reasoning and Action. However, not all of the processes that Shulman refers to in his model are represented by the 11 themes that emerge from the lesson observation reports. The processes alluded to in Shulman's model that do not appear in the 11 themes are summarised in the following tables, together with possible reasons for their exclusion from the data, or from the study:

Table 4.6: Table showing aspects of Shulman's pedagogical reasoning and action that are not specifically included in the facets, and an explanation for their omission⁵⁹

Name of process	Processes of pedagogical reasoning and action NOT included in facets	Possible explanation for omission/exclusion
Comprehension	Broad educational purposes of the discipline, beyond the isolated lesson	Student teachers often teach isolated lesson topics without locating lessons within a broader unit
Transformation	Tailoring: adapting lesson to individual learners	Not visible to university tutor, who does not see how lesson is presented differently to different classes of learners University tutors do not know learners, and would probably not recognise where a lesson has been designed to meet interests of specific learners
Evaluation	Formal testing and evaluation that teachers do to provide feedback and grades	Summative assessment is not normally observed by university tutors, although monitoring understanding during lesson is
Reflection	Reviewing, reconstructing, re-enacting and critically analysing one's own and the class's performance	Lesson observation reports do not provide evidence of reflection, although student teachers' reflections would have emerged during the post-lesson discussion. Limited evidence from focus group discussions, reflective essays and journals, but these are more generalised reflections, not specifically linked to particular lessons
New comprehension	Learning from experience	Sometimes visible to university tutors or supervising teachers in the changes in teaching after feedback or self-reflection – not often referred to in lesson observation reports Beyond the scope of this study

Summary

The 11 significant themes that emerged from the analysis of 893 lesson observation reports have been grouped into five facets. These facets have some similarities with the processes of teaching as suggested by Shulman in his Model of Pedagogical Reasoning and Action. The relationship between Shulman's process of pedagogical reasoning and action and the five facets as defined in this study are summarised in Table 4.7 as follows:

⁵⁹ Refer back to the discussion on Shulman's Model of Pedagogical Reasoning and Action, pp. 109 - 113.

Table 4.7: Table showing relationships between the 11 themes emerging from lesson observation reports, the five defined facets and Shulman's Model of Pedagogical Reasoning and Action

Shulman's Model of Pedagogical Reasoning & Action	Themes from lesson observation reports	Name of facet
Comprehension	Knowledge of lesson topic	Knowledge & understanding of content
Transformation	Formulating outcomes Selecting teaching resource material Linking lesson to learners' lives Planning lesson steps	Preparation
Instruction	Classroom management and routines Class control	Classroom management
	Teaching strategies & learner activity Using teaching resource materials Learner involvement Sustaining learner interest	Teaching strategies
Evaluation	Monitoring learning	Monitoring learning
Reflection ⁶⁰	-	-

However, there are certain discrepancies largely because this study works with student teachers, whereas his research was based on the expert teaching of veterans. Furthermore, Shulman's study worked with teachers of Senior/FET learners, whereas student teachers in this study teach Intermediate/Senior phase learners.

Sequencing the facets

In his Model of Pedagogical Reasoning and Action, Shulman sequences the processes he defines, while maintaining that although they "are presented in sequence, they are not meant to represent a set of fixed stages, phases or steps. Many of the processes can occur in different order. Some may not occur at all during some acts of teaching" (Shulman, 1987b, p. 106). The empirically-derived facets of this study will be sequenced in the same order as their counterparts within Shulman's model, as follows: From the understanding of the lesson topic

⁶⁰ Reflection does not emerge from lesson observation reports, which are written while lessons are being taught by student teachers. The student teachers' ability to reflect on the lesson would be demonstrated during the post-lesson discussion, but the content of these discussions are not documented in lesson observation reports.

(corresponding with Facet 1: Knowledge and understanding of content) and transforming the content into a way that learners may understand it (corresponding with Facet 2: Preparation), to the processes involved in the delivery of the lesson (corresponding to Facet 3: Teaching strategies and Facet 4: Classroom management), and finally assessment during the lesson (which corresponds with Facet 5: Monitoring learning). The facets will therefore be examined in the following order:

FACET 1: Knowledge and understanding of content

FACET 2: Preparation

FACET 3: Teaching strategies

FACET 4: Classroom management

FACET 5: Monitoring learning

In Chapter 8, I will argue that there is a logical hierarchy associated with this sequence.

Defining the levels of teaching within each facet

I reread lesson observation reports, assessment forms, reflective journals and reflective essays and recorded comments that in any way related to the 11 themes (now clustered into five facets). The transcripts from the focus group discussions were similarly scrutinised for relevant insights.⁶¹ All these quotes were grouped into the five facets. Within each facet, the quotes were examined for evidence of development in ‘learning to teach’. It was immediately evident that although a university tutor was expressing concern about a certain theme, the nature of these comments varied. In some cases, the university tutor was addressing issues that were rudimentary, whereas in other cases, university tutors were making some rather sophisticated recommendations, aimed at fine-tuning teaching practice

⁶¹ In a number of cases, student teachers made references (both in focus group discussions and in their reflective journals and essays) to difficulties they had encountered during their TE sessions. It was possible to correlate their recollections and perceptions with those of the university tutor as expressed in the relevant lesson observation reports.

rather than establishing foundational teaching skills. The comments from lesson observation reports therefore reveal different levels of practice within each facet. This then led me to see the need to define *levels* within each facet, according to which the data could be developmentally sequenced. In order to define generically the levels of teaching practice within each facet, I now return once more to the existing models of ‘learning to teach’. The levels have therefore been conceptually informed by the ‘learning to teach’ literature.

Generic description of levels

In the findings, I will show how the comments, when classified, show extreme variation among the abilities of student teachers within each facet. It proved possible to group the comments into four broad levels of teaching competence. Although I draw on the description of student teaching from other models of learning to teach, the hierarchical levels I propose do not necessarily comprise a series of successive stages through which student teachers develop. I will show how the level of teaching competence that a student teacher demonstrates is affected by a variety of contextual factors. Furthermore, the four levels do not in any way correspond with student teachers’ year of study. Generic descriptions of the levels will now be considered in light of the ‘learning to teach’ literature:

Level 1:

Teaching at Level 1 manifests problematic perceptions of teaching and learning that student teachers have gleaned during the years of schooling. Teaching at this level does not yet enable learning or demonstrate consideration of pedagogical issues, nor insight into the complexities associated with teaching. I therefore argue that teaching across all facets at Level 1 does not employ professional teacher knowledge.⁶² At this level, the student teacher does not yet make sense of the busyness of classroom situations from a teacher’s perspective. Tomlinson (1995)

⁶² Not all transmission teaching is devoid of teacher knowledge, for example, a highly informed teacher with deep subject matter knowledge (beyond level 4 of facet 1) who uses transmission modes of teaching can convey information in a highly considered and conceptually sound manner (Level 4 of Facet 3).

describes this state as “unconscious incompetence” (p. 44), and Fuller describes it as a period of “non-concern with the specifics of teaching”. Student teachers at this level depend heavily on direction from university tutors and supervising teachers to help them read the classroom contexts, plan what to do next, and evaluate their attempts at teaching. They are unable to sense if their lessons are working or not, and focus primarily on the delivery of what they have planned. They tend to teach irrespective of whether learners are attending to them or not. This level also corresponds to some extent with Maynard and Furlong’s Stage 2: ‘Struggle for survival’.⁶³ However, some of these student teachers do not yet seem aware that there is indeed a struggle – they continue ‘teaching’ their lesson regardless of what is happening around them. This stage is characterised by unawareness and unresponsiveness, both to the learners and to the classroom environment in general.

Level 2:

Level 2 is characterised by an attempt by the student teacher to learn the basic procedures and routines associated with classroom practice although this is more mechanical than insightful. Student teachers at this level have realised that their teaching is rudimentary, and are attempting to address the challenges they face, but are not always able to pinpoint the root cause of their difficulties. This corresponds with Stage 3: ‘Dealing with difficulties’ (Maynard & Furlong, 1993, 1995) and the state described as “conscious incompetence” by Tomlinson (1995, p. 44). Tomlinson describes this as the “early cognitive phase” of acquiring teaching skills, where student teachers are clarifying what plan of action will “enable their basic attempts including what to look for, what to do and when” (p. 25). Fuller’s model suggests that this is the stage where student teachers most crave teaching tips, and “how to” advice that will provide a foundation upon which to teach. Berliner (1994) argues that it is reasonable for such ‘novice’ teachers to rely on generalised rules, guidelines and teaching tips. He suggests that it is perhaps appropriate that student teachers “must learn to be structured before

⁶³ See Chapter 9 for further discussion.

they can be unstructured; perhaps they must control before they can improvise” (p. 174). At this level, student teachers tend to react to situations defined by learners. They depend heavily on their supervising teachers for support about the scope of their lessons, resource material and ideas for appropriate learning activities. They also depend on their university tutors or supervising teachers for feedback about how their lesson went, and what problems occurred. The reliance on the teaching tips, lesson resources and structures provided by the teacher can mean that student teachers in this stage quickly learn a set of procedures to follow when teaching – a state that Maynard and Furlong (1993, 1995) refer to as ‘Stage 3: Hitting a plateau’. The student teachers learn about classroom life and start to engage with what it means to be a teacher. Maynard and Furlong (1993, 1995) suggest describe student teachers who go through the exterior motions of teaching, but do not yet have a deep insight into the reasons behind their actions. At Level 2 teaching may be perceived as a set of mechanical routines. The knowledge base from which such students teach cannot yet be regarded as a professional knowledge base, as the action is not yet pedagogically reasoned. Every lesson appears to follow the same generic format, regardless of learners or content. This is also closely related to what Hammerness et al. (2005a) term ‘the problem of complexity’, where student teachers are not yet aware of the complexities associated with processes of teaching and learning (p. 375).

Level 3:

At Level 3, student teachers begin to teach purposefully, deliberately reflecting on their teaching, and the learning that has taken place. When things have not worked out as planned, they are able to make adjustments for next time. Tomlinson refers to this as an “associative phase” of acquisition of teaching skills, “with repeated efforts to remember strategy, to make attempts and to adjust their strategy on the basis of feedback” (p. 25). As they become more aware of the effect their teaching has on learners, student teachers no longer stick tightly to rigid formula type lessons, and begin to ‘move on’ (Maynard & Furlong’s Stage 5). This beginning of flexibility is indicative of what Berliner (1994) terms an ‘advanced beginner’. Teaching practice at Level 3 may be regarded as deliberate and routine, where

according to Fuller and Brown (1975), student teachers develop their teaching skills and are concerned with the mastery of tasks. Their teaching routines are explicit and considered, typifying what Tomlinson (1995) terms “conscious competence” (p.45). Student teachers respond to learners and retrospectively reflect on their actions. They have a sense of where they experience difficulty, but are not always able to adjust their lesson immediately in response to problems they encounter. However, with reflection on their action, they re-strategise and make appropriate adjustments for future lessons. At Level 3, student teachers think about their teaching more consciously, basing pedagogical actions on general pedagogical knowledge, which refers to the “broad principles and strategies of classroom management and organisation that appear to transcend subject matter” (Shulman, 1987b, p. 92). Calderhead and Shorrocks (1997) recognise that this type of generic teaching is common in Inter/Sen student teachers, who “appeared to develop a general orientation to the subject and to learn associated activity structures” rather than “formulate any deep understanding of the subject and its pedagogy” (p. 163 – 164).

Level 4:

Student teachers at this level organise lessons that set up a systematic learning process. Student teachers gauge their success in how successful learning has been. They monitor their own teaching practice and rely less on the feedback from others when something is or is not working during their lessons. Such student teachers tend to be more flexible in their teaching because they consciously reflect while in action, and can therefore be more responsive to learners. Maynard and Furlong (1995) suggest that such student teachers have made a transition “from teaching to learning” (p. 181).

Student teachers at Level 4 adjust their teaching in response to changing circumstances during the course of the lesson. Berliner (1994) would regard such student teachers as “competent” because they “have rational goals and choose sensible means for reaching the ends they have in mind” (p. 166). Tomlinson

(1995) describes this as the beginnings of an “autonomous or intuitive phase”, where teaching is characterised by “more reading and awareness of the classroom setting” (p. 19). Students at this level begin to develop depth in their teaching practice, where they develop an ability to intuitively recognise, pre-empt and respond to patterns of classroom dynamics (Tomlinson, 1995, p. 45). They demonstrate their ability to teach independently in a way that provides authentic learning. Although they may still need guidance from supervising teachers, they are able to plan, present and assess authentic learning experiences that they devise independently.

Teaching at Level 4 demonstrates emergence of pedagogically reasoned action in which student teachers use a degree of general pedagogical knowledge as well as a consideration of the subject matter knowledge, and knowledge of the learners they are teaching. They construct PCK as they prepare, and *transform* content and teaching resource material for use with their learners; use teaching strategies that involve learners in meaningful learning opportunities; manage their classrooms in such a way as to construct environments where learners are completely engaged in learning; and actively monitor learning and conceptual understanding. All of these tasks depend entirely on PCK, which is a blending of subject matter knowledge, knowledge of learners and general pedagogical knowledge.

Limitations of this analytical framework

Analytical frameworks offer opportunities for new ways of thinking, but also impose their own limitations. Here I will explore the limitations of the facets and levels that I will use to analyse student teaching.

Limitations of the facets

It is important to note that these five facets are not intended to provide a definitive and complete account of the complexities of teaching practice. Not all dimensions of teaching practice are highly visible to university tutors during a couple of observed lessons. For example, aspects of teaching that may be more visible to the supervising teacher than the university tutor include the way in which the student

teacher interacts with colleagues, the moral dimensions of teaching, sensitivity to context, and responsiveness to the needs of individual learners. Rather, the facets defined by this study are the actions of student teaching that university tutors regard as central to learning to enable learning, and manifested most frequently in the particular cohort of student teachers in this study. The obvious omissions from the facets are those themes that were discarded because they did not manifest significantly in this particular group of student teachers, including their ability to ‘communicate’ using the language of teaching and learning, and their ‘relationships with learners’.

Limitations of the Levels:

The most sophisticated level of practice of the student teachers participating in this study is described as ‘Level 4’. This is not intended to imply that the practice at ‘Level 4’ is the ultimate to which all teachers should aspire. Neither is it a description of what may constitute ‘expert’ levels of practice. It is merely a category that refers to the most advanced teaching demonstrated by this group of student teachers during their pre-service teacher education programme.⁶⁴

Relationship between Facets

Although Chapter 6 explores each facet independently, some university tutor comments show that relationships exist between two or more facets. These links will be noted, and further clarified in Chapter 7, where the developmental teaching of five student teachers will be compared and contrasted. In Chapter 8, the relationships between facets that emerge from the data will be explored. In this way, the *relational* nature of the model will be highlighted. It will be shown how a particular level of teaching practice within one facet can support or undermine teaching practice in other facets.

64 Beyond Level 4, could be interrogative teaching, in which teachers increase their knowledge of practice. This level of teaching, however, is beyond what can be expected of student teachers and would require additional research.

CHAPTER 5: TEACHING EXPERIENCE WITHIN THE BEd PROGRAMME AT THE WITS SCHOOL OF EDUCATION: A CASE STUDY

The BEd programme at the Wits School of Education provides the context for this case study. It is therefore necessary to review some of the institutional factors that affected both the university tutors and this group of student teachers between 2003 and 2006.

The incorporation

The state's decision to locate teacher education within the higher education sector resulted in the incorporation of the former Johannesburg College of Education (JCE) into the University of the Witwatersrand's School of Education.⁶⁵ While the merge officially took place on 1 January 2002, in practice these two institutions continued to operate independently, although occupying the same campus, until 2005, when existing management structures were disbanded, and new divisions and leadership structures were put into place.⁶⁶

Introducing the BEd degree

While still adjusting to the incorporation, university staff was simultaneously grappling to understand the implications of the NSE Report, which required the introduction of a BEd degree to replace the former teaching qualifications of the Higher Diploma in Education (HDipEd) and Bachelor of Primary Education (BPrimEd). University staff members from the legacy college were responsible for conceptualising and designing new courses in line with the national guidelines. A number of BEd programmes were designed, each one specialising in a different combination of phases. For example, it became possible to specialise in Early Childhood Development/Foundation phases; Intermediate/Senior phases, or

⁶⁵ Henceforth called the Wits School of Education.

⁶⁶ During the transition, JCE was renamed the 'College of Education at Wits'.

Senior/Further Education and Training phases.⁶⁷ In 2003, the year following the incorporation, the Wits School of Education enrolled the first intake of undergraduate students for the newly defined BEd degree. The first graduates of this degree graduated on 12 December 2006. The years between 2002 and 2006 were therefore years of immense change for university staff.

Teaching Experience within the BEd programme

Teaching Experience is described as “a fundamental part” of the BEd programme, intended to “complement professional and academic courses” (College of Education, 2003, Appendix D, pp. 462 - 469). At the Wits School of Education, the TE programme accounts for 72 of the 480 SAQA credits required for the BEd qualification. The core role TE plays in the BEd programme is evident in the rules for promotion, which stipulate that a student may not proceed to the next year of study “unless s/he has gained credit for at least seven courses (including the course in Teaching Experience)”.⁶⁸ Student teachers who do not earn credit in TE, therefore, may not proceed to the next academic year.

Organisation of TE

The BEd model adopted by Wits School of Education is that of an integrated programme, where blocks of lectures are interspersed with two three-week periods of classroom based TE sessions in all four years of study. Student teachers already venture into schools within the first four months of their first year of study. During this time it is expected that student teachers are regarded as “junior colleagues, responsible and committed to the schools to which they are assigned” (College of Education, 2003, Appendix D, pp. 462 - 469). The student teachers thus teach in eight TE sessions of three weeks each during their four-year programme.

⁶⁷ Foundation Phase: Grades R (0) – 3; Intermediate phase: Grades 4 – 6; Senior Phase: Grades 7 – 9; FET: Grades 10 – 12.

⁶⁸ University of the Witwatersrand, Faculty of Humanities Rulebook (2003)

Selection of schools

Wherever possible, student teachers are “permitted to apply for allocation to schools of choice, subject to the school’s capacity and areas of specialisation” in and around the greater Johannesburg/Witwatersrand area, accessible to both student teachers and their university tutors (College of Education, 2003, Appendix D, pp. 462 - 469). Formerly racially segregated suburban and inner city schools have opened to learners and teachers of all race groups, and now provide student teachers with opportunities to teach in multi-racial and multi-lingual classrooms.⁶⁹

It was in such schools that student teachers in this study conducted most of their TE sessions.⁷⁰ Most of these schools have English as the language of teaching and learning, and many of the suburban schools around Johannesburg are well resourced. Some inner city, and township schools still do not have well-equipped classrooms. More experienced student teachers find that, “even if the school is under-resourced and without electricity, you can teach and it doesn’t mean that just because there are no overhead projectors, you can’t give the learners work” (S 2 RTE). Many independent schools are reluctant to take student teachers, because of pressure from parents who insist that only qualified teachers conduct lessons. There were a number of student teachers who completed a TE session in schools located in formerly black or Indian townships. Opportunity is provided for some student teachers to teach at rural farm schools in Kweni Basin, Mpumalanga, where a lecturer from the Wits School of Education co-ordinates a literacy development and reading project.

Student teachers “try to select schools which are ‘the same’ as them and tend to avoid the schools where they would ‘stick out’” (UT FGD). University tutors observe this trend across all cultural groups, however “the only students who can’t avoid schools that are new to them are the student [teachers] from rural areas” (UT FGD). First-year student teachers, especially those who are new to Johannesburg and living in the university residences, rely on municipal buses, walking or taxi transport to get to and from schools. There is a tendency for these

⁶⁹ Township schools continue to be predominantly black African.

⁷⁰ Only specialist religious schools still remain rather homogeneous with respect to learner diversity.

student teachers to repeatedly request to do their TE sessions at inner city schools, motivated primarily by accessibility and minimising their transport costs (UT FGD).

Student teachers may complete one '*elective*' TE session, where they may teach in a "school specialising in a phase in which the student has not specialised, or a school located beyond the reach of the university (for example, schools in provinces other than Gauteng, or outside the country)" (College of Education, 2003, Appendix D, pp. 462 - 469). This option partly addresses the urban bias in the schools used for TE sessions. It is during this 'elective' that a number of student teachers from rural areas return to teach in their own communities. Student teachers completing an 'elective' TE are not usually observed by university tutors during that session. In cases like these, the student teacher acts as an intern, and is fully supervised and assessed by the supervising teacher.

Role and challenges of university tutors

At the Wits School of Education, a university tutor is assigned to each student. The functions of the university tutor are "to observe and assess the student teacher's progress; to evaluate the student teacher's performance, in consultation with the supervising teacher, and to recommend the final result of the student teacher's performance" (College of Education, 2003, Appendix D, pp. 462 - 469). University tutors are normally able to observe two or three lessons prepared and taught by the student teacher during the three-week TE session. The university tutor makes notes on a lesson observation form during the observed lesson. One copy is kept for the university's records, and a second copy is handed to the student teacher. After the lesson observation, it is expected that the university tutor and student teacher engage in a reflective discussion about the lesson. A number of student teachers made comments like, "I preferred it when a [university] tutor 'crits' your lesson by writing everything down (right and wrong) and then discusses it all with you straight afterwards. The ones who just hand you a paper and leave are not helping [me develop]" (S 3 FGD). These types of

comments imply that post-observation discussions sometimes do not happen in accordance with policy requirements.

The NSE Report requires TE to be “mode of delivery through which all the different roles of educators should be both *developed* and *assessed*”⁷¹ (Dept of Educ, 2000, p. 5). This requirement necessitates that university tutors act as both mentor and judge. For student teachers, the university tutor’s visits, or ‘crits’, can be a source of a great deal of stress and anxiety, yet students spoke with surprising affection of the relationships they established with some of their university tutors during TE. They spoke of how “comforted” and “reassured” they felt to have “a familiar face” in their classrooms, despite their nervousness at having their teaching performance under intense scrutiny (S 3 FGD).

With the incorporation into the university, the number of staff teaching in the BEd programme was reduced from 90 to 48. Consequently, there were fewer university tutors, and former JCE staff found that their allocation of student teachers increased from typically 12 to 18 student teachers per TE session. The amalgamation therefore directly affected TE in terms of the increased tutoring load on university tutors during TE sessions. It was clear from the focus group discussions with student teachers that they felt the effect of this increased tutoring load. One student teacher commented, “You feel like you must respect the lecturers’ valuable time. They have more people to deal with than you and you should not waste their time” (S 4 FGD).

Requirements of student teachers during TE

Student teachers are expected to “teach a variety of lessons relevant to the school phase, learning area or teaching subject” and to be involved in activities such as lesson observations, providing assistance to smaller groups and producing learning materials. Student teachers are expected to “produce a written record of

⁷¹ The use of italics here is my emphasis.

preparation for each lesson presented” (College of Education, 2003, Appendix D, pp. 462 - 469).

The early exposure of student teachers to classroom environments necessitate that the requirements of student teachers are different from their first to their final year of study (Yule et al., 1990). The minimum number of lessons that a student teacher is expected to teach depends on the year of study, with the load increasing progressively until, by their fourth year, student teachers are expected to teach “continuously” for ten days, as apparent in the following table:

Table 5.1: Minimum requirements for teaching loads required of BEd students in different years of their degree (College of Education, 2003, Appendix D, pp. 462 - 469).

Year of study	NQF Level	Minimum requirements: First 3-week TE session	Minimum requirements: Second 3-week TE session
1	5	Observation of lessons during first week; One taught lesson per day	2 Fully prepared lessons per day
2	5	2 Fully prepared lessons per day	2 Fully prepared lessons per day
3	6	3 Fully prepared lessons per day	3 Fully prepared lessons per day
4	6	Continuous teaching load for 10 consecutive days	Continuous teaching load for 10 consecutive days

Table 5.1 shows that student teachers in their first and second year of study are to be assessed at NQF level 5; whereas third- and fourth-year student teachers are to be assessed at NQF level 6.⁷² However, the distinction between these two levels seems arbitrary and unclear. One distinction between NQF Levels 5 and 6 can be seen in terms of the teaching load the student teacher is expected to carry. Whereas at NQF 5, student teachers are expected to teach two lessons per day, at NQF 6, student teachers are expected to teach at least three lessons per day. The criteria in the Table 5.2 (p. 163) suggests as the distinguishing features of student teaching at NQF 5 compared with NQF 6:

⁷² For a discussion of NQF levels, see p. 75.

Table 5.2: Extract from BEd TE requirements, suggesting differences between NQF levels 5 and 6 (College of Education, 2003, Appendix D, pp. 462 - 469).

NQF Level 5 Competence to be assessed	NQF Level 6 Competence to be assessed
Basic classroom & group management	
Design & presentation of lessons	Design & presentation of extended lesson units
Appropriate use of language	
Application of teaching skills to phase/subject	Further or advanced application of teaching skills to phase/subject
Skills of guided assessment of learners	Implementation of strategies for assessment & evaluation.
Awareness of learner's special needs	Assistance to learners with special needs
Participation in extra-murals	Co-ordination of extra-murals
Understanding of professionalism	Application of professional rights
	Design, use & evaluation of learning materials
	Critical reflection on teaching practice & methods.

This table shows how vaguely the differences between NQF 5 and 6 are defined. For example, the difference between “application of teaching skills” at NQF 5, and “further and advanced application of teaching skills” at NQF 6 is not clearly specified. It is difficult to interpret exactly what these distinctions imply. Other criteria are equally vague and inaccessible. For example, it is not clear what “application of professional rights” could possibly mean, in the context of a student teacher going on TE. There are certain aspects (like classroom management and appropriate use of language) that are listed as competences to be assessed at NQF 5 but not at NQF 6. This seems to imply that at NQF 6, certain issues (like language use and classroom management) cease to be important!

The NSE Report requires each teacher education institution to determine its own criteria for assessing student teachers on TE at differing NQF levels. Wits School of Education has interpreted the fundamental differences of NQF levels 5 and 6 in terms of differences in the teaching load the student teacher assumes, as well as the degree of development of certain skills expected.

Assessment and evaluation of student teachers

Student teachers are assessed in every period of TE. The assessment focuses on “the student teacher’s compliance with all requirements laid down by the University and the school; and the extent to which the student teacher has failed to match, matched or surpassed the essential outcomes prescribed for a specified level of TE” (College of Education, 2003, Appendix D, pp. 462 - 469). The university tutor and supervising teacher complete a formative assessment at the end of each TE session. In this formative assessment the student is not graded, but an indication is given of the level of teaching performance attained alongside the competences described in the Exit Level Outcomes. Ideally, the assessment is completed in the presence of the student teacher, but this requirement “may be waived if the university tutor and supervising teacher agree that it is not conducive to an objective assessment” (College of Education, 2003, Appendix D, pp. 462 - 469).

Student teachers (in their first, second or third year of study) are assessed formatively, with the lesson observation reports and assessment forms identifying areas of strengths and weaknesses in their teaching. They are awarded either a ‘Credit’ or a ‘No credit’ for the TE session, and their competences in various categories are profiled, as can be seen in the assessment forms in Appendix C (pp. 455 - 461). The TE policy at the Wits School of Education makes allowances for first-year student teachers, who may not be able to demonstrate all areas of competence at the required level, to nevertheless be “admitted to the second year if...sufficient potential and commitment have been shown...to indicate that the outcomes could be achieved in the second year” (College of Education, 2003, Appendix D, pp. 462 - 469). In borderline cases, a university tutor may call for a moderator, “whose recommendation is considered in conjunction with the assessment of the university tutor and supervising teacher” (College of Education, 2003, Appendix D, pp. 462 - 469). In contrast, fourth-year student teachers are assessed summatively in their TE sessions and are awarded a mark.

The assessment tools used between 2003 and 2006

Four different assessment tools have been used to assess a student's teaching performance during TE in recent years; three of which were used for TE with the group of student teachers in this study, over the duration of their BEd. A comparison of the criteria listed in these four tools is summarised in Table 5.3.

The range of assessment tools is partially attributed to the radical changes in policies governing teacher education in recent years. With the release of the NSE Report, a group of JCE staff members devised a new assessment tool structured around the Roles of the Educator defined by the state, and reflects the exit level outcomes and associated competences as stipulated by the Standards Generating Body for Educators (2001).⁷³ Like its predecessor, this tool required university tutors and supervising teachers to judge the student teacher, using a five-point scale, across a range of performance criteria. However, the then-JCE staff soon found that this assessment tool was inappropriate to use with first-year student teachers, as it was derived from the competences expected of a graduating student teacher. The new assessment tool was therefore retained for second- and third year students, and adapted further for use with first-year student teachers. Fourth-year student teachers, on the other hand, are assessed via three open-ended evaluations written according to various criteria by the university tutor; the supervising teacher; and the student teacher. However, the criteria given for the open-ended assessment emerged from the assessment tool used prior to the NSE Report, and are not based on the exit level outcomes or their associated competences.

For these historical reasons, three different assessment tools were used over the course of the BEd programme between 2003 and 2006. Each of these will be discussed in turn. The assessment tool used for second and third year student teachers will be discussed first, as it forms the basis for the first-year tool.

⁷³ See TE Assessment tool, Appendix C pp. 459 – 460.

Table 5.3 Similarities and differences in criteria between various TE assessment tools used

Assessment criteria used prior to NSE Report	Assessment criteria for 1 st years	Assessment criteria for 2 nd and 3 rd years	Assessment criteria for 4 th years
Ability to communicate (voice projection; fluency, pronunciation, vocabulary; confidence, self-assurance; effectiveness in giving instructions)	Communication in the language of instruction; Voice, volume, pitch, enunciation, tone/expression; Clear questions, instructions and explanations; Quality of written communication	Communication in the language of instruction: voice; questions; giving instructions; explaining	Ability to communicate; instructions; explanations, descriptions, questions
Quality of relationship with pupils	Respectful and professional treatment of learners	Attitude to learners, respectful, professional, supportive; Sensitive to learners' needs	Quality of the student teacher's relationship with learners
	Ability to create a positive learning environment	Classroom management: arrangement, organisation	Classroom management
Effective group control; firmness and consistency in controlling discipline	Ability to handle disruptions / misconduct by learners	Classroom management: constructive discipline	Effectiveness of control (discipline)
Quality & appropriateness of stimulus material; originality of worksheets, tests etc; Effective use of stimulus material	Integrated use of teaching aids	Integrated use of media/aids: chalkboard, OHP etc	The development and effective use of support materials
Use of a variety of teaching strategies; appropriateness of teaching strategies Ability to encourage pupils to explore further; pupil participation	Quality of learner activity / involvement; Outcomes achieved	Effective group & pair work: learner centred; Selecting a variety of teaching strategies appropriate to learner context; Stimulating & directing critical and creative thinking; Have outcomes been achieved?	The variety and appropriateness of teaching strategies; Ability to motivate, arouse and maintain interest
Quality of pupil performance	Ability to facilitate on-task behaviour in learners;	Effectiveness of learner development (quality of learning)	The effectiveness of learner development
Pacing of the lessons	Suitable pacing of work	Suitable pacing of learner activities	
Thorough knowledge of subject matter, content	Sound knowledge of content	Sound knowledge of content; Evidence of thorough research; Wide general knowledge appropriately applied in the learning situation	Degree of knowledge & insight into relevant learning areas
Planning & preparation (Suitability and value of aims; Clarity of aims; appropriate thought given to needs of learners; knowledge of syllabus & schemes of work)	File correct and updated; lesson prep according to requirements; Outcomes clearly stated;	Planning in line with new curriculum; selecting and sequencing sufficient, suitable and accurate content; Have outcomes been clearly stated? Quality and accessibility of preparation file	The planning, preparation and integration of units of work
Interaction with colleagues	Co-operates well with colleagues; Fits in with the school requirements	Co-operates with colleagues, a good team worker	The quality of the student teacher's relationship with teachers and school organisation
Variety of assessment procedures to assess progress; control of written work		Regular control & assessment of learner work	The assessment of learner development
Ability to evaluate quality of own performance in teaching; Review and use of evaluation to improve teaching		Ability to reflect on self as educator	
		Upholding / teaching the Constitution, human rights; responsibilities & respect for others; Provide a listening ear/ extra help to those in need	
		Active involvement in the extra-mural programme of the school	Extra-curricular involvement
Degree of professionalism; Willingness to learn and accept guidance	Enthusiastic and committed to the profession; Willing to learn and adapt		Degree of professionalism

Assessment tool used for second- and third-year student teachers⁷⁴

The TE assessment tool used for second and third year student teachers resulted from an early attempt by college staff to comply with the NSE Report. The competences associated with exit level outcomes were thus used as an organising framework for TE assessment. Although the NSE Report regards *exit level* outcomes as a description of the ideal abilities of graduating teachers at the end of their studies, these same outcomes are used as yardsticks against which to measure student teachers from their second year of study. Moreover, instead of using the word ‘competent’ to describing the ideal abilities of a graduating teacher, the assessment tool uses it to indicate a minimally acceptable level of ability expected from a second and third-year student teacher.

Within the parameters of each defined role of the educator, certain exit level outcomes and associated competences have been registered with SAQA as the outcomes for the BEd degree. These have informed the assessment tool, as can be seen in Table 5.3 (on p. 166).

Student teachers were graded against these outcomes using five descriptors of competence, namely, Incompetent, Not yet competent, Competent, Highly Competent, and Excellent. No clarification exists about what is expected at each of these levels – other than frequent occurrences of ‘incompetent’ or ‘not yet competent’ on the checklist must result in a ‘no credit’ for the TE session. The use of these vaguely defined descriptors is ambiguous and confusing for assessors and student teachers alike. A student teacher, for example, explains how “everyone has their own standards and requirements. I find this frustrating” (S 4 FGD). On the other hand another student teacher found that her university tutors had been “very consistent in their feedback, criticism and assistance. All of them have been working towards set standards” (S 3 FGD).

⁷⁴ See Appendix C, p. 459 – 460.

Table 5.4: Table showing how exit level outcomes (SGB for Educators, 2001) informed criteria in the TE assessment tool used by Wits School of Education

Related criteria in TE assessment tool	Roles of the educator (NSE Report)	Exit level outcomes (SGB for Educators,2001)	Guidelines for assessing applied competence (SGB for Educators,2001)
7.1. Evidence of thorough research (beyond textbooks) 1.1. Communication in the language of instruction: Voice (volume, pitch, pace, enunciation, tone); questions; giving instructions and explaining	Educator roles 1.Learning mediator 4. Scholar, researcher and lifelong learner;	1.1 Demonstrate competence in reading writing and speaking language/s of instruction in ways that facilitate their own academic learning, learning in the classroom	• Read academic texts critically, integrate and use the knowledge in their...teaching • Use the main language of instruction to explain, describe, discuss and relate key concepts in their area of specialisation
1.11 Sound knowledge of content	Educator roles 1.Learning mediator; 2.Interpreter & designer of learning programmes & materials; 7.Learning area/subject/ discipline/phase specialist	2.1. Demonstrate competence with regard to the knowledge base underpinning the learning areas / subjects they teach	• Demonstrate an understanding of the fields of knowledge which underpin their subject/learning area of specialisation
2.1 Planning in line with the new curriculum (interpreting official documents)		2.2. In their area of specialisation, demonstrate competence in planning, designing and reflecting on learning programmes appropriate for their learners and learning contexts	• Interpret curricular knowledge in practice in their area/s of specialisation, in terms of broader understanding of the relevant fields of knowledge
2.1 Selecting a variety of teaching strategies appropriate to learner context 1.9 Suitable pacing of learner activities 1.8. Effective group and pair work: learner centred 1.6. Integrated use of media/aids: chalkboard, OHP etc	Educator Roles 1.Learning mediator 2.Interpreter and designer of learning programmes and materials 3.Leader, administrator and manager 4. Scholar, researcher and lifelong learner 5.Community, citizenship and pastoral role 6.Assessor 7.Learning area/subject/ discipline/phase specialist	3.1. In their area of specialisation, candidates demonstrate competence in selecting, using and adjusting teaching and learning strategies in ways that meet the needs of the learners and context.	• Select and use teaching and learning strategies appropriate to the subject, phase and topic and on the basis of careful assessment, appropriate to the learners in their classes • Create expectations which make appropriate demands of learners; accommodate differences in learning style, pace and ability, in planning and use of teaching and learning strategies • Facilitate occasions where learners are taught in groups, pairs and as individuals • Use teaching and learning support materials to facilitate learner progress and development
1.7 Stimulating and directing critical and creative thinking 1.5. Classroom management: constructive discipline 1.2. Attitude to learners respectful, professional and supportive 1.3. Sensitive to learners' needs		3.2. Demonstrate competence in managing and administering learning environments and supporting learners in ways that are sensitive, stimulating, democratic and well-organised	• Manage learning environments democratically and in ways that foster creative and critical thinking • Discipline learners in ways that are firm, growth-promoting and fair • Create learning environments that are sensitive to cultural, linguistic and gender and other difference
3.2. Regular control and assessment of learners' work 2.4. Have the outcomes been clearly stated? 2.5. Have outcomes been achieved?		3.3. Demonstrate competence in monitoring progress and achievement in specialisation	• Select, adapt or design assessment tasks and strategies appropriate to the specialisation and a range of learning contexts • Assess & record systematically the progress of individual learners • Explain the link between the methods of assessment, the overall assessment purpose and the outcomes being assessed
1.2 Attitude to learners respectful, supportive 3.1 Co-operates with colleagues, a good team worker 8.4 Active involvement in the extra-mural programme		4.1 Candidates demonstrate that they can function responsibly within the education system, an institution, and the community in which the institution is located	• Maintain a sense of respect towards others in the learning environment • Co-operate professionally with colleagues in an institutional setting • Select, create, justify, deliver, and reflect upon and improve extra-curricular activities
8.1. Upholding and teaching the constitution, human rights and responsibilities and respect for others 7.3 Ability to reflect on self as educator	Educator roles 3.Leader, administrator and manager 5. Community, citizenship and pastoral role	4.2 Demonstrate a respect for and commitment to the educator profession	• Promote the values and principles of the constitution, particularly those related to human rights and the environment • Evaluate their own professional progress effectively

Although attempts were made to base the new assessment tool on the requirements of the NSE Report, it does not fully reflect the spirit of the latter. For example, the NSE Report states that the “list of roles and their competences is meant to serve as a description of what it means to be a competent educator. It is not meant to be a checklist against which one assesses whether a person is competent or not” (NSE Report, 2000, p. 8). Although the NSE Report states that the role of “learning area/subject/discipline/phase specialist is the over-arching role into which the other roles are integrated, and in which competence is ultimately assessed” (p. 7), the assessment tool does not consider this role at all. Furthermore, the NSE Report requires that each role be broken down into practical, foundational and reflexive competences. However, only one element on the assessment form refers to reflective practice. With specific reference to TE, the NSE Report states that it “should provide an authentic context within which student teachers experience and demonstrate the *integration* of the competences developed in the entire curriculum” (p. 7) and “ultimately, the qualification should reflect an applied and integrated competence. This demonstrated ability to integrate theory and practice in teaching must be assessed within all educator qualifications” (p. 8). On these grounds, I argue that neither the NSE Report nor the associated exit level outcomes were intended as a checklist against which student teachers are assessed during TE. To use the roles, competences and exit level outcomes as a list of discrete elements against which the teaching competence of a student teacher can be measured reinforces the problematic notion that teaching is a fragmented activity, comprised of unrelated tasks. While the revised assessment tool attempted to bring the TE programme in line with the NSE Report, it further fragmented the assessment of student teaching. Furthermore, the assessment form that arose out of an attempt to comply with criteria as stipulated in the NSE Report emphasises the outward appearances of competent teaching rather than the ability of the student teacher to organise systematic learning.

Assessment tool used for first-year student teachers⁷⁵

In the assessment grid used with first-year student teachers, there are four main categories, namely, communication in the language of instruction; preparation and presentation; attitudes; and classroom management. Each category has a number of criteria, according to which symbols (from A to E)⁷⁶ are assigned. After each category, supervising teachers are encouraged to make an open-ended comment about the student teacher's ability.

Each category has a number of associated criteria. Many of these come directly from the assessment tool used for second and third year student teachers, and as such, are based on the exit level outcomes and associated competences for the BEd qualification.

The following criteria are not in the assessment tool used for second- and third-year student teachers:

- Quality of written communication;
- Quality of learner activity/involvement;
- Willingness to learn and adapt;
- Enthusiastic and committed to the profession;
- Fits in with the requirements of the school;
- Ability to facilitate on-task behaviour in learners;
- Ability to handle disruptions/misconduct by learners;
- Ability to create a positive learning environment.

It is not clear from where these criteria come, since they do not relate to the NSE Report or the previous assessment tool. However, all other criteria are taken from the assessment tool used for second and third year student teachers, and therefore

⁷⁵ See Appendix C, p. 462

⁷⁶ Aside from a note that 'E' is equivalent to a fail, there are no other indications of what these symbols mean.

are related to the exit level outcomes of the BEd degree, as registered with SAQA by the Standards Generating Body (2001).

Assessment tool used for fourth-year student teachers⁷⁷

In their fourth year of study, student teachers are assessed summatively. Unlike the checklist of competences or outcomes used in other years, open-ended assessment reports form the basis of the assessment. The student teacher, university tutor and supervising teacher independently write a report on aspects of the student teacher's teaching practice. These three reports are "the focus of discussion in the final meeting of the [supervising] teacher, the student [teacher] and the [university] tutor" (College of Education, 2003, Appendix D, pp. 462 - 469). On the basis of the reports, and discussion that follows, the university tutor and supervising teacher assign a summative mark to the student teacher for the TE sessions.

There are 14 categories suggested as guidelines for writing the assessment report. These categories are not drawn from the assessment tool that was devised from exit level outcomes and the NSE Report, but are closely linked instead to a previous TE assessment tool used prior to the release of the NSE Report, as illustrated in Table 5.5 (p. 172).

The use of open-ended reports means that student teachers are assessed more holistically than in previous years. The ability of student teachers to conduct a thorough self-assessment is also a test of their ability to reflect on their own teaching practice.

⁷⁷ See Appendix C, pp. 455 - 461.

Table 5.5 showing relationship between criteria from previous assessment tool and the criteria used for assessment of fourth year student teachers

Criteria from previous assessment tool (1994 – 2000)	Criteria from assessment guidelines for continuous TE (Inter/Sen)
Degree of knowledge and insight into subjects taught	Degree of knowledge and insight into relevant learning areas
Planning and preparation	The planning, preparation and integration of the units of work
	The development and effective use of support materials
The variety and appropriateness of teaching strategies	The variety and appropriateness of teaching strategies
The ability to motivate, arouse and maintain interest	The ability to motivate, arouse and maintain interest (include here the learning environment established).
	The effectiveness of learner development
	The assessment of learner development
Effective group control	The effectiveness of control (discipline)
	Classroom management (administration, time management, giving instructions, asking questions, organising group work)
Ability to communicate	The ability to communicate (instructions, explanations, descriptions, questions)
Quality of relationship with pupils	The quality of the student teacher's relationship with learners
Degree of professionalism	The degree of professionalism (code of conduct)
	The quality of the student teacher's relationship with teachers and school organisation (including leadership and initiative)
	Extra-curricular involvement
Willingness to learn and accept guidance	

Discrepancies between the official assessment criteria and the professional judgement of university tutors

During a focus group discussion, the assessment criteria that experienced university tutors use for student teachers in different years was probed, and will now be compared with the official university criteria.

Supporting and assessing first year student teachers

Whereas the first and second year of study are clustered together (at NQF 5) by TE policy, this distinction is not reflected in the perceptions of university tutors. Rather, university tutors express an opinion that there is a “need to distinguish very carefully between first years, seconds and so forth because the first years are so different” (UT FGD). University tutors expect that many first year student teachers have a “lack of subject knowledge and methodological knowledge” but take into consideration the student teachers’ “effort, willingness to learn and listen to feedback” (UT FGD). While some university tutors believe that even first year students should show some attempt to implement what they have learnt in their

courses, others felt that their ability to cope in their first year is largely determined by “whether or not they had the kind of educational background that gives them confidence, content knowledge and exposure” to a vision of teaching congruent with that of the university (UT FGD).

A university tutor points out, for example, that she considers “what is reflected in attitude, level of interest and level of effort - what they are prepared to engage with, how much learning they are prepared to do. I expect them to have small experience coupled with big positive attitude” (UT FGD). However, this support does not mean that their teaching should not be subject to honest critique. A university tutor notes, “as much as we should be supportive of our first year students, it is important that we don’t give a false impression of them being on the right track when they are not... It can be detrimental to them later in their studies” (UT FGD). Examples of comments that could potentially lead to confusion were found in lesson observation reports. In one such instance, the student teacher was told: “You are an *excellent* teacher...I feel the lesson was in places a *bit boring*. You should have *let the learners do more discovering* than giving all the facts to them, but still, you handled the whole learning environment *excellently*”⁷⁸ (UT LO 1). Excessive praise in their first year of study may give student teachers unrealistic and false impressions of their teaching ability, which can lead to them being resistant to critique in later years. Furthermore, a simplistic view of teaching may be cemented by excessively positive ‘encouraging’ comments that some student teachers receive in their first year, which reinforce their perceptions that teaching is straightforward and easy.

Instead of looking at specific knowledge and pedagogical skills, university tutors assess first year students on how suited they appear to be for the profession of teaching. University tutors “quickly become aware of those who lack a real liking for children” and may find student teachers to be unsuited for teaching if there are clear indications that they are not able to “interact constructively with children”

⁷⁸ Italics are mine, to highlight the conflicting messages: it is unclear how the lesson can be regarded as “excellent” if it is “a bit boring” with little learner discovery or enquiry.

and that they “avoid engaging too much” with teaching (UT FGD). This is borne out by the data showing that student teachers who were given ‘no credit’ for their first TE session were found to be unsuited for teaching. This conclusion was based on the indifference of these student teachers towards classroom activities and the learners, lack of basic communication skills, and opting out of classroom life and teaching. One such student teacher, deemed not suitable for the teaching profession, was described in a report written by his university tutor as follows:

“His shyness, coupled with his insecurity in the language of instruction, as well as his lack of interest in classroom matters, suggest that he is actually not at all suited to a profession which demands that its members have (i) an awareness of situations and individuals (ii) initiative in making themselves available and (iii) curiosity about the world and the individuals in it.

He was invited to choose lessons, which he would enjoy trying out, provided they were discussed in good time. Unfortunately he never seemed to manage to get beyond making requests at the end of the day, supposedly for the following day. Educators eventually became reluctant to give him lessons because he showed so little interest in what was going on in their classes. As such, there were too few lessons that were actually prepared and taught, resulting in very little evidence or likelihood of growth over the three-week period. In these circumstances, I don’t think it’s possible to give him a credit for this first TE. Furthermore, I think that he should re-consider whether it is appropriate to incur four years, perhaps five, of student expenses to himself and his family, for the sake of a career, which he gives little evidence of being suited for. I wish him much wisdom and courage in his considerations” (UT LO 1).⁷⁹

In general, university tutors regard TE in the first year as a kind of ‘settling in’ period, in which student teachers are coming to terms with tertiary education. University tutors perceive the assessment of first year student teachers as being “quite complicated” and “tricky to judge”, with their own role a delicate balance between supporting and guiding, and, at times, acting as a gatekeeper to the profession.⁸⁰

⁷⁹ After this TE session, it was arranged for this student to receive career counselling. He subsequently deregistered from the BEd.

⁸⁰ In Chapter 9, I will make proposals for revisions of how the first year of TE could be restructured on the basis of the findings of this study.

Challenging and assessing second and third year students

University tutors assess second year students in the same way that they appraise third year student teachers, despite university stipulations that these two years are assessed at different NQF levels. A university tutor describes the tutor's role of diagnostician towards these student teachers, saying, "Our main role is to identify student's strengths and weaknesses. That's why we have TE – to identify and point out weaknesses" (UT FGD). University tutors accept that student teachers "experience difficulties as they 'learn to teach'", however, when student teachers "acknowledge that they are in dire straits" the opening for "moving on" is provided (UT FGD). When student teachers "flatly refuse to recognise a problem" and do not show progress over a three-week period, this too may constitute grounds for failure (UT FGD).

University tutors often find that in the case of student teachers whose knowledge of the lesson's content is weak, honest critique is needed. A university tutor explains, "You can't soften the blow because then they won't realise that [weak content knowledge] is a serious problem" (UT FGD). Whereas weak content knowledge may be expected of first-year students, in subsequent years it is recognised as grounds for failure. A lack of preparation, for example, is considered to be grounds for failure. Similarly, a university tutor explains that she looks at the quality of a student teacher's preparation file, because "an organised file is a sign of an organised person" and "the lesson plans do reflect the amount of teaching" that has been attempted (UT FGD).

In the second and third year of the BEd, university tutors require student teachers to reflect on their lessons. The insights that student teachers show into their own teaching demonstrate their ability to engage in reflective practice. University tutors perceive that it is important to "give [student teachers] a reflecting prompt before beginning the feedback" by "asking them what they thought of the lesson and what would they change about it if they could do it again" (UT FGD). However, "understanding what a reflection is and how to go about it properly" is

a process that some student teachers “find really difficult” (UT FGD). A university tutor, for example, finds it superficial when “second and third year students just say a brief ‘the lesson was fine the learners were interested’” (UT FGD). Another university tutor contends that many of the student teachers she observes “just want to know if I liked their lesson or not” (UT FGD). While the degree of reflective practice on the part of student teachers is not visible during the teaching of the lesson, it is assessed during the post-lesson conference. Although a lack of reflective practice is not necessarily grounds for failure, university tutors use the reflections as an indicator of the insights they show into their teaching.

Although it is accepted that first-year students use teaching materials provided to them by their supervising teacher, by second year student teachers are expected to begin devising their own teaching resource materials. University tutors indicate that they consider the “quality of the written work” of the student teachers on TE. A university tutor remarks, “There are often mistakes on worksheets and incorrect sentence structures. It’s all very well for them to hand in something like that to me but when they give something full of mistakes to the learners, that’s not on” (UT FGD). Another university tutor recognises that this problem is “not just limited to second language students, but occurs across the board” (UT FGD).

University tutors expect the student teachers in second and third year to be gaining confidence and competence in executing classroom routines, formulating outcomes, preparing resource material and delivering their lessons. They therefore perceive a shift in their own roles from supporter to diagnostician. Their assessment criteria change to include the degree to which the student teacher is able to participate in a reflective discussion, and the quality of teaching resource materials that the student teacher designs. University tutors now assess more critically the student teacher’s degree of knowledge of the topic of the lesson, the quality of the preparation file and the teaching methodologies employed.

Evaluating and assessing fourth year students

It is sometimes assumed that if student teachers have proceeded to their fourth year of study, their teaching should be such that they should not be in danger of failing their TE. However, in some cases, university tutors of fourth years express dismay at the quality of teaching they observe. There exist rare cases where fourth year students do fail, or come close to failing, their fourth-year TE.⁸¹ This situation can arise when university tutors are too lenient in preceding years, or when basic problems manifest for the first time in a student teachers' fourth year. A university tutor comments, "I work mostly with fourth year students during school experience and I have seen how some of them have gone through first, second and third year and now I have to query their teaching ability. Their content is weak, their methodology and techniques are poor" (UT FGD). A university tutor comments, "In fourth year, where they are expected to be fully competent and ready to go out and teach and you tell them they are not, they look at you like you are crazy" (UT FGD).

Added requirements are placed on student teachers in their fourth year of study. For the first time, they are expected to present longer term planning for a 'unit' of lessons, rather than isolated lesson plans prepared one at a time. Their classroom management is observed, not only during a lesson period, but also during the 'changeover' from one lesson to the next. In addition, student teachers are expected to take responsibility for setting up relevant displays of learner work on their classroom walls. More especially, fourth-year student teachers are expected to engage in extensive independent reflective practice, and conduct a critical self-assessment.

For the second TE session, the university tutors' role switches from provider of formative feedback to that of assessor and judge, although they still provide the

⁸¹ An example of such a student teacher will be studied in depth in Chapter 7. Joseph coped fairly well in his first three years, but experienced tremendous challenges in his fourth-year TE. He was able to improve sufficiently in his final TE session to ultimately earn his pass.

student teacher with written observation reports on lessons that contain formative feedback. It is only in this final TE session that a summative TE mark is awarded.

Summary

The TE programme at the Wits School of Education involves two TE sessions of three weeks each per annum, which together comprise 20% of the academic year. For each TE session, university tutors expected to observe at least two lessons for each student teacher assigned to them. While the first seven TE sessions provide formative feedback, student teachers are assessed summatively in their eighth ‘continuous’ session at the end of their four years of study. The differences between assessing TE at NQF 5 (first and second year) and 6 (third and fourth year) are neither well defined nor well understood by university tutors. Although official policy suggests that there are two levels of TE assessment criteria (NQF 5 and NQF 6), university tutors draw on their professional experience and judgement to describe three levels of assessment criteria (1st year; 2nd – 3rd year; 4th year). When responding to student teacher lessons and assessing student teachers, university tutors rely more on their professional judgement than on official university guidelines; the criteria listed by the NSE Report; or on criteria contained in the assessment tools. The assessment tool used to assess student teachers in their second and third year of study is designed to reflect the competences as defined by the NSE Report, but takes the form of a checklist, uses vague categories of competence and does not correspond with what experienced university tutors deem important in the process of ‘learning to teach’.

Between 2003 and 2006, three substantially different tools were used for the assessment of student teachers during TE. There was a discrepancy between the criteria used over the four years of study in that the summative assessment in fourth year is based on a different set of requirements from those of the first three years. The three TE assessment tools do not reflect the expected development of teaching practice; neither do they link with each other. Consequently, they do not allow student teachers easily to monitor the development of their teaching practice. Nor do these assessment tools allow university tutors readily to track the

student teacher's teaching practice as it progresses over time, or changes from one context to another.

In light of the serious problems around the assessment of student teaching during TE, this study will carefully document aspects of 'learning to teach' that university tutors most frequently respond to when observing student teaching. The resulting model of student teaching will reflect the nature of teaching that university tutors observe, within the categories that they deem important for learning to teach. The model I develop empirically may have value as an analytic tool for the systematic observation of student teaching.

SECTION D: DATA ANALYSIS

CHAPTER 6: DEVELOPMENTAL TEACHING PATTERNS OF STUDENT TEACHERS

Although the practice of teaching draws on all five facets in an integrated way, this chapter will consider each facet independently.⁸² A review of current literature will introduce each facet by examining views of what constitutes effective teaching practice within that facet. For each facet, four *levels of practice* will be described, ranging from the most rudimentary teaching patterns (at Level 1) to the most insightful and sophisticated (at Level 4) that can be expected of a student teacher.

This chapter will consider the nature of student teaching in each facet, across four levels of practice. In each level of every facet, I will organise the discussion around the following sub-headings:

- A description of the level
- The manifestation of classroom action at that level
- The coping strategies used by student to address difficulties arising
- The nature of support and guidance provided by university tutors to student teachers at that level

When student teachers show a facet of teaching practice at Level 4, lesson observation reports generally contain high praise and commendation from the university tutor.⁸³ It is important to note that less data exists for student teaching at Level 4 compared to the other levels. It will later be shown that only 31 out of the 66 student teachers in this study reached Level 4, in certain facets of teaching by their fourth year of study.

⁸² Links with other facets may be mentioned here, but these relationships will be expanded upon in Chapter 8.

⁸³ This is consistent with Maynard & Furlong's (1995) findings that the role of the university tutor shifts from being a 'coach' to that of a 'critical friend' or partner in teaching once student teachers develop beyond Stage 5: Moving on.

After each level, a brief tabulated summary highlight key aspects of that level. At the end of each facet, a composite table showing all levels will be presented, giving a sense of the progression within each facet.

Key to the formatting used in this chapter:

1. Use of italics

- Quotes extracted from lesson observation reports, student teacher reflective essays and focus group discussions are shown in italics.
- Core phrases or keywords that emerge from literature are in italics, for emphasis. Where the emphasis is my own, I say so in an accompanying footnote.

2. Use of square brackets

Adjustments of original quotes are indicated in square brackets. These have been kept to a minimum, but have been essential in the following cases:

- In lesson observation reports, university tutors are frequently writing directly to the student teacher. In some cases, I amend quotes to the form of the third person when reporting the comment given to the student teacher. Similarly, extracts taken from reflective journals or essays are initially written in the first person. Some of these quotes, too, are adjusted to the form of the third person to reflect the insight of the student teacher.
- In some places, it was necessary to adjust the tense to make the quote grammatically consistent within the discussion. In all cases, however, I have taken utmost care to keep true to the expressions used by the author.
- Terminology has also been adjusted in certain cases to ensure that terms used in this dissertation remain consistent. For example, the words ‘student’ and ‘pupil’ have been altered to ‘learner’.

3. Use of underlined words:

Where the original author underlined words for emphasis, this has been retained.

FACET 1: KNOWLEDGE & UNDERSTANDING OF CONTENT

Introduction

Understanding subject matter knowledge comprises much more than memorising the information required for a particular lesson; it also encompasses the roots, philosophy and skills of a particular discipline (Morine-Deshimer & Kent, 1999). Such deeper understanding of subject matter knowledge has been termed *substantive* knowledge (the ways of thinking within a discipline that make sense of the data); and *syntactic* knowledge (how new knowledge is acquired within that particular discipline) (Schwab J, quoted in Grossman et al., 1989, p. 29). Subject matter knowledge held by expert teachers is connected and organised around important concepts within the disciplinary base, which “helps experts to know when, why and how aspects of their vast repertoire of knowledge and skills are relevant in any particular situation” (Bransford et al., 2005b, p. 41). It is clear from such literature that newly graduating student teachers are not expected to have the very deep subject matter knowledge that expert teachers accumulate from years of teaching and engaging with the concepts of a subject discipline.⁸⁴

Shulman suggests that a good pedagogue understands the content in deeper ways than just knowing how to get the correct answer. To design a learning experience that can connect with the prior knowledge and understanding of learners, teachers need to be able to distinguish between core and peripheral knowledge, and have a good knowledge of the learners and their contexts (Shulman, 1989). Subject matter knowledge is therefore “a central feature of the knowledge base of teaching,” with teachers serving as “the primary source of student understanding of subject matter” (Shulman, 1987b, p. 94). Grossman et al. (2005) assert that unless a teacher possesses knowledge and understanding of the lesson content,

⁸⁴ For this reason, the term ‘subject matter knowledge’ will refer to a deep disciplinary understanding, whereas the term ‘lesson content’ will refer to knowledge and understanding of the lesson topic.

teaching cannot happen, saying, “To argue that teachers need to know the subject matter they teach seems almost tautological, for how can we teach what we do not understand ourselves?” (p. 205).

Subject matter knowledge affects how teachers “critique textbooks, how they select material to teach, how they structure their courses, and how they conduct instruction” (Grossman et al., 1989). In this way, subject matter knowledge (as a central component of PCK) informs the pedagogical choices that teachers make. These links will be explored in latter facets, but are briefly acknowledged here.

What content knowledge do student teachers need to teach?

Grossman et al. (2005) suggest that topic knowledge, without a broader insight into the subject’s discipline, has limitations, asserting, “Knowing a number of facts within a subject is less powerful preparation for teaching than knowing the big ideas and deep structures of a discipline” (Grossman et al., 2005, p. 210).

Some research shows that primary school student teachers have more reservations about their subject matter knowledge, and tend to see themselves as more child-centred, and less subject-centred, than secondary teachers (Kagan & Tippins, 1991, Gess-Newsome, 1999b; Smith, 1999). However, Grossman et al. (2005) argue that even teachers working with intermediate phase learners “need both depth and breadth of subject matter preparation” to provide a “strong grounding in disciplinary ways of knowing” (p. 230). Grossman et al. (2005) argue that focus on teaching and learning within a specialised learning area would promote elementary⁸⁵ classrooms becoming more inquiry-orientated, and would also facilitate a construction of elementary teachers’ pedagogical content knowledge (p. 231). Grossman et al. maintain, “At a minimum, prospective teachers need a *solid foundation in the subject matters* they plan to teach and the *requisite disciplinary tools* to continue learning within the subject matter throughout their careers” (p. 206).

⁸⁵ Elementary classes in the USA are equivalent to intermediate phase classes in South Africa.

In the data surveyed, 41 (out of 48) university tutors made comments regarding their student teachers' understanding of lesson content knowledge. Within this facet, the comments of university tutors are rather limited in terms of the advice and suggestions they offer, mostly rectifying very specific inaccuracies and drawing the student teacher's attention to learner misconceptions that became evident during the lesson. Some university tutors direct student teachers towards finding more authentic resources from which to work, or point out missed learning opportunities.

Trends from the data

In Chapter 4, it was shown how 11 themes emerged from the lesson observation reports that university tutors wrote. Only one of these themes makes up this facet, namely the knowledge of the lesson topic. The data relevant to these themes are extracted from Table 4.4 (p. 142) to generate Table 6.1, which is specifically relevant to this facet. It can be seen that concerns about the student teachers' understanding of the lesson content are expressed consistently in 31 – 33% of lesson observation reports across all years of study.

Table 6.1: The percentage of student teachers whose university tutors express concern regarding knowledge and understanding of lesson content for the different years of study

Year of Study	Knowledge of lesson topic
1 st Year LO Reports	33%
2 nd Year LO Reports	33%
3 rd Year LO Reports	33%
4 th Year LO Reports	31%

It may be surprising that there seems to be no real development in the depth of subject matter knowledge of BEd student teachers over time. However, this interpretation is misleading. In their first three years of study, student teachers arrange scheduled lesson observations with their university tutors. These lessons are by large arranged for the learning area in which the student teacher has specialised. However, for fourth-year student teachers, university tutors arrive unannounced – and observe whatever lesson is scheduled for the class of learners

at that time. These observations therefore are less likely to be in the student teachers' subject specialisations.

Levels of Knowledge and understanding of content:

The following levels of Facet 1: Knowledge and Understanding of Content emerged from an analysis of the data:

Level 1: Memorised/generalised knowledge

Level 2: Need-to-know knowledge

Level 3: Investigated topic knowledge and understanding

Level 4: Discipline-grounded topic knowledge and understanding

At Level 1, student teachers possess a highly inaccurate, fragmented or generalised knowledge base, whereas at Level 2 they know only what the learners need to know for the purpose of the lesson, but understanding is mechanical rather than conceptual. At Levels 3 and 4, student teachers show greater levels of research - deeply researching the topic of the lesson (at Level 3), and teaching from a good understanding of the content and the wider disciplinary knowledge base (at Level 4). At Levels 1 and 2, student teachers possess rather superficial degrees of knowledge and understanding of the content. At Level 3, their content knowledge increases in depth, and at Level 4, it increases further in both depth and breadth. In the investigation of subject matter knowledge, the manifestation of visible aspects of this knowledge will be examined, in particular the depth of topic knowledge, the ability to formulate or critique learning materials, and how student teachers use learning opportunities that present themselves.

Each of the levels will now be examined in depth.

Level 1 of Knowledge and understanding of content: Memorised/generalised knowledge

Description of level

At this level student teachers possess weak and fragmented subject matter knowledge and take information given to them at face value. They may be able to recite the ‘facts’ but do not possess a conceptual understanding of the topic they teach. A second year student teacher recalls, for example, how he “*taught a topic about land features above sea level*” but “*was confused about what is an escarpment*” (sic) (S 2 RTE). A university tutor describes one student teacher who “*just did not have the academic knowledge to critique a worksheet that a teacher had given him*” but nevertheless she “*saw how good he was with ‘little’ ones*” (UT FGD). Without a thorough understanding of the topic content knowledge, inaccuracies may be presented during a lesson – either because of inaccurate sources or because student teachers have misunderstood the lesson’s content.

A generalised level of subject matter knowledge does not enable student teachers to assess whether a diversion is worth taking or not. As such, lessons were easily sidetracked and seen as “*not going anywhere*” (UT LO 2). A university tutor describes such a student teacher, saying to him, “*There is no evidence that you are doing any research around your themes – this would suggest that you are not extending yourself for your teaching*” (UT LO 4). Another student teacher believes that, “*Teaching in a Grade 4 class, the level and content of knowledge is not that deep, therefore the degree of knowledge that I have was sufficient to educate the learners*” (S 4 RTE). She does not perceive the need to research her lesson topics, nor is she questioning her own understanding of topics.

Manifestation

Without understanding content, student teachers may not be able to address adequately all questions asked by the learners. For example, a particular student teacher was told she “*needs to do more research and ensure she is able to internalise the information: her class was quite knowledgeable and there were*

learners who often asked pertinent questions that she sometimes did not respond adequately to” (UT LO 4). A number of similar comments suggest that insecure student teachers may discourage questioning from the learners for fear of having their lack of knowledge exposed – especially when their university tutor is observing them. A student teacher recalls, *“I once had a bad experience when a learner asked me a question based on the topic and I could not answer it [after which time she] regarded a good lesson as when the learners were silent and only talked if I asked a question”* (S 4 RJ). Such student teachers may limit opportunities in their lessons for learners to ask questions.

Some student teachers at this level rely on their general knowledge and entertaining personalities to captivate learner attention, but are often unable to sustain learner interest until the end of the lesson. This problem frequently gives rise to comments such as *“You will lose the children if you don’t have something worthwhile to say and do. The class was restless because not much happened”* (UT LO 4) and *“This lesson did not seem to have much content to cover. You allowed a general discussion to evolve and did not seem to have focus at to what outcomes you needed to achieve”* (UT LO 3).

Coping strategies

To compensate for deficient lesson content knowledge and understanding, student teachers employ a number of coping strategies. Some student teachers resort to rote learning of the content, which they then recite to their learners. A first year student in TE, for example, explained how by *“memorising things [she] was able to stand in front of the kids and teach from memory”* (S 1 FGD). The memorisation of unfamiliar content, however, does not enable adequate internalisation of key concepts.

Other student teachers depend on their supervising teacher to explain the work to them, and then convey it to the learners. One student teacher explains, *“[As a student teacher] you are still a learner you have to stop and ask the teachers for information. Like if you don’t understand something you have to ask those teachers for help”* (S 1 FGD). This may be how student teachers cope when faced

with unfamiliar topics, but when they misunderstand, they may not realise that they need to ask for assistance. In such instances, they may confidently convey flawed explanations to learners.

Some student teachers avoid allowing their learners to ask questions, for fear of exposing their lack of knowledge. University tutor responses, like *“Allow the learners to ask questions”* (UT LO 1) may urge the student teacher to do that which they are consciously avoiding, while not addressing the root cause of the problem.

Some student teachers opt out of teaching or engaging with subject material during their TE. One such first year student teacher was *“willing to stand in front of a class of learners and read from teachers’ worksheets, but did not demonstrate any personal engagement or processing of such material”* (UT LO 1). Occasionally, first year students only *“teach the two university tutor observed lessons in the whole time [and] actually avoid engaging too much”* (UT FGD). Perceptions such as these are confirmed by comments like, *“Why is there only one lesson plan in your file? I’ll look at this closely again next week”* and *“I do have a problem with the [low] number of lesson plans in your file. Remember, you will be evaluated on the work you have done during the three weeks – not just the two lessons I have observed”*. However, it may also be that such comments are also a result of a lack of commitment to teaching, or reluctance by the supervising teacher to give student teachers with deficient content knowledge lessons to teach.

University tutor guidance

A clear point of consensus emerged from the data: university tutors revealed their perception that student teachers are unable to teach a topic effectively if they do not understand it well. A university tutor asserts, *“I am quite blunt about content weakness. If it is weak, I will fail them. You have to let them see that weak content will stand in the way of their success”*. University tutors express disappointment when confronted by student teachers who *“do not have enough knowledge of the content that he or she is supposed to teach [because] they are there to impart*

knowledge which will make a difference to learners in the classroom” (UT FGD). University tutors consistently argue that deficient content knowledge and understanding is highly problematic and can be grounds for failure during TE.

At this level, university tutors tend to point out inaccuracies, and explain where their content was problematic. In response to highly inaccurate content in a lesson, the university tutor wrote, *“Content knowledge is very deficient. You are using the word ‘trekboers’ but you actually mean ‘voortrekkers’. You said they spoke Afrikaans, but they actually spoke Dutch. You said they trekked to Limpopo – a name only invented in 2002. There was no such thing as Apartheid then... You simply get so many facts wrong that the lesson was actually counterproductive”* (UT LO 1). In this case, the university tutor failed this student teacher on the grounds of repeated instances of insufficient knowledge and understanding of content. Other university tutors suggest that the student teachers repeat a problematic lesson once they have corrected inaccuracies or clarified their own misunderstanding. In some cases, university tutors request that student teachers focus instead on teaching in learning areas in which they are more knowledgeable and observe supervising teachers’ lessons in other learning areas.

University tutors challenge student teachers who presume their general knowledge is sufficient. A university tutor, for example, explained to her student teacher why his lesson was superficial, saying, *“More discussion around bullying would have been instructive – the learners asked interesting questions and they needed to be responded to in more depth. I think it is important for learners to brainstorm, but they need to be taken further down the road in relation to their understanding – This is where your research plays a role”* (UT LO 3). Others demand that student teachers pay immediate attention to rectifying this. For example, a university tutor admonished a student teacher, saying, *“You are competent enough to keep learners quiet and busy, but I want more! I want to see well thought out, conceptually strong teaching. Don’t waffle on about common sense stuff”* (UT LO 4). Although these student teachers look superficially as though they are engaging

the learners, they are simply pooling existing learner knowledge without developing new content knowledge or conceptual understanding in their learners.

Table 6.2: Summary of Facet 1, Level 1: Memorised/generalised knowledge

LEVEL 1:	1: Memorised/generalised knowledge
Description	Lacks conceptual understanding of lesson topic; teaches vague content from ‘general knowledge’
Manifestation	Inaccuracies/errors in content, conveys own misunderstanding; can’t answer learner questions adequately; unable to identify problematic answers, or learner misconceptions
Coping strategies	Memorises and recites information Opts out, or avoids teaching Discourages learner questions or takes them nervously Reliance on supervising teacher/textbooks
University tutor guidance	Points out inaccuracies in content Suggests that student reteach lesson Greater supervising teacher support Reprimands and challenges student teachers

Level 2 of Knowledge and understanding of content: ‘Need-to-know’ knowledge

Description of level

At this level, the knowledge and understanding of student teachers about their lesson topic is generally limited to what the learners ‘need to know’. A university tutor described her student teacher’s knowledge as ‘adequate’ adding “*She could however, have researched certain topics in more detail - The educator needs to know more than simply the content she is teaching at the time*” (UT LO 4). At this level, student teachers are generally following the teacher’s notes or the textbook closely and have a mechanical understanding of the work to be covered during the lesson. The textbooks, worksheets or other teaching materials given to student teachers provide them with the wherewithal to teach their lesson. At this level, they do not venture past the teaching materials supplied to them. These resources provide them with guidelines regarding the purposes, outcomes, and scope of the lesson content.

Student teachers who know that their knowledge of a topic is mechanical may feel anxious about teaching it, especially to classes of learners who “*know more than*

we think they do”(S 3 RJ). A fourth year recorded in her reflective journal: “*My worst experience was when my background knowledge was poor. I thought I had researched the topic, but obviously not well enough. When learners asked me questions, I was very nervous and felt uncomfortable.*” (S 4 RJ). This level of knowledge and understanding of the content can undermine student teachers’ ability to deliver lessons confidently. A student teacher, for example, reflects, “*I enjoy teaching history because I have studied it at school and university. I am passionate about it and feel confident to teach it. I fear teaching geography (in the Social Science Learning Area) because I do not feel confident in my own knowledge of the subject*” (S 4 RJ). The confidence a student teacher has in his/her ability to deliver a lesson is somewhat dependent on their confidence in their own content knowledge and understanding.

Manifestation

When a student teacher’s grasp of the content is just adequate to cope with presenting an isolated lesson, the student teacher may make errors with proper terminology, or make mistakes in any task done, especially when a marking memo has not been prepared for a learner activity. Comments such as, “*Be careful with details – kids will judge you on inaccuracy*” (UT LO 2) occurred frequently across all years of study. A first-year student teacher describes how she had miscalculated a maths problem saying, “*I didn’t notice until I looked back at what I’d wrote. Fortunately the class didn’t see it and I corrected it*” (S 1 FGD). For this relieved student teacher, it was more important to save her credibility than to turn her error into an explicit learning opportunity for her class of learners. ‘Need-to-know’ knowledge and understanding of the content does not enable student teachers to recognise and rectify misunderstandings of learners. A university tutor commented, “*You need to research your topic properly: YOU do not understand [the topic of] ‘energy’ – because you accepted many incorrect answers and wrote the incorrect answers on the board. Learners gave you types of energy, and you accepted them as sources of energy!*”(UT LO 3). In this example, the student

teacher did not have enough understanding of the lesson topic to monitor learner responses, nor to realise that learners had misunderstood her question.

Student teachers at this level tend to begin from a theoretical point (like a definition) and then proceed to teach the concepts in a way that is unrelated to the learner's prior knowledge or life experiences. When the student teacher lacks deep insight into the topic and disciplinary base, lessons tend to be rather mechanical. A university tutor commented, "*The focus of your lesson was 'getting the right answer' rather than exploring the possibilities of understanding, and engaging with the concepts*" (UT LO 3). When they do not have deeper knowledge, student teachers sometimes miss exciting learning opportunities, planning rather superficial activities. A university tutor saw a missed opportunity for meaningful engagement in a lesson on the symbolism of South Africa's Coat of Arms. She advised the student teacher to "*rethink the way you taught the Coat of Arms,*" adding, "*This is such an amazing symbol and it would be intriguing to see what learners would come up with. Just reading from the textbook...Well?*" (UT LO 4). The university tutor is prompting the student teacher to reconsider how this lesson could have been taught in a more thoughtful way.

Although they may have enough information to cope with presenting an isolated lesson, student teachers possessing this level of content knowledge and understanding are not able to relate the topic meaningfully to wider fields of knowledge, for example current affairs or broader disciplinary links. In one such instance, a university tutor critiqued a poetry lesson in which the learners were writing Haiku poems. She urged the student teacher to "*please do additional background research. Haiku is a form of poetry that has its origins in Zen Buddhism – this is the reason for its simplicity and economy with words. This kind of background knowledge makes the topic of the lesson more interesting. You need to go beyond the textbook when preparing lessons*" (UT LO 1). In this example, the university tutor encourages the student teacher to link her lesson topic to a broader knowledge base, thereby giving the lesson more depth and relevance.

Coping strategies

Student teachers report that they rely heavily on school textbooks, existing worksheets or teacher's notes to prepare themselves for unfamiliar lesson topics. A student teacher coped with unfamiliar topics by "*asking experienced teachers how they teach particular topics*" (S 3 FGD). The nervousness experienced by student teachers who are unsure of their content knowledge is visible to learners. One student teacher comments, "*When you are not 100% sure of your content, the learners can sense it; and they give you obscure questions - almost to trip you up. I don't know how they know it; they just do*" (S 3 FGD). When student teachers have this need-to-know level of subject matter knowledge of their lesson content, they may not be in a position to answer learners' questions. More experienced students tend not to hide their ignorance but instead to embrace the question as an opportunity to explore. One student relates how he copes when learners pose a difficult question: "*I either say 'I don't know' or 'I'll get back to you'. I may ask learners to find out the answer, thus getting everyone involved*" (S 4 RJ). In this way, the student teacher shifts his role from 'provider of information' to co-investigator of content.

When student teachers give lessons in areas where they know their subject knowledge is lacking, they may be inflexible in deviating from the steps in their lesson preparation. A student teacher, for example, reflects, "*I thought my lesson was good if I followed my lesson plan step by step, and I made sure that everything I wrote down was completed*" (S 4 RJ). A lack of content knowledge and understanding makes it difficult for student teachers to distinguish incidental peripheral detail from the core learning, so pacing of lessons can be a problem as they labour each lesson step, not daring to deviate for fear of omitting what could be core content.

University tutor guidance

Many university tutors took time to explain why student teachers' sources of information were inadequate and some gave advice about where additional sources of information could be found, for example, *"The information in the textbook is insufficient. You have to supplement with topic books, the Internet, pictures, posters etc. It is very important for the teacher to have this in-depth knowledge. Not only does this make your lessons richer, but you feel confident knowing what you are talking about. And, of course, the lessons become informative and interesting"* (UT LO 4). This university tutor urges her student teacher to locate her lesson within a wider knowledge base, moving the lesson beyond textbook bound teaching

Table 6.3: Summary of Facet 1, Level 2: 'Need-to-know' knowledge

LEVEL 2:	2: 'Need-to-know' knowledge
Description	Student teachers know just what is needed for that lesson – mechanical understanding
Manifestation	Unable to link topic to other knowledge (current affairs, other learning areas, other topics etc) Can still make errors – especially with appropriate vocabulary Learning of mechanical routines/methods rather than conceptual understanding Unable to answer some questions Pacing – labour each point
Coping strategies	Rely heavily on information from textbook, teachers' worksheets/notes Rigid adherence to lesson plan steps Avoid taking learner questions
University tutor guidance	Encouragement to consult resources more widely and find authentic resources. Give suggestions about how to teach topic meaningfully

Level 3 of Knowledge and understanding of content: Investigated topic knowledge and understanding

Description of level

Student teachers at this level have spent considerable time reading up on their topic and are able to develop deeper understanding of the concepts before they teach their lesson. Students gave accounts of having been *"asked to teach a topic I knew nothing about and had to become an expert overnight"* and *"At first, I did not have much knowledge about some of the topics, but I made it my personal duty*

to find more information” (S 4 RTE). These student teachers “*spend hours researching a particular topic*”, aware how minor errors can undermine their credibility and result in learners losing confidence in their competence as a teacher. At this level, student teachers understand the concept enough to link it to broader knowledge, like current affairs or other topics across learning areas and its relevance to lives of learners. One tutor describes how “*by using cookery to contextualise your explanations [about capacity], you have tied the topic to real life*” (UT LO 4). Such links make the lesson pertinent to learners and more likely to capture their interest.

Although they may present accurate, researched information, student teachers at this level lack a developed conceptual framework and may not always be able to structure the topic in a way that facilitates learner comprehension. A university tutor, for example, observed a student teacher moving the discussion topic from ‘The Constitution’ to ‘what the government does for us’ and commented, “*It’s quite a difference. The class needed to understand the difference between national, provincial and local government. The linkages between the ideas and the activities in this lesson weren’t smooth*” (UT LO 4). This comment indicates that although her content knowledge is accurate, it was not structured in a way that facilitated conceptual understanding for learners.

Manifestation

A student teacher reflects how, with support from her supervising teacher, her investigated topic knowledge enabled her to “*create worksheets, devise learner activities and formulate lesson plans [and] answer the learners’ questions concerning information that had not been covered in the lesson*” (S 4 RTE). However, without a real understanding of the disciplinary goals underlying the subject, well-meaning student teachers may emphasise aspects of the topic in ways that may be ultimately counterproductive. For example, a university tutor gently suggested during a language lesson that while “*dictionary skills are useful*” the student should “*encourage learners to work with the meanings of the word in context - this builds up reading confidence*” (UT LO 2). The student teacher in

this example teaches mechanically rather than requiring learners to construct their own meaning.

Some student teachers operating at this level of content understanding are unable to focus and carefully select core information and resources that enhance, but don't overwhelm, the learners. A student teacher considers her greatest challenge to be "*having too much information on a subject [and not knowing] what I should teach. What should I leave out? What is vital?*" (S 4 RJ). A student teacher with this problem during TE was told to "*get a balance between enough detail (to promote understanding) and too much (so learners get bogged down)*" (UT LO 2). Without disciplinary insight and tools for the selection of relevant content, investigating topic knowledge can be a cumbersome and time-consuming process for student teachers.

Coping strategies

To prepare unfamiliar lesson topics within time constraints, some student teachers spend more time on becoming competent in the knowledge of unfamiliar subject areas than on preparing more informed lessons within their areas of subject specialisation. A fourth year student revealed that the "*learning areas I knew best suffered because the unfamiliar ones took most of my time [to research and prepare]*" (S 4 RTE). Another student, too, expresses how "*I researched each topic I was required to teach – however, I did more research for some topics than others, particularly in areas where my own knowledge was limited. I found the research beneficial as I gained enough knowledge to answer the learners' questions concerning information that had not been stated during the lesson*" (S 4 RTE). The process of thoroughly researching lesson topics, especially unfamiliar ones, is "*extremely time-consuming,*" which contributes to the difficulties experienced by student teachers (UT FGD). This concern is acknowledged by university tutors with comments like, "*The fact that she was teaching all learning areas meant that she found it difficult to cope with the workload*" (UT LO 4).

It is at this level of content understanding that guidance from the supervising teacher, regarding scope of the topic and purpose of the lesson, becomes paramount. A number of student teachers describe how they “*don’t find it helpful when [they are] given vague instructions on what to teach – just the topic for example*” (S 3 FGD). Supportive teachers help student teachers considerably when they explicitly discuss the scope of the lesson with them. As one student teacher explains, “*Knowing exactly what needs to be covered reduces the stress, especially when one does not have deep knowledge of a subject and time does not allow much research. I was comfortable with the learning areas that were part of my current studies. With those that were not so familiar, it was a matter of just researching them well and overcoming the initial stages of nerves*” (S 4 RTE). A coping strategy used by student teachers is then to seek clarity from the supervising teacher about the scope and expected outcomes of lessons they are asked to teach.

University tutor guidance

In general, university tutors were satisfied with student teachers who were functioning at this level of engagement with lesson content. Some tutors needed to intervene when the teaching load was too heavy for the student teacher, by reducing the number of learning areas for which the student teacher had to prepare.

Some university tutors showed student teachers how to place lesson concepts within a greater disciplinary structure of conceptual understanding. For example, with regard to a geography lesson, a university tutor commented to the student teacher, “*Your analysis of the graphs was good, but incomplete. You told them to remember that temperature is always a line graph, which is true, but why is that not the case for rainfall graphs? Why is this so? Learners need to know why we sometimes draw line graphs and sometimes draw bar graphs.*” (UT LO 3). In this example, the university tutor urged the student teacher to teach not just the facts, but the structure of the subject knowledge as well.

Table 6.4: Summary of Facet 1, Level 3: Investigated topic knowledge

LEVEL 3:	3: Investigated topic knowledge and understanding
Description	Student teachers research lesson topic thoroughly Able to internalise information and concepts
Manifestation	Able to make links to wider general knowledge: e.g. links with learners' lives Time consuming preparation Overwhelmed by information – difficulty in selecting key concepts
Coping strategies	Less time spent on researching lessons where they feel more confident Request supervising teachers' guidance in process of selection of key issues/concepts
University tutor guidance	Intervene if workload too high Link lesson topic to broader learning area/or disciplinary framework

Level 4 of Knowledge and understanding of content: Discipline-grounded topic knowledge and understanding

Description of level

Student teachers at this level have a thorough grasp of the lesson topic and how it relates to the broader discipline as a whole. The understanding is not isolated to an individual topic; it thus allows links between lessons and the wider sphere of knowledge, such as current affairs or other learning areas. In a Social Sciences lesson on the Acts associated with Apartheid, the university tutor comments, *“These Grade 5s love to ask questions – questions based on fact, and some rather outlandish myths. You dealt well with each question...Good explanations, and most importantly, a good display of content knowledge!”* (UT LO 2). The student gives insightful answers to learners' questions and is able to respond to their answers effectively and with confidence.

Insights into the disciplinary base of the topic enable the student teacher to assess learning materials critically or devise new ones. Students and university tutors reported alike that confidence in content understanding was linked closely with levels of enthusiasm during lessons. A university tutor argues, *“it is not possible to be enthusiastic about anything you don't know yourself. It is a contradiction”* (UT FGD). A number of student teachers (all in their final year of study) mention

having *passion for the subject* as a factor for effective teaching.⁸⁶ Their responses include comments such as, “*Having sound knowledge and showing learners your passion for the topic makes it interesting*”, (S 4 RJ) and, “*passion for your subject, and a love of the content you are teaching, is essential*” (S 4 RJ).

Manifestation

A student teacher noted that the ability to cope when the lesson deviates from the lesson plan is dependent on understanding of content, commenting, “*I understand that to teach effectively, your knowledge about the subject has to be outstanding, so that even if the lesson diverts from your plan, it is not a major problem, as long as learners are actively engaged in learning*” (S 4 RJ). This comment implies that deep subject matter knowledge allows student teachers to judge whether active and worthwhile learning is taking place in such a diversion.

A deep understanding of the topic, within the context of broad disciplinary insight, allows student teachers to capitalise on topics that fully exploit the available learning opportunities. In a natural science lesson, a university tutor commends her student teacher for converting a possible disruption into a learning opportunity, saying, “*The fact that the heater burst worked in your favour - they had a real life experience of evaporation, which you cleverly incorporated into your lesson*” (UT LO 4). The degree of understanding enables student teachers to exploit such ‘teachable moments’ to their full potential.

University tutor comments

At Level 4, university tutors are extremely impressed with the depth of subject knowledge of student teachers, making comments such as “*You know your subject and teach with confidence*” (UT LO 2) and “*Her broad and deep knowledge of the content of the learning areas add interest and stimulation to her lessons*” (UT LO 4). By the end of their second year of study, BEd student teachers have completed

⁸⁶ When similar questions were posed to a group of first and second year students, the issue of passion was not mentioned at all.

two years in their chosen academic major. It is therefore not surprising that the university tutor may already commend a second year student for displaying insight into a particular learning area.

Table 6.5: Summary of Facet 1, Level 4: Discipline-grounded topic knowledge and understanding

LEVEL 4:	4: Discipline-grounded topic knowledge and understanding
Description	Insights into learning area and topic – able to make links to other knowledge Able to cope with questions from learners
Manifestation	Able to identify key concepts and key issues Able to critically evaluate teaching resources and materials Able to make links to wider knowledge: links with learners' lives Give insightful answers to learner's questions Enthusiastic and passionate about subject
Coping strategies	Use preparation time efficiently
University tutor guidance	Commend understanding of content

Table 6.6: SUMMARY OF FACET 1: KNOWLEDGE & UNDERSTANDING OF CONTENT

LEVELS	1: Memorised/ generalised knowledge	2: ‘Need-to-know’ knowledge	3: Investigated topic knowledge	4: Discipline- grounded topic knowledge
Description	Lacks conceptual understanding of lesson topic; teaches vague content from ‘general knowledge’	Student teachers know just what is needed for that lesson – mechanical understanding.	Student teachers research lesson topic thoroughly Able to internalise information and concepts	Insights into learning area and topic – able to make links to other knowledge Able to cope with questions from learners
Manifestation	Inaccuracies/errors in content, conveys own misunderstanding; Can’t answer learner questions adequately Unable to identify problematic answers or learner misconceptions	Unable to link topic to other knowledge (current affairs, other learning areas, other topics etc) Can still make errors – especially with appropriate vocabulary Learning of mechanical routines/methods rather than conceptual understanding Unable to answer some questions Pacing – labour each point	Able to make links to wider general knowledge: e.g. links with learners’ lives Time consuming preparation Overwhelmed by information – difficulty in selecting key concepts	Able to identify key concepts and key issues Able to critically evaluate teaching resources and materials Able to make links to wider knowledge: links with learners’ lives Give insightful answers to learner’s questions Enthusiastic and passionate about subject
Coping strategies	Memorises and recites information Opts out Discourages learner questions or takes them nervously Reliance on supervising teacher/textbooks	Relies heavily on information from textbook, teachers’ worksheets/notes Rigid adherence to lesson plan steps Avoids taking learner questions	Less time spent on researching lessons where they feel more confident Request supervising teachers’ guidance in process of selection of key issues/concepts	Use preparation time efficiently
University tutor guidance	Point out inaccuracies in content Suggest that student reteach lesson Greater supervising teacher support Reprimand and challenge student teachers	Encouragement to consult resources more widely and find authentic resources. Give suggestions about how to teach topic meaningfully	Intervene if workload too high Link lesson topic to broader learning area/or disciplinary framework	Commend understanding of content

FACET 2: PREPARATION

Introduction

Shulman argues that subject matter knowledge alone is not sufficient for teaching. In addition to knowledge of content, teachers need to know how the content can be transformed into ways that will be comprehensible to others. In his Model of Pedagogical Reasoning and Action, Shulman (1987b) suggests that four processes take place during the procedure of *transforming* content prior to the lesson. These are: examining and critically interpreting texts or resources to be used during a lesson;⁸⁷ representing the ideas in explanations and in examples; selecting an appropriate teaching method; and making adaptations to the needs and interests of the learners (Shulman, 1987b, p 101). These processes culminate in a “plan, or set of strategies” that set the foundation for the presentation of a lesson (Shulman, 1987b, p. 104). In this study, the processes involved in designing a process of learning will constitute the facet of Preparation.

Lessons are a means by which teachers help learners to “organise their thinking, to practise skills and understand concepts better” (Hayes, 2003, p.148). When preparing a lesson, student teachers, therefore, need to consider “(i) what the children already know and understand, (ii) what the children need to know and understand and (iii) the best way to help them move from (i) to (ii)” (Hayes, 2003, p.148). Lesson preparation addresses this process, and can be described as “deciding when, where, why and how a certain lesson is taught” (Shalaway, 1997, p. 33).

⁸⁷ Whereas Shulman uses the term ‘preparation’ to refer specifically to the scrutiny of teaching material in light of the teacher’s comprehension, in order to determine its suitability, in this study the term ‘preparation’ will be used more broadly, to refer to the planning stages that a student teacher embarks on before teaching a lesson.

Formulating a purpose

A major aspect of preparation is formulating a purpose for the lesson. Shulman writes of how teachers need to “scrutinise educational purposes or goals” of the lesson or unit of lessons (1987b, p. 103). Darling-Hammond et al. (2005) argue that without clear goals and a sense of purpose, a teacher is “likely to have difficulty making sensible, consistent decisions about what to teach, when, and how” (p. 171-172). Student teachers should be able to “articulate the purpose of each lesson” and “defend their selection of purposes” in terms of their overall educational goals (Zumwalt, 1989, p. 177). Darling-Hammond et al. (2005) assert that student teachers “need to be clear about what they are trying to accomplish in specific subject matter domains” (p. 193). To engage meaningfully in the practices of a learning area, learners “need to know things and how to do things... [which] includes knowledge of the facts, procedures and concepts; fluency with strategies; skills at monitoring and self-regulation; and dispositions and beliefs consistent with productive engagement with the discipline” (Grossman et al., 2005, p. 210). In planning learner activities, Hayes (2003) emphasises that “it is important [for the student teacher] not only to provide activities, but to consider what relevance they have in respect of identified learning goals” (p. 148) and “lesson intention needs to guide the activities so they are contributing to the purpose of the lesson” (p. 157).

Beginning the preparation process

1. Using a text as a starting point

Shulman (1987b) suggests that “most teaching is initiated by some form of a ‘text’: a textbook, a syllabus, or an actual piece of material that the teacher or [learner] wishes to have understood” (p. 100). He argues that such a text acts as “a vehicle for the accomplishment of other educational purposes” which then set into motion a cycle of comprehension, planning, instruction, evaluation and reflecting (Shulman, 1987b, p. 100).

2. Using outcomes as a starting point

Wiggins and McTighe (1998) propose a model for planning where teachers “start at the end – the desired results (goals or standards) – and then derive the curriculum from the evidence of learning performances called for by the standard and the teaching needed to equip students to perform” (p. 8). In planning by ‘backward design,’ teachers would first identify the results they desire. Second, they would determine what acceptable evidence of that outcome would constitute, and third, plan instruction and learning experiences to reach that goal.

3. Using a learner activity as a starting point

Calderhead and Shorrock (1997) found Inter/Sen student teachers often choose a teaching strategy first, and build their lesson around the management of various learning activities, rather than engaging in a deep pedagogical consideration of the purposes of the lesson. They argue that Inter/Sen teachers who are “faced with the teaching of several subject areas, and faced with severe time and resource constraints, may have great difficulty in doing anything other than thinking at the level of managing activities” (p. 164).

Developing a coherent learning experience

Darling-Hammond maintains that “the capacity to plan instruction so that it meets the needs of students and the demands of content, so that it is purposeful and ‘adds up’ to important, well-developed abilities for students, is not something that most people know how to do intuitively or that they learn from unguided classroom experience” (Darling-Hammond et al., 2005, p. 176). While preparing a lesson, student teachers need to consider the purpose of the lesson and the key knowledge, and select appropriate teaching strategies, teaching support materials and assessment tasks. Lesson preparation culminates in the writing of a lesson plan that “sets out how to get from start to finish, in such a way that the learning outcomes for the children are achieved” (Hayes, 2003, p. 147).

Although university tutors only observe isolated lessons, researchers have stressed the importance of the broader educational purposes that enable units of lessons to be purposefully constructed. Darling-Hammond et al. (2005) assert, for example, “Given that teachers are responsible for enabling students to achieve some overarching instructional goals, beginning teachers should have knowledge of a planning process that enables them to plan curriculum beyond the individual lesson” (Darling-Hammond et al., 2005, p. 184).

In this section, lesson preparation will consider the formulating of outcomes, selecting and adapting of resources and teaching materials; and the sequencing of the lesson into steps that organise a systematic learning process. The record of lesson plans has a pragmatic use in providing university tutors with evidence of the quantity and nature of lessons being taught when they are not observing.

Trends from the data

Four (out of the 11) themes that emerge from the analysis of the lesson observation reports written by university tutors are particularly relevant to the facet of ‘preparation’. The data from these four themes have been extracted from Table 4.4 (p. 139) to generate Table 6.7 below:

Table 6.7: The percentages of student teachers whose university tutors expressed concerns related to lesson preparation for the different years of study

Year of Study	Formulating outcomes	Planning lesson steps	Teaching resources	Linking lesson to learner’s lives
1 st Year LO Reports	30%	16%	22%	19%
2 nd Year LO Reports	29%	10%	9%	19%
3 rd Year LO Reports	17%	15%	21%	18%
4 th Year LO Reports	24%	7%	16%	11%

Although the vast majority of student teachers in this study quickly learned how to plan ‘lesson steps,’ the selection of purposeful goals, formulation of meaningful outcomes, and alignment of the lesson with their intended purpose, provided considerably more challenge. By their fourth year of study, 24% of student teachers were still experiencing difficulties related to formulating outcomes for

their lessons, compared with just 7% who still needed to pay attention to formulating and sequencing coherent lesson steps. This may be attributed to fourth year student teachers formulating outcomes for units of lessons, not just isolated lessons. Formulating coherence over several lessons is more challenging than planning a coherent stand-alone lesson.

It will be shown that many university tutors in this study emphasise the centrality of outcomes to determine purpose for lessons.

The levels, as defined in this facet, show development in terms of student teachers' ability to consider purpose and coherence within the planned learning experiences. The data show that by fourth year, fewer student teachers needed university tutor assistance in formulating their outcomes and in planning their lesson steps. The levels of teaching practice that emerged within the facet of lesson preparation are:

Level 1 of Preparation: Focuses on formatting of lesson plan

Level 2 of Preparation: Devises disjointed lesson steps

Level 3 of Preparation: Plans for coherent lessons

Level 4 of Preparation: Purposefully plans for learners' needs

Through the levels, the student teachers move from dependence on the supervising teacher for preparation (at Levels 1 and 2), to independence in finding their own purpose, content, activities and resources (at Levels 3 and 4). During their studies, student teachers draw increasingly on their growing insights into what constitutes meaningful engagement within specific learning areas, and learn to prepare appropriate learning experiences accordingly.

Each of these levels will now be explored.

Level 1 of Preparation: Focuses on formatting of lesson plan

At this level, student teachers perceive adequate preparation as ‘correctly’ formatting their lesson plans, in line with university requirements. At first, many student teachers fixate on how to write up their lesson steps neatly and in an acceptable format. Student teachers explain that the challenge of learning to ‘write lesson plans’ is uppermost in their minds: *“In first year it was just a month or so before we went to Teaching Experience. We were not sure about lesson plans, we did not know how to do anything”* (S4 FGD) and *“My first Teaching Experience was horrible because we didn’t know what a lesson plan looked like; we did not know how to format a lesson plan”* (S 4 FGD). Such student teachers take time to find a lesson plan format with which they feel comfortable.

In contrast, more experienced student teachers sometimes become overconfident in their own ability to teach *ad lib*, believing that lesson preparation is no longer necessary. Some third and fourth year student teachers were admonished for their lack of focus on formatting a lesson plan – despite having produced quite acceptable lesson plans in preceding years. Some student teachers go through a phase where they regard their lesson plans as burdensome, irrelevant ‘paperwork’, and feel confident enough in their own ability to teach to dispense with writing up lesson plans. In other cases, they strategically write up lesson plans for observed lessons to comply with university tutor requirements. The perception of preparation as ‘paperwork’ does not consider the thinking and thought processes that go into the conceptualisation of a learning experience. Even if such students are capable of writing lesson plans, they do not purposefully consider how best to construct their lesson so that knowledge is coherently presented for learning.

Manifestation

Beginner student teachers at this stage tend to use their lesson plan as a contract from which they dare not deviate, or omit any of the planned ‘steps’. For example, *“In first year, I followed my lesson plan exactly as I had set it out”* (S 4 RJ). Student teachers who are driven by what is in their lesson plan tend to think that

when they have completed their lesson steps, the lesson is over, leading university tutors to make comments such as *“Don’t inform me that your lesson is finished! You could have given other learners a chance to read!”* (UT LO 1). This tendency leads to an inflexible execution of their lesson, which does not consider the learners’ behaviour or understanding.⁸⁸

Preparation in which the process of learning is not thoroughly considered affects student teachers’ ability to conduct their lesson smoothly. A student teacher who believed that he was able to teach without attention to preparation *“discovered that preparation, not clearly thought out, leads to disastrous, inconclusive lessons. These problems have now led to more methodological and systematic (and successful) lesson planning”* (UT LO 3). This example illustrates a case where lesson planning was not perceived to be a complex task of transforming content to make knowledge accessible for learners.

Coping strategies

Student teachers who have not yet learnt to plan lessons rely heavily on their supervising teacher to provide, or at best help them to devise, teaching resource materials like worksheets and learner activities. At this level, some student teachers do not actually ‘conceptualise’ their own lesson independently, but regard preparation as merely writing up the lesson steps for a lesson that their supervising teacher has devised. Not having a clear conceptual understanding of what they are doing and why, student teachers at this level tend to stick rigidly to their lesson plan, not wanting to miss one of the lesson steps required by their teacher.

A number of student teachers cope with their fear of deviating from the lesson plan by constantly referring to their lesson plan throughout their lesson, prompting comments like, *“Try not to rely so heavily on your notes – you should have a*

⁸⁸ This level of lesson planning links with Level 1 of Monitoring learning, where the student teacher is primarily focused on delivering their plan, without checking for evidence of learning. See pp. 266 - 269.

clear idea of the direction of your lesson” (UT LO 2). In this example, the student teacher seems to equate teaching with delivery of what’s contained in her lesson plan.

University tutor guidance

University tutors spend time helping first year student teachers to structure their lesson plans. Comments like, *“Your lesson plans are not yet adequate – let’s discuss this”* appear in lesson observation reports of numerous student teachers.

Some student teachers who do not prepare their lessons report that they get away with *“faking it”* for a while, as some university tutors do not check their file for consistency between lesson plans. However, other university tutors tend to be unsympathetic and firm with capable and experienced student teachers who do not prepare adequately. A university tutor firmly asserts expectations with a fourth year student teacher in writing: *“This TE will be evaluated on 10 consecutive days of full-time teaching. You need to get your act together rapidly, because at the end of one week, I see 3 lesson plans in your file. I’m going – and you can start again on Monday with everything carefully planned and set out!”* (UT LO 4). In her comment, she both admonished the student for a lack of evidence of thoroughly thought through preparation, but nonetheless gave him a chance to make a fresh start.

Table 6.8: Summary of Facet 2, Level 1: Focuses on formatting of lesson plan

LEVEL 1:	Focuses on formatting of lesson plan
Description	(i) Attention on getting format “right” OR (ii) Preparation perceived as writing out of plans - unnecessary paperwork: Strategic compliance: may only write detailed plans for observed lessons
Manifestation	Follow lesson steps without deviation – inflexible execution
Coping strategies	Rely on supervising teacher for lesson ideas, resources and structure Refer to notes through lesson Critique perceived to be directed at supervising teacher
University tutor guidance	(i) Generally supportive and helpful to first year students (ii) Strategic compliance regarding preparation from capable, more experienced student teachers is rejected - dealt with firmly

Level 2 of Preparation: Devises disjointed lesson steps

Description of level

At this level, student teachers have learnt to write up lesson plans within a workable format. They measure adequate preparation in terms of their documentation, rather than the purpose and quality of the learning experience they prepare for learners. A student teacher reveals the importance that such student teachers place on the format of their lesson plan, saying, *“in first year, I felt confident about going into a lesson if my preparation had all the steps and was neatly typed”* (S 4 RJ). At this stage, student teachers *“consider a good lesson to be when [their] lesson plan was correct and neat, and [they have] a pretty worksheet”* (S 4 RJ). Although the format is now appropriate, lesson steps are not necessarily logical, thoughtfully scaffolded or linked to one another. Lessons therefore can be incoherent, although they may be neatly written up in an acceptable format. A university tutor responds to such a lesson saying, *“Although the intentions are good, I’m not really sure what the link is between the introduction, the miming activity and the story...Your lesson plans lack structure and insight. You appear to have difficulty in developing a lesson plan from its introduction to the conclusion”* (UT LO 3). The university tutor seems happy enough with each part of the lesson in isolation, but concerned that they do not work together as a coherent learning experience.

Lessons without a clear focus also tend to lack cohesion. University tutors attribute nebulous lessons to the absence of clearly formulated outcomes, as can be seen from a plethora of comments such as, *“What, at the end of the lesson, do you want to teach the children?”* (UT LO 1) and *“Your outcomes need to be more specific. What is the information about? Why are you teaching this content?”* (UT LO 2). University tutors acknowledge that many student teachers *“struggle quite a lot”* with formulating their lesson outcomes (UT FGD). Even in their fourth year, 24 (out of 66) student teachers still needed assistance in how to formulate intended outcomes for their lessons. Of 48 university tutors who observed lessons in this study, 32 worked on formulating outcomes with student teachers as a means of conceptualising a lesson with direction, purpose and focus. Until student

teachers are able to determine their outcomes and focus for a lesson, longer term planning is not possible. At this level, student teachers generally plan each lesson in isolation, without consideration to overall purpose and links from one lesson to the next.

Manifestation

Student teachers at this level do not consider the needs of their learners – focusing rather on an unrelated series of activities or things to do in the class. Unconsolidated planning manifests as a mismatch between the outcomes and the activity of the lesson, or the input and the learner activity. Without focus, student teachers tend to jump from one lesson step to another unrelated one. Such lack of consistency is indicated in remarks like, *“Your input and your activity did not match. Your input needs to help learners to do the activity. The activity had nothing to do with the topic of your lesson”* (UT LO 3). In some cases, the student teachers use teaching resources of which not all are relevant or used to optimise learning, as reflected in comments like, *“Good worksheet – although not much about what you did with the learners.”* When there is a mismatch between the input and the learner activity, learners struggle to understand the progression of the lesson and what is expected of them. One university tutor observed, *“As you will have noticed, learners’ questions indicated that they hadn’t quite got the link between your introduction and the worksheet”* (UT LO 3). In cases like this, learners may not be adequately primed for their task, with subsequent confusion.

When student teachers at this level select teaching resource material, they do not adapt it to the needs or context of their class of learners. For example, a university tutor insists that his student teacher *“be careful about using worksheets like this indiscriminately – this is clearly taken from a British source – we do not use the word ‘pitcher’ for ‘jug,’ and the advert uses ‘25p!’”* (UT LO 3). The student teacher used teaching resources without modification, regardless of the context of the learners. Similar problems are seen when student teachers use existing materials in which the language level is inappropriate for the learners. In one such lesson, for example, the university tutor notes how a student teacher *“used*

information that was written in a difficult way and there was too much information” (UT LO 4). At this level, student teachers use existing teaching resource material or texts without considering whether or not it needs to be adapted to the specific context and needs of their class of learners.

Without a clear purpose for the lesson, and for the activities they want learners to complete, instructions to the learners during the delivery of the lesson tend to be vaguely defined. This can lead to learner confusion. One manifestation of such a problem can be seen in the following comment, *“Your instructions were not clear. Explain what task each group is assigned to do. This was not done effectively as learners struggled to find meaning”* (UT LO 2). The student teacher did not think through the instructions that would be necessary for learners to complete a learning activity.

Coping strategies

Formulating outcomes are seen initially as simply a formality, rather than a means of ensuring that the lesson has purpose and focus. Student teachers may cope by devising outcomes that are actually meaningless, prompting a university tutor, for example, to question, *“What does ‘Think critically about cars’ actually mean?”* (UT LO 2). The stated outcomes tend to be vague, and do not provide the student teacher with a focus or direction for the lesson.

Some of these student teachers put effort into ‘window dressing’ their lessons in order to make their lesson look more impressive. One student teacher, who put much effort into making attractive teaching resources, reflects how she used to regard teaching resource materials as *“pretty decorations to brighten up the classroom”* (S 4 RJ). The effort in preparation goes into making the lesson look good on paper, and in terms of attractive resources, rather than into considered design of a coherent learning process.

Tension can arise when university tutors observe and critique lessons or resources that the supervising teacher has provided. Many university tutors who sense that

the worksheet, for example, has not been entirely devised by the student teacher, ask, “*Is this worksheet yours?*” and go on to make comments. The student teachers can perceive critique as a conflict between the university tutor and supervising teacher, and feel confused about differences in expectations. A student teacher comments, for example, “*There was a disagreement over the suitability of the worksheet I had prepared – which the teacher herself had actually helped me with*” (S3 FGD). These student teachers cope by ignoring the university tutors’ comments regarding resources they have not constructed, as they do not perceive the comments as being directed at them. Such student teachers do not take responsibility for the teaching resource material they use, especially when the supervising teacher instructs them to use it.

University tutor guidance

When a university tutor noticed that no new learning was taking place, she alerted her student teacher to consideration of the needs and prior knowledge of learners during the planning stages. She suggested, “*When planning the introductions to lessons, consider the importance of building from the known to the unknown. Teaching what the learners already know is not productive*” (UT LO 4). In this way, the university tutor urged the student teacher to consider more explicitly the nature of the learners and what they already know during the preparation process.

University tutors consistently concentrated on helping student teachers whose lessons lacked focus to *formulate clear outcomes*, as the first step in giving purpose to a lesson from which structure could follow. This type of guidance is similar to the “backward design” planning strategies proposed by Wiggins and McTighe (1998). This approach is expressed in a university tutor’s comment to a third year student: “*Purpose leads to content leads to activities leads to [classroom] organisation. It is imperative that you get this right!*” (UT LO 3). Other tutors encouraged their student teachers to “*keep your outcomes realistic and clearly stated. You will find the focus of your lesson will become more apparent*” (UT LO 2). Once the outcomes are in place, university tutors regard lesson plans as a means through which student teachers can organise their

thinking processes and their lesson's structure. A university tutor explains her strategy for helping student teachers to find purpose for their lessons, saying, *"I find myself writing outcomes for them. I help them to define and think through what they are trying to achieve. If I can start the thought process the rest usually follows. One of the ways that I address a lesson that has gone quite poorly is to start off by saying 'What were you aiming at?' They have to identify the outcome, what their purpose was. Then we work backwards to get the structure right"* (UT FGD).⁸⁹ At this level, student teachers experience difficulty in formulating relevant outcomes, or translating outcomes into a series of coherent lesson steps.

Table 6.9: Summary of Facet 2, Level 2: Devises disjointed lesson steps

LEVEL 2:	Devises disjointed lesson steps
Description	Lesson plans neatly and thoroughly done, but inconsistencies in lesson structure: Lack of cohesion between outcomes, instruction, activity, assessment and resources
Manifestation	Meaningless, vague outcomes Lack of cohesion between input, activity, assessment and resources Tend to use existing materials (textbook, worksheets) without adapting them for learners; do not attend to problematic aspects, e.g. inappropriate language level or quantity of information
Coping strategies	Use attractive teaching aids to compensate for depth Stick closely to planned lesson steps Write outcomes that sound good, but are actually meaningless
University tutor guidance	Help student teachers clarify their purpose, by helping them formulate outcomes; Consider needs and prior knowledge of learners when planning Effective use of teaching resources

Level 3 of Preparation: Plans for coherent lessons

Description of level

At this level, student teachers write detailed lesson plans, and lessons are coherent, as the teaching sets a foundation for a follow-up learning activity. However, although the lesson itself is coherent, it is planned in isolation from the disciplinary structures of the learning area, and from subsequent lessons within the unit. In response to a student teacher whose lessons were coherent but divorced from a larger unit and the learning area itself, a university tutor responded that he *"needs to work more at unit level planning, to show the overall*

⁸⁹ This is reminiscent of Wiggins and McTighe's 'backward design' strategy.

intentions for the whole period of teaching – the development of relevant skills in each learning area. What activities, assessment and resources will be used? The point is to show the relationship between individual lessons and longer-term outcomes” (UT LO 4). Although the outcomes are clearly articulated and achievable, student teachers do not always think through what it means to plan a worthwhile learning experience according to the goals of the learning area. A university tutor, for example, asks a student teacher to consider how to position the lesson in line with broad curriculum goals by asking, *“Every (geography) lesson ought to have a geography enquiry element. Instead of copying, what else could the learners be doing?”* (UT LO 4). In these examples, university tutors urge student teachers carefully to consider the educational goals of the learning area being taught and to consider whether the content, skills and attitudes are addressing these learning goals.

Manifestation

A student teacher at this level may be able to plan a coherent isolated lesson, but is not yet able to locate the lesson in a deeper disciplinary understanding – either by aligning the purpose of the lesson with the goals of the learning area, or being able to locate the lesson as one part of a larger unit of lessons. Noticing a misalignment with a lesson and the learning area, a university tutor commented *“This lesson was more a Life Orientation lesson than an English lesson”* (UT LO 2). At this level, student teachers are still planning isolated lessons, with supervising teachers giving student teachers day-by-day instruction as to what lesson to prepare next. A university tutor noticed this, and commented, *“Looking at your file, I don’t find it very easy to see how things connect with each other and create solid units of work”* (UT LO 4). An absence of longer-term planning may, therefore, manifest as an incoherent collection of (individually focused and coherent) lesson plans.

Coping strategies

Since unit planning is only an explicit requirement at fourth year level, some of those who found it difficult simply avoided it. Student teachers often find the process of formulating a vision for a series of lessons rather difficult. A student teacher, for example, explains, *“It was difficult to do unit plans as I found it easier to plan things on a daily basis”* (S 4 RTE). Others, however, opted out of the forward planning exercise and did unit plans in retrospect. A university tutor recalls how it took one student teacher *“the whole period of TE for his unit plans to be completed!”* (UT FGD).

University tutor guidance

Lessons that are purposeful and well prepared are generally well received by university tutors. However, this is not enough. University tutors expect student teachers to develop a vision for the way in which isolated lessons can be scaffolded and structured to make a coherent series of lessons. A university tutor explained, *“One area that needs careful attention is the unit planning expected of a fourth year. He needs to be given full responsibility for his teaching for his two weeks – not a day-by-day instruction as to what the teacher wants done. And for this, there must be longer-term planning. Learning needs to be consolidated and that happens in part when there is a clear development of teaching in the planning stage”* (UT LO 4). At this level, the student teacher is able to prepare coherent lessons in isolation, but not a series of lessons together. This university tutor attempts to explicitly detail the expectations she has of his preparation.

Some university tutors recognise the effort of student teachers in making teaching resource material, but take issue with how the student teacher is using them, as in the following comment, *“Your support materials are very good, but I want to see you using them more effectively”* (UT LO 3).

At this level, university tutors express satisfaction with the student teachers’ ability to plan a lesson, but urge them to consider a greater degree of purpose, depth and coherence across a unit of lessons. For example, a university tutor

pointed out, *“Looking at lesson plans, there are some detailed and worthwhile lessons, but generally I would say that she needs to work at achieving greater depth in her teaching”* (UT LO 4).

Some university tutors help their student teachers think more explicitly about linking their lessons to the outcomes as indicated by the National Curriculum Statement (NCS). Tutors sometimes address these requirements at the level of lesson format, as in the observation, *“Your lesson plans themselves are still not quite in line with the NCS – where are your assessment standards, for instance?”* (UT LO 3) and *“You need to be interpreting the knowledge statements along with the Learning Outcomes and the Assessment Standards to build knowledge, skills and attitudes”* (UT LO 4). This indicates a perception that working closely with the outcomes and assessment standards, as expressed in the curriculum, will help student teachers to focus their planning, and will provide them with a bigger picture of the goals of the learning area. In some cases, the university tutor suggests that student teachers consider specific outcomes or assessment standards from the NCS, for example, *“Instead of merely copying down notes, what aspect of Learning Outcome 3 (Social Justice) could you be tackling?”*(UT LO 4). In providing a prompt, she expects the student teacher to investigate the relevant assessment standards.

Table 6.10: Summary of Facet 2, Level 3: Plans for coherent lessons

LEVEL 3:	Plans for coherent lessons
Description	Carefully select or formulate outcomes, but not directly linked to goals of learning area Use of relevant resources; coherent lesson steps in isolated lesson Does not locate lesson within larger unit of lessons
Manifestation	Worthwhile isolated learning experiences, but lack longer-term planning, and can lack continuity between lessons Lessons, although coherent, may not align with goals of learning area
Coping strategies	Opting out of completing unit plans, or completing them retrospectively Asking supervising teachers for lesson topics, one at a time
University tutor guidance	Help in developing longer-term planning; links to NCS Assist student teachers in recognising goals of learning area

Level 4: Purposefully plans for learners' needs

Description of level

At this level, lesson plans align closely with clearly defined outcomes. This results in purposeful and coherent lesson plans, where learning experiences promote learners' understanding of the learning area. A university tutor affirms a student teacher at this level with the remark, *"Looking through your file, it is a treat to see the clarity of your intentions in each of your lessons – your outcomes are succinctly and sharply focused"* (UT LO 4). When students plan at this level, they select strategies, skills, values and key questions that link with their outcomes, and with learner interests and abilities. A university tutor, for example, commented, *"Knowledge of learning areas was very good, and was complemented by thoughtful reading and sound consideration of resources and methodological possibilities"* (UT LO 4). This comment and others like it indicate that student teachers not only have a thorough understanding of the lesson topic, but also an understanding of which teaching strategies and learning activities would be appropriate to the content knowledge being taught.

In such lessons, student teachers adapt resources to suit their own teaching styles, and also the needs of learners. A university tutor observed, *"I enjoyed seeing how many existing worksheets have been reworked by you, giving your own flavour to the lesson"*. Student teachers at this level consider the needs and characteristics of the learners in their class. A university tutor reflected, for example, that a student teacher *"was very conscious of the different levels of ability of her learners in different classes, and attempted to adjust her style, pace and approach to meet their needs"* (UT LO 4). At this level, student teachers consciously use their knowledge of their learners to adapt their teaching accordingly.

Student teachers use carefully considered teaching resources that are central to the learning process. Illustrating the relevance of one student teacher's wall display, a university tutor commented, *"You explained the concept of the brochure very well – it always helps to have a real example, and it was a wonderful moment when you could take one off your lovely classroom display"* (UT LO 4). Teaching

resource materials are no longer ‘pretty decorations’ but enrich the learning process considerably.

Lessons therefore form a series that work together to achieve long-term goals. Longer term planning is evident when a university tutor commends his student teacher’s *“well-structured lesson that continues nicely from the preceding one. This lesson allows learners to apply information gained from the previous lesson in a concrete way”* (UT LO 4). At this level, lessons show coherence, both individually and as a unit.

Manifestation

Student teachers rely on their insights into the overarching goals and aims of the learning area to formulate broad purposes. In every learning area they teach, their unit plan develops the topic in a way that links lessons and develops appropriate knowledge, skills and attitudes/values in a coherent manner. A university tutor comments on how purposeful unit planning links with an insight into subject matter knowledge, saying to a student teacher, *“It’s good to watch you teaching a learning area about which you are knowledgeable. The unit is clearly set out, the content is thorough and informed, and the attitudes you are addressing are worthwhile”* (UT LO 4). In this example, the student teacher draws on her content knowledge to address goals of that learning area and provides worthwhile learning opportunities for learners, in a way that enacts PCK.

Meaningful unit planning extends a student teacher’s ability to plan isolated lessons with purpose. By the time student teachers graduate, they are expected to plan lessons in which they integrate themes meaningfully across learning areas, where possible. Such integration is evident in comments like, *“What was especially good to see is how you’ve been considering your theme of ‘Natural Disasters’ across the curriculum”* (UT LO 4). A supervising teacher describes integration saying, *“She integrated her learning areas with smooth precision, from English to Economic Sciences, to introducing new ideas or themes using knowledge taught in other learning areas. This was particularly evident when*

doing a bar graph reading exercise in English: it was taught using the information taught in geography earlier, where a pie graph was used. Every learner remembered what she had taught them, and eased into the English survey with little difficulty” (ST 4). At this level, student teachers pay attention to the prior knowledge and experiences of learners, and assist learners in connecting their prior knowledge with the lesson topic.

University tutor comments

University tutors commend student teachers at this level for their degree of insight into the purpose of their lessons, as well for the extent to which they mould the lesson to the needs of learners. A university tutor, for example, commended her student teacher for being *“able to adapt her preparation to the level of her learners, which was no mean feat, given the differences of ability in the class”* (UT LO 4).

Table 6. 11: Summary of Facet 2, Level 4: Purposefully plans for learners’ needs

LEVEL 4:	Purposefully plans for learners’ needs
Description	Incremental development of knowledge, skills and attitudes/values through unit of lessons Align unit with curriculum requirements
Manifestation	Well-considered unit plans; integration over learning areas
Coping strategies	Rely on good understanding of curriculum goals of learning area, and insight into subject matter knowledge
University tutor guidance	Purposeful planning in line with learning area goals highly commended Adjustments of lesson to meet needs of learners highly commended

Table 6.12: SUMMARY TABLE OF FACET 2: PREPARATION

LEVEL:	1: Focuses on formatting of lesson plan	2: Devises disjointed lesson steps	3: Plans for coherent lessons	4: Purposefully plans for learners' needs
Description	(i) Attention on getting format "right" OR (ii) Preparation perceived as writing out of plans - unnecessary paperwork: Strategic compliance: may only write detailed plans for observed lessons	Lesson plans neatly and thoroughly done, but inconsistencies in lesson structure: Lack of cohesion between outcomes, instruction, activity, assessment and resources	Carefully select or formulate outcomes, but not directly linked to goals of learning area Use of relevant resources; coherent lesson steps in isolated lesson Does not locate lesson within larger unit of lessons	Incremental development of knowledge, skills and attitudes/values through unit of lessons Aligns unit with curriculum requirements.
Manifestation	Follow lesson steps without deviation – inflexible execution	Meaningless, vague outcomes Lack of cohesion between input, activity, assessment and resources Tend to use existing materials (textbook, worksheets) without adapting them for learners; do not attend to problematic aspects, e.g. inappropriate language level or quantity of information.	Worthwhile isolated learning experiences, but lack longer-term planning, and can lack continuity between lessons Lessons, although coherent, may not align with goals of learning area	Well-considered unit plans Integration over learning areas.
Coping strategies	Rely on supervising teacher for lesson ideas, resources and structure; Refer to notes through lesson Critique perceived to be directed at supervising teacher;	Use attractive teaching aids to compensate for depth Stick closely to planned lesson steps. Write outcomes that sound good, but are actually meaningless	Opting out of completing unit plans, or completing them retrospectively Asking supervising teachers for lesson topics, one at a time	Relies on good understanding of curriculum goals of learning area, and insight into subject matter knowledge
University tutor guidance	(i) Generally supportive and helpful to first year students (ii) Strategic compliance regarding preparation from capable, more experienced student teachers is rejected - dealt with firmly	Help student teachers clarify their purpose, by helping them formulate outcomes; Consider needs and prior knowledge of learners when planning Effective use of teaching resources	Help in developing longer-term planning; Links to NCS Assist student teachers in recognising goals of learning area	Purposeful planning, in line with learning area goals highly commended Adjustments of lesson to meet needs of learners highly commended

FACET 3: TEACHING STRATEGIES

Introduction

In his Model of Pedagogical Reasoning and Action, Shulman (1987b) suggests that teacher actions involving *instruction* of learners are the most visible of the teaching processes. This facet will encompass the aspects of instruction that relate to “presenting clear explanations and vivid descriptions; assigning and checking work; and interacting effectively with [learners] through questions and probes, answers and reactions, and praise and criticism” (Shulman, 1987b, p. 104).

For the purpose of this study, the term ‘teaching strategy’ will refer to the way in which a student teacher delivers the content of a lesson and to the nature and execution of learner activities during the course of a lesson. The particular teaching strategies selected are influenced by the student teacher’s “intentions for and vision of student learning” (Darling-Hammond et al., 2005, p. 183). The overall goals for instruction “should be related to the assignments and assessments [student teachers] devise, the activities they plan, the materials they select, the feedback they give and the ways in which they interact” with their learners (Darling-Hammond et al., 2005, p. 183). The thoughtful and considered selection of a teaching strategy reflects the means through which student teachers expect to achieve their learning purposes. Whether learning is actually enabled, however, depends to some extent on how the student teachers enact and deliver their plan.

In a coherent and purposeful lesson, the teaching strategies selected are closely linked to the lesson’s chosen outcomes. Grossman et al. (1989) found that “teachers’ subject matter knowledge affected the content and processes of instruction, influencing both what teachers teach and how they teach it” (p. 26). Grossman et al. (2005) insist that “to teach the subject matter effectively, teachers need a pedagogical repertoire for the particular content they teach” (p. 224). They argue that, “examples, analogies and representations that are particular to subject matter” can “help prospective teachers understand how to build bridges between their own understanding of the content and the students’ understanding” (Grossman et al., 2005, p. 225). Each subject area may, therefore, have

“distinctive approaches for teaching the subject matter, and teachers in these subjects will want to explore how to design and orchestrate such classroom practices” (Grossman et al., 2005, p. 224). This implies that student teachers’ understanding of the content, and the learning area as a whole, will influence their use of teaching strategies and learner activities.

Value of learner activities

Learner activities during the lesson are critical, as learners “are not likely to develop certain kinds of understandings unless they have the opportunity to practice them” (Grossman et al., 2005, p. 226). However, Hayes (2003) cautions that, “merely providing children with tasks to occupy the space of a lesson does not, in itself, ensure thorough learning. [Teachers] have a crucial role to play in helping children apply their knowledge and skills to a variety of situations and challenges” (p. 123). Shepard et al. (2005) stress that “classroom instruction should engage [learners] in learning activities that are, to the greatest extent possible, instantiations of the real goals for learning” within that subject area (p. 280). The teaching support materials, too, need to align with the lesson’s purpose. Worksheets, for example, are “only as useful as [their] appropriateness to the needs of children and learning outcomes... [and] not intended as a means of keeping children quiet” (Hayes, 2003, p. 195). A selected teaching strategy should construct a learning environment so that learners are “interested and engaged in the learning activities presented in the classroom” (LePage et al., 2005, p. 332).

Selecting an appropriate teaching strategy during planning is not enough. During the lesson itself, the student teacher needs to enact the lesson plan, and implement the chosen teaching and learning strategies. Certain approaches may be “enacted in ways that render them ineffective in the classroom” (Grossman et al., 2005, p. 226). For example, poor implementation of ‘cooperative learning’ strategies can lead to “many small group conversations not focused on the lesson topic” (Grossman et al., 2005, p. 226). Effective group work requires the teacher to create “truly interdependent tasks, establish clear goals, effectively organise discussions, monitor activities to reinforce how students can help one another, and

facilitate frequent evaluations of how work is progressing” (LePage et al., 2005, p. 338).

In this study, one particular teaching strategy will not be regarded as inherently more effective than others. Shulman (1987b) argues that in certain instances, “good lecturing is an indispensable teaching technique” (p. 110), while Darling-Hammond cautions, an “overemphasis on group work, without sufficient individual work, might leave the teacher with inadequate diagnostic information about individual students’ learning” (Darling-Hammond et al., 2005, p. 187). These comments suggest that transmission-mode teaching may result in more productive learning than vaguely defined co-operative or group tasks. What will be considered in this study is the quality of learning that stems from the selected teaching strategy, and the appropriateness of a particular teaching strategy for achieving the desired lesson goals.

Trends from the data

From the lesson observation reports, three themes emerged that are relevant to this facet, namely (i) the quality of learner activities, (ii) the learner involvement in the lesson and (iii) the ability of the student teacher to sustain learner interest. The data relating to these three themes have been extracted from Table 4.4 (p. 142) to generate Table 6.13 on p. 226.

It can be seen that university tutor concern regarding teaching strategies and quality of learning activities recurred consistently in 17% – 20% of packs of lesson observation reports across all four years of study, although the nature of the comments changed. Through all years of study, at least one third of student teachers received comments related to involving learners in their lessons. In the first year, many comments urged student teachers to give learners work to do, whereas in third and fourth year, some comments show student teachers how to exploit opportunities to maximise learning to an even greater extent.

Table 6.13: The percentages of student teachers whose university tutors expressed concerns relating to teaching strategies, for the different years of study

Year of study	Teaching strategies/quality of learning activity	Learner involvement in the lessons	Sustaining interest
% 1 st Year LO Reports	17	42	23
% 2 nd Year LO Reports	17	50	28
% 3 rd Year LO Reports	18	33	16
% 4 th Year LO Reports	20	43	30

There seems to be a dramatic drop in the occurrence of concerned comments relating to the ability of third-year student teachers to sustain learner interest until the end of their lessons, only for this concern to become more problematic again in their fourth year. This trend is not easily explained, but may be attributable to the structure of TE requirements of fourth year student teachers. In their fourth year, student teachers teach ‘continuously’ and are involved with the same class throughout the school day. Fourth year student teachers therefore strive to sustain learner attention throughout the school day, whereas in preceding years, student teachers need only sustain learner interest until the end of the lesson period. This places a higher degree of challenge on fourth year student teachers.

The aspects of teaching strategies that are visible to university tutors include the choice of teaching strategies and how they are implemented in the observed lessons. The student teachers’ voice has also been considered so as to understand the motivations behind the selection of teaching strategies. Trends emerged showing broad patterns of teaching strategies and related degrees of learner involvement in lessons as student teachers ‘learn to teach’. The data reveal a shift in the reasons why student teachers employ the teaching strategies they do. The following levels of teaching practice emerged from the data:

Level 1 of Teaching Strategies: Strategies that give information

Level 2 of Teaching Strategies: Strategies that get through the work

Level 3 of Teaching Strategies: Strategies that maximise learner participation

Level 4 of Teaching Strategies: Strategies for conceptual understanding

Tracing the changes in student teachers' selection of teaching strategies reveals a shift from transmission mode and the use of predominantly strongly framed teaching strategies (at Levels 1 and 2) towards more participative teaching strategies (at Levels 3 and 4). The examination of the process of selection of teaching strategies at Level 4 reveals that it is based on the potential of appropriate strategies for providing learners with conceptual learning opportunities.

Level 1 of Teaching strategies: Strategies that give information

Description of Level

Many first-year student teachers perceive teaching as conveying facts and information to their learners. This perception is revealed in comments such as, *"I love the kids – to be in front of them and to give them information"* (S 1 FGD) and *"[A good lesson is] if you have done a lot of research for your lesson you are telling [learners] something you know"* (S 1 FGD). This manifests in a tendency for student teachers to lecture at the learners, perhaps occasionally asking questions. For the most part, they believe that teachers talk and learners listen. In one such lesson, a university tutor suggests, *"Perhaps it would have been a good idea to ask learners to interpret the meaning of the poem, before you present your interpretation"* (UT LO 3). This level is characterised by little interaction between the student teacher and the learners, who are mostly passive. The emphasis is more on transmitting information than on conceptual understanding.

Aside from student teachers who are still grappling with what teaching entails, a very different group of student teachers also 'teach by telling'. These student teachers tend to lecture or conduct lengthy teacher-led discussions as their teaching strategy of choice. A university tutor confronts such a student teacher's tendency to lecture, saying, *"Be careful – don't speak AT the children, speak TO them. Work for greater contrast in your presentation style"* (UT LO 3). One such

student explains his perception of what makes a good lesson: *“Learners must look forward to attending my lessons and hold onto my every word with bated breath”* (S 4 RJ). Student teachers in this category evidently see their teaching as a performance captivating an audience of learners.

Manifestation

At this level, student teachers focus more on their own teaching than on the participation of the learners. Without learner involvement, few student teachers are able to sustain learner interest until the end of the lesson. This is illustrated by observations including, *“While she has shown the ability to arouse and maintain learners’ interest, she does not always maintain this. This is the result of a tendency to ‘teacher talk’, not always distributing questions widely enough to involve all learners”* (UT LO 4). Transmission teaching, by its nature, reduces opportunities for student teachers to monitor learner understanding. A university tutor draws attention to this, by saying, *“As learners read, instead of you explaining everything, rather ask questions to check if they follow and understand. If you explain everything, they will stop thinking and interacting with the text – this will not encourage independent learning”* (UT LO 3). A perception of teaching as the transmission of knowledge manifests as student teachers ‘explain’ in detail, but do not provide opportunities for learners to construct their own meaning, or engage with resources during the lesson.

Coping strategies

Student teachers at this level tend to employ more and more class control strategies as the lesson progresses and learners get progressively restless. A student teacher whose transmission-mode lessons were a continuing concern for his university tutors was told, *“You were compelled throughout the lesson to reprimand the class... Be careful about empty threats like, ‘This is your last warning’ – these tend to undermine rather than enhance your authority”* (UT LO 3). Instead of switching to learning activities that engage learners, the student

teacher adopts an authoritarian approach. In doing so, he addresses the symptom, not the cause of learner misbehaviour in this lesson.

University tutor guidance

Many university tutors urge student teachers to extract information from learners more actively, for example in the comment, “Try not to *explain* where you could rather *draw information out* of your learners. You are doing it to some extent, but try to do it more because I suspect that is the knowledge your learners will retain” (UT LO 4). A university tutor was “*astonished that [the student teacher] found it necessary to provide a ‘correct’ definition of relationships.*” He asks, “*Surely your learners are capable, with your facilitation, to arrive at an adequate, and more owned, definition?*” (UT LO 4). In examples like this, university tutors attempt to challenge the perception of student teachers that their job is merely to provide learners with information.

Certain university tutors suggest strategies for student teachers to increase learner involvement in their discussions, such as, “*Rather than manage the whole class discussion, you could get learners to talk to each other in pairs. This is a way to involve them all a bit more*” (UT LO 1). In other cases, university tutors insist that student teachers give learners a task to involve them in their lessons, such as, “*Do let learners do their own activity or worksheet for the last part of the lesson – they get too restless just listening and answering questions*” (UT LO 1) and “*You need to think how to keep everybody constructively busy throughout your lesson*” (UT LO 1). Certain university tutors suggest alternative teaching strategies that the student teacher could try. For example, a university tutor suggests that a student teachers uses writing activities to “*concretise the learning in writing, otherwise the learning [from a discussion] is in danger of being merely ephemeral and superficial*” (UT LO 3).

Some university tutors prompt student teachers to engage in reflective practice more rigorously, as evident in the following comment, “*What you need to work on is the precision of your input and actually involving the learners in actually doing*

things in the class – not just whole-class discussions all the time, but in discovering and learning independently. How could you, for example, make this a much more learner centred lesson? How could you have made your hand-out more learner-friendly?” (UT LO 3). These questions would presumably have been explored further in the post-lesson conference.

It has been shown that the use of such teacher-talk strategies often results in learners losing concentration, and the student teacher losing class control. Student teachers often respond to this loss of class control by increasing their use of visible classroom management strategies, rather than addressing their choice of teaching strategies. Certainly, university tutors did offer suggestions directed at helping student teachers deal with the restlessness and loss of class control.⁹⁰ However, student teachers at this level seldom make the link between their choice of teaching strategy and their loss of class control without feedback from their university tutor or supervising teacher.

Table 6.14: Summary of Facet 3, Level 1: Strategies that give information

LEVEL 1:	Strategies that give information
Description	Perception that teaching is about transmitting information. Some enjoy own teaching performance and explaining content – tendency to lecture/lead whole class discussions
Manifestation	Tendency to lecture or have lengthy teacher-led discussions with little or limited learner involvement Learners grow restless – problem with sustaining interest Does not enable monitoring learning
Coping strategies	Resort to class control strategies to cope with loss of learner attention.
University tutor guidance	Attribute loss of class control to lack of learner participation Suggest strategies for increasing learner participation during discussion Suggest written tasks Prompt reflective practice

⁹⁰ These are mainly discipline issues, and are further explored in the facet of Classroom Management (See pp. 244 - 262).

Level 2 of Teaching strategies: Strategies that get through the work

Description of Level

Many student teachers find they can get through the designated work with minimal risk of losing class control by using a generic lesson formula, which they replicate with little variation, irrespective of the lesson topic. One common ‘recipe’ that student teachers employ involves a class discussion, followed by questions that learners answer individually on a worksheet, or in their books. Student teachers satisfy themselves, and often their supervising teacher, that learners have ‘received the notes’ and have demonstrated their ‘understanding’ by answering questions, often set out on a worksheet. University tutors describe such lessons: *“They listened and answered questions correctly. Learners were able to fill in their worksheets without any difficulty”* (UT LO 2) and *“In the body of the lesson, she discussed the worksheet and the questions that learners would have to answer. The learners worked through the questions on their own, writing their answers in their books”* (UT LO 2). Supervising teachers sometimes insist that the student teachers use the common teaching resource materials across all classes in the grade, which may seem to lock student teachers into a ‘recipe’ mode of teaching. One student who was obliged to work from a pre-existing workbook received a comment that *“The use of a mathematics workbook led to the repetition of the same format of a lesson over an extended period”* (UT LO 4).

Certain student teachers in this ‘recipe stage’ assume that they are teaching effectively. For example, one student teacher, who describes how she *“tried as much as possible not to do too many worksheets, therefore at times, [she] worked straight out of the textbooks”* (S 4 RTE), seems oblivious to her lack of variety. In another case, a student teacher no longer thought it was necessary to consult with her supervising teacher, prompting from her university tutor to comment, *“She needs to use TE as an opportunity to explore and experiment with what she has learnt. Lesson preparation was detailed but [teaching] could have been more effective if she had consulted more fully with the educator about lesson content,*

ideas, methodology and teaching strategies” (UT LO 2). This type of comment suggests student teachers who *think* they are able to teach independently, but are limited in the repertoire of teaching strategies they use.

Other student teachers realise that more is expected from their teaching than standard recipe teaching. However, they perceive participative activities to be unrealistic in the context of the real classroom, and regard their recipe teaching to be quite adequate. A student teacher admits how she “*reverts back to a ‘normal’ lesson when [the university tutors] are not around*” (S3 FGD). Student teachers such as these use lessons promoting learner participation exclusively when their university tutors or supervising teachers are observing them. Because they believe fundamentally that their teaching is adequate, they resist implementing feedback, and the same sorts of comments occur through many of their lesson observation reports.

Some student teachers are aware that their limited vision of possibilities restricts their teaching strategy repertoire. They stick to routine teaching strategies for want of alternative strategies. A student teacher recalls how she went through a frustrating stage where she “*felt like [she was] out of new ideas for lessons*” (S 4 FGD). These student teachers require concrete suggestions for how to improve their teaching. A student teacher explains her frustrations, saying, “*I have only had university tutors who tell me where my lesson didn’t work and I feel, ‘Great! What do we do tomorrow then?’ You don’t know how to expand [on the university tutor’s comments]. It helps me more when a university tutor suggests [what to do]*” (S 4 FGD). Another student teacher adds, saying, “*It is so helpful having a university tutor popping little ideas into your head. You can keep those ideas for later*” (S 4 FGD). These student teachers are highly responsive to feedback and suggestions, and crave inspiration for innovative strategies.

Manifestation

University tutors express concern that lessons at this level tend to be rather routine and mechanical. A university tutor observed a perfectly adequate lesson, which he

described as follows: *“Technically, this was a competently planned and executed lesson: your focus was clear, you introduced a concept, you engaged learners’ previous knowledge, using various scaffolded explanatory phases, you added input, then gave an exercise and then checked answers. You followed a clear learning pathway towards your intended outcomes. You can enhance your lesson/teaching by focusing on developing strategies to make this pathway more meaningful and more collaborative, using problem-solving exercises from their real life to really engage their brains and interest”* (UT LO 3). Another university tutor, too, described a routine lesson, saying, *“Today’s lesson was coherent and clear, a bit textbook based, although reasonable. What I missed was the something extra that comes from your own growing, learning and reading”* (UT LO 4). These examples suggest that student teachers do not yet perceive teaching as more than a set of routines. They are satisfied to teach by delivering the worksheet given to them or what is in the textbook.

Some university tutors are aware of the tendency for some student teachers to use participative strategies for observed lessons, but transmission mode lessons at other times. They specifically compare the quality of activities in the observed lesson to those documented in other lesson plans. Inconsistencies in the uses of participative teaching strategies prompts comments like, *“There is a big difference in the lesson you have prepared for me and the other lessons”* (UT LO 3) and *“The overall quality of work in your file seems uneven”* (UT LO 3). Such inconsistency is openly admitted by some student teachers who describe observed lessons that have been *“over-planned to impress”*. Vigilance on the part of university tutors in checking for these inconsistencies forces student teachers to work more consistently.

Coping strategies

Student teachers often rely on the provision of teaching materials (such as textbooks, worksheets) by the supervising teacher, and base their lessons to fit these. This tendency is illustrated in the following comment, *“Although this particular lesson went well, it was clear that it was one of those pre-prepared*

lessons where much of the hard work had already been done, and little new input was being provided" (UT LO 3). In some cases, student teachers use the materials the teacher provides them with as an excuse for opting out, or as a crutch. Such a situation prompted the following comment, *"To some extent, I think the student was in a sheltered situation, working with an extremely caring teacher who hopefully will relinquish control more fully in the final Teaching Experience. It may well have been for her own good that this support was available during this session, however, it will be important to see how authentically she is able to establish her own learning environment and relationship with her learners"* (UT LO 4). It is difficult to gauge the true teaching ability of student teachers who continue to rely heavily on support from supervising teachers in their final year.

At this level, student teachers perceive teaching to be the delivery of a particular worksheet, or textbook activity to learners, and cope by using these tasks as a basis for planning their lesson.

University tutor guidance

A number of university tutors dare student teachers to be more adventurous in their teaching. For example, a university tutor comments, *"[This was] a very traditional lesson with you as educator providing the information and learners completing a worksheet activity. You appear to be a confident teacher and needn't be afraid to try something different and more 'exciting'. Challenge the pupils and yourself!"* (UT LO 3) and *"Use this opportunity to develop a range of teaching strategies. You can afford to take risks"* (UT LO 2). In general, student teachers who teach routine lessons are challenged to extend themselves beyond the mechanical, but as has been shown, some students express frustration at not knowing how to implement these suggestions to experiment.

Certain university tutors do provide concrete suggestions about alternative teaching strategies that could be tried. A university tutor, for example, suggests that instead of simply reading through the notes, the student teacher *"try providing learners with opportunities to actively interact with the core notes. For example,*

Underline a word that means...; Circle an example of...; Add a label onto the diagram” (UT LO 3). In this case, the university tutor provides ideas for the student teacher to incorporate specific activities in her existing strategy.

In some cases, university tutors challenge the misconceptions the student teachers have regarding the nature of teaching. For example, a university tutor explained, *“simply photostatting from a textbook is not teaching”* but rather, *“teaching needs to prepare [learners] for this task”* (UT LO 1). The university tutor is attempting to provide the student teacher with an alternative vision for teaching – teaching as scaffolding learner understanding, in preparation for a task.

Table 6.15: Summary of Facet 3, Level 2: Strategies that get through the work (with minimal disruption)

LEVEL 2:	Strategies that get through the work (with minimal disruption)
Description	Employ strategies that allow the student teacher to teach the topic with the most amount of control and least potential for disruption Follow a similar routine of lesson steps across all lessons: typically teacher-led discussion followed by answering of questions
Manifestation	Some only plan explorative tasks to comply with university tutor expectations for observed lessons: discrepancy between lesson plans for observed lessons and other lessons taught Frustration by own lack of ideas for teaching lessons
Coping strategies	Structure lesson around existing teaching material Some assume that this is all that teaching involves, or teach participative lessons only for university tutor observation – lacking in reflective practice and can be resistant to implementing feedback. Others feel frustrated with their lack of creative ideas
University tutor guidance	Some accept this as fine Most dare student teachers to plan more participative learning experiences. Some suggest how student teacher can adapt lesson to make it more exciting Check for consistency between observed and other lessons

Level 3 of Teaching strategies: Strategies that maximise learner participation

Description of Level

Student teachers at this level experiment with more adventurous teaching strategies that maximise learner participation. They discover that learners co-operate if they are interested and have fun during their lessons. The student spends

a lot of effort designing enjoyable and stimulating tasks in an attempt to gain learner co-operation during the course of the lesson. Student teachers at this level explain their perceptions: *“I feel that a good lesson is one that has variety. Variety gets them interested and excited about learning”* (S 4 RJ) and *“A good lesson is getting the learners active and keeping them busy, making the lesson fun for yourself as well as the kids”* (S 4 RJ). The student teachers’ focus their attention less on their teaching performance and more on the active involvement of the learners in the lesson. Student teachers at this stage tend to be highly receptive to learner feedback, and take pride in planning “fun” lessons, often as a way of capturing learner attention.

Manifestation

When student teachers make a concerted effort to design participative activities, but do not have a clear focus or well-established classroom routines in place, these more explorative teaching strategies do not work well. In one such case, the university tutor advised, *“Your use of group-work is not working well at present – some learners take it as a free period”* (UT LO 1). Similarly, instructions can be so vague that they are meaningless, as indicated in the comment, *“Just getting learners to ‘discuss in groups’ seemed a pretty empty exercise here”* (UT LO 1). Such student teachers may need to learn first how to focus their task, give instructions, and implement classroom routines more effectively before they are able to successfully experiment with such strategies.

Problems develop when learners are entertained, but not actively involved in meaningful engagement with the subject matter knowledge. Through a perception that good teaching amounts to keeping learners entertained, student teachers revert to superficial levels of teaching, keeping learners busy rather than engaging in purpose-driven, meaningful engagement with authentic resources relevant to the content. In one such case, the university tutor commented, *“Your activity seems to emphasise participation and speed rather than purpose, although the children enjoyed it”* (UT LO 4). In this example, the learners were actively involved, but the activity hardly contributed to the goals of the learning area. A student teacher,

for example, may strive to captivate the interest and attention of learners, but find it difficult to sustain the involvement towards the end of the period. Even highly capable and experienced student teachers fall into the trap of paying careful attention to sophisticated teaching strategies and fun experiences for learners. One student teacher commented on how his learners told him “*they enjoyed [his] lessons and found them exciting*” (S 4 RTE). Another student teacher explained, “*When my lesson has gone wrong, I can get feedback from learners on what they liked about the lesson*” (S 4 RJ). In these examples, the student teachers judge the quality of a lesson on the degree to which learners enjoy the experience, rather than on the level of understanding that learners achieve.

Coping strategies

When student teachers begin to experiment, many feel initially insecure about their loss of control over the learning process. Some respond by imposing unrealistic conditions on the learners – such as constantly requesting that learners work silently in their groups, defeating the purpose of collaborative learning. This is evident from reassuring university tutor comments like, “*You can’t ‘shoosh’ your learners if they are doing this type of [group work] activity – no need to stress here*” (UT LO 1).

Student teachers use a *variety* of teaching strategies as a means of maintaining learner interest and class control through their lesson. A university tutor observed how her student teacher “*knows exactly when to switch [learner] focus so that their interest is maintained throughout the lesson*” (UT LO 4). The use of teaching strategies therefore sometimes becomes a classroom management tool.

University tutor guidance

University tutors respond to student teachers’ insecurities about noise during co-operative learning by reassuring them that a “*working buzz*” is not the same as an “*uncontrolled noise*” (UT LO 1) and giving comments like, “*Learning noise is not a bad thing – don’t stop it*” (UT LO 3). University tutors assure student teachers

that such noise is desirable when using co-operative teaching strategies. This may be contrary to their own experiences of schooling, where silence was demanded from them as learners. A number of student teachers recall having initially perceived a good lesson to be when “*learners were kept quiet, followed instructions and did their work*” (S 4 RJ). These criteria reveal a conception of teaching that does not revolve around enabling learning.

University tutors observe student teachers experimenting with teaching strategies without a firm foundation of understanding the subject content first. They urge student teachers to use these strategies only in conjunction with deeper understandings of the purpose of their lesson. A university tutor, for example, told her student teacher, “*I think you are trying to be too adventurous when you are not really clear about the content you are teaching – An investigation has to be very clearly defined and worked out. You have to know what you want the learners to learn!*” (UT LO 3). In this comment, a university tutor suggests that a student teacher is attempting to use a sophisticated teaching strategy, without the foundation of adequately conceptualised content, or a consideration of the purpose of the learning. The use of co-operative teaching strategies without substantial content or preparation does not lead to worthwhile learning experiences.

Student teachers with inadequate classroom management skills to support the use of these teaching strategies were advised to “*cut down [the use of group work tasks] for now, and rather give very short, focused activities with tight time limits and clear end products*” (UT LO 1). The comment implies that the student teacher should revert to group work strategies at a later stage.

Table 6.16: Summary of Facet 3, Level 3: Strategies that maximise learner participation

LEVEL 3:	Strategies that maximise learner participation
Description	Plan fun lessons to keep learners busy, use adventurous teaching strategies
Manifestation	Can be insecure about noise generated, if classroom management is lagging
Coping strategies	Use variety of teaching strategies to keep learner interest, and as classroom management tool
University tutor guidance	Require effective classroom management Meaningful learning only if coupled with adequate subject knowledge Check other lessons for consistency Reassurance and support Invitation to reflect on practice

Level 4 of Teaching strategies: Strategies for conceptual understanding

Description of level

Student teachers select appropriate teaching strategies, based on an informed consideration of how best to promote the learners' conceptual understanding of the topic. Their lessons develop cognitive thinking appropriate for the learning area. For example, a university tutor commends a student teacher for using a teaching strategy that enables learners to construct a new understanding about poetry. She writes, *"Learners are intrigued and engaged by this task. They are challenged to think about poetry and rhythm in a different way to usual, and they are also working well in their teams – it's the kind of activity that generates a real need and desire to collaborate. Feedback and presentations: Their analyses reflect how exploration of rhythm contributed to their understanding of the poem as a whole"* (UT LO 3). Student teachers are observed teaching concepts within an authentic context, selecting strategies for the conceptual understanding they promote and for the opportunities they provide for learner engagement with the lesson topic. A university tutor, for example, congratulated her student teacher for *"the really lovely way of getting them to use adjectives, without being aware of it – an authentic, interesting task"* (UT LO 3). This is an example where the student teacher is deliberately structuring a context for relevant learning.

At this level, a student teacher may very well consider that answering questions from a worksheet, a teacher-led discussion or even a transmission mode of

teaching is the best strategy to teach a particular topic. No particular teaching strategy is privileged above another. What characterises the use of teaching strategies at this level is the way in which the student teacher uses them to develop conceptual understanding. For example, at Level 4, student teachers use worksheets in conceptually challenging ways. A university tutor commented to a student teacher that the worksheet she had devised on rhyming words “*was well pitched – with a lot of challenge. I think you are keeping your learners on their toes. You were careful to involve everyone and to make the time a useful learning opportunity*” (UT LO 4). In this example, the student teacher has used a worksheet as a vehicle of active learning. This stands in contrast to Level 2, where worksheets are used in a routine and mechanical manner.

Student teachers at this level select teaching strategies based on a consideration of not just the content, but also on the needs of particular learners. In one such case, the supervising teacher was impressed to see how a student teacher’s “*teaching strategies are not only varied for each lesson, but also for each learner. If a learner struggled to understand a new concept taught, she would work one on one with that learner using whatever method worked best for that learner!*” (ST 4). In summary, this level is characterised by student teachers selecting and using teaching strategies based on the consideration of how to best teach a concept to a specific group of learners. This consideration requires that student teachers construct PCK.

Manifestation

At this level, the student teacher carefully considers the teaching strategies that would be appropriate to the particular purpose of the lesson. In a lesson introducing fractions, for example, a student teacher used a “*highly developed and appropriate*” teaching strategy where “*learners cut up different ‘wholes’ themselves*” (UT LO 4). In this concrete experience, the concepts of numerator and denominator were introduced (UT LO 4). After a number of such lessons, the university tutor was “*very impressed with her selection of teaching strategies that enhance [learners’] conceptual understanding*” (UT LO 4). Another student

teacher used a song, which *“was not merely entertaining, but provided very effective practise of new vocabulary”* (UT LO 3). In such cases, the teaching strategy does not merely involve learners, but leads to worthwhile learning.

The selected teaching resources and skills developed through the lesson are consistent with the aim of the learning area. In a geography lesson on wheat farming, for example, a student teacher demonstrated her ability to devise learner activities around appropriate geographical skills, like graphical analysis and map interpretation. The university tutor described her lesson as follows: *“Right from the start, you used the maps and graphs to set a problem-centred approach, where learners were thinking and interpreting data. They had to engage with the information and actually synthesise it into their own knowledge”* (UT LO 4). He commented on her choice of teaching strategy, saying, *“You were able to turn a potentially dull section, unrelated to learner interests, into a dynamic lesson where approach transforms this content into a fascinating topic - who would have thought that wheat farming could be so exciting?”* (UT LO 4). This student teacher’s activities developed topic knowledge, and also disciplinary skills and thinking, showing blending of subject matter knowledge and pedagogical knowledge into PCK.

Some student teachers at this stage still teach with pre-existing materials, like worksheets or textbooks, but enhance their lesson with their own ideas for participative teaching strategies, and additional learning materials. University tutors made comments such as *“Even though your lesson was largely textbook based, you enriched it considerably with the way you handled it methodologically, as well as the additional information you were able to bring in”* (UT LO 4) and *“Even though you are working from largely pre-existing materials, you are bringing innovation and your own creative methodology to bear significantly”* (UT LO 4). Student teachers at this level are able to adapt existing materials to suit their own purposes, and still present a lesson that reflects their own teaching style.

University tutor comments

Comments commending student teachers who have planned authentic learning experiences for their learners, includes, “Activities in most of the learning areas were extremely well considered and interesting – really engaging with the topics in a challenging and problem-centred ways” (UT LO 4). The authentic learning of relevant knowledge, skills, attitudes and values is evident from the university tutor’s comment regarding a Life Orientation lesson: “Every step of this lesson was absolutely brilliant. I can only congratulate you on your creativity, motivation, explanations and dedication to the huge and important outcome of being tolerant of others and accepting differences. This was so valuable - not I, nor your learners, will forget what happened in their lives today” (UT LO 4). In these examples, university tutors acknowledge student teachers’ ability to construct authentic learning experiences that address worthwhile learning goals.

Table 6.17: Summary of Facet 3, Level 4: Strategies for conceptual understanding

LEVEL 4:	Strategies for conceptual understanding
Description	Consideration of how best to organise knowledge and learner activities to promote conceptual understanding and authentic learning Approaches develop disciplinary skills, thinking Problem solving learning opportunities Thoughtful selection of strategies for particular purposes
Manifestation	Adapt existing resources to meet their own purposes
Coping strategies	Draw on insights into learning area for what constitutes worthwhile learning activities
University tutor guidance	Some commend for high degrees of learner participation, others impressed by high (but appropriate) levels of cognitive challenge and conceptual understanding

TABLE 6. 18: SUMMARY OF FACET 3: TEACHING STRATEGIES

LEVEL	1: Strategies that give information	2: Strategies that get through the work (with minimal disruption)	3: Strategies to maximise participation	4: Strategies for conceptual understanding
Description	Perception that teaching is about transmitting information. Some enjoy own teaching performance, and explaining content – tendency to lecture/lead whole class discussions	Employ strategies that allow the student teacher to teach the topic with the most amount of control, and least potential for disruption. Follow a similar routine of lesson steps across all lessons: typically teacher-led discussion followed by answering of questions. Some only plan explorative tasks to comply with university tutor expectations for observed lessons.	Plan fun lessons to keep learners busy, use adventurous teaching strategies.	Consideration of how best to organise knowledge and learner activities to promote conceptual understanding and authentic learning Approaches develop disciplinary skills, thinking. Problem solving learning opportunities; Thoughtful selection of strategies for particular purposes.
Manifestation	Tendency to lecture, or have lengthy teacher-led discussions with little or limited learner involvement Learners grow restless – problem with sustaining interest. Does not enable monitoring learning.	Tend to use existing materials (textbook, worksheets) as given to them: do not adapt existing materials for learners; do not attend to problematic aspects, e.g. inappropriate language level or quantity of information	Can be insecure about noise generated, if classroom management is lagging.	Adapt existing resources to meet their own purposes.
Coping strategies	Resort to class control strategies to cope with loss of learner attention.	Structure lesson around existing teaching material Some assume that this is all that teaching involves, or teach participative lessons only for university tutor observation – lacking in reflective practice and can be resistant to implementing feedback; whereas others feel frustrated with their lack of creative ideas	Use variety of teaching strategies to keep learner interest, and as classroom management tool	Draw on insights into learning area for what constitute worthwhile learning activities
University tutor guidance	Attribute loss of class control to lack of learner participation Suggest strategies for increasing learner participation during discussion Suggest written tasks Prompt reflective practice	Some accept this as fine. Most dare student teachers to plan more participative experiences. Some suggest how student teacher can adapt lesson to make it more exciting Urge to adapt, extend existing teaching materials. Check for consistency between observed and other lessons.	Require effective classroom management Meaningful learning only if coupled with adequate subject knowledge Check other lessons for consistency. Reassurance and support Invitation to reflect on practice	Some commend for high degrees of learner participation, others impressed by high (but appropriate) levels of cognitive challenge and conceptual understanding.

FACET 4: CLASSROOM MANAGEMENT

Introduction

Shulman's Model of Pedagogical Reasoning and Action includes "organising and managing the classroom" as an aspect of the teaching activity of *instruction* (Shulman, 1987b, p. 104).⁹¹ Classroom management can be defined as "actions taken to create and maintain a learning environment that supports educational goals" (LePage et al., 2005, p. 330). Whereas classroom management traditionally involved implementing systems of reinforcing desirable behaviour and punishing unacceptable learner behaviour, the emphasis has shifted to "the prevention of disruptions rather than interventions" (LePage et al., 2005, p. 327). Classroom management is not simply "organising classroom routines and dealing with misbehaviour" (LePage et al., 2005, p. 327) but rather "optimising learning time by maintaining an orderly learning environment" (LePage et al., 2005, p. 340). It involves "many practices integral for teaching, such as developing relationships; structuring respectful classroom communities where learners can work productively; making decisions about timing and successfully motivating children to learn" (LePage et al., 2005, p. 327). Classroom management has the purpose of "helping [learners] become self-initiating and responsible for their own behaviour" and is therefore essentially a classroom socialisation process (Evertson, 1989, p. 67). LePage et al. (2005) support this position, asserting that, "classroom management relies as much on developing relationships and orchestrating a productive learning community as it does on determining consequences for inappropriate behaviour" (p. 332). Ideally, the task of the teacher with respect to classroom management is to "provide the framework" for classroom routines and interactions and ultimately to shift the responsibility for maintaining appropriate behaviour to learners themselves (Evertson, 1989, p. 67).

⁹¹ See pp. 109 - 113 for a review of Shulman's Model of Pedagogical Reasoning and Action.

Classroom management as enabling learning

An effectively organised and managed classroom has the dual role of eliminating many potential learner behaviour problems as well as establishing a classroom environment that is conducive to learning (Shalaway, 1997, p. 12). Grossman (1992) identifies the importance of classroom management: “How teachers manage classrooms enables, or constrains, the possibilities of teaching, classroom discourse and student learning” (p. 174). LePage et al. (2005) support this position, arguing “skilful classroom management makes good intellectual work possible” (p. 327). Hayes argues, “a lesson cannot run smoothly if it is punctuated by stops-and-starts to deal with poor behaviour” (Hayes, 2003, p. 212). The literature suggests that classroom management contributes to the ability of teachers to conduct a fluid lesson.

Other possible causes for loss of class control

Classroom management is a primary concern of student teachers, as without it, they struggle to gain class control (Fuller, 1969). Hayes suggests that learners often regard a student teacher as “just another adult to be tried and tested, before being accorded ‘real teacher’ status” (Hayes, 2003 p. 209). Grossman (1992) argues that the goals of teacher education programmes should include “helping prospective teachers attain mastery of classroom routines” (p. 176). However, not every case of learner misbehaviour can be attributed to issues around classroom management.

Problems with other facets of teaching may manifest visibly as a loss of class control, which superficially may look like a class management problem. Hayes (2003) asserts, “If the work is tedious, few children will sit passively” through the lesson (p. 211). Learner misbehaviour may certainly happen if the student teacher pays insufficient attention to developing norms and participating routines in the classroom, however, LePage et al. (2005) suggests that learner misbehaviour can also “be the result of poor planned activities, inadequate scaffolding and

modelling (leaving children unaware of what to do)” (p. 331). They therefore maintain that there is a link between classroom management (Facet 4) and the teaching strategy the teacher uses (Facet 3).⁹²

Trends from the data

More comments were made about classroom management and class control than any other facet of teaching, arguably because class control is the area where problems (such as lack of preparation, lack of topic knowledge or the use of inappropriate teaching strategies) most visibly manifest themselves. Two themes emerging from the lesson observation reports are grouped together in this facet. The data related to the themes of ‘class control’ and ‘class management and routines’ have been extracted from Table 4.4 (p. 139) and reproduced here as Table 6.19:

Table 6.19: The percentages of student teachers whose university tutors expressed concern about classroom management and class control

Year of study	Class control	Class management and routines
1 st Year LO Reports	43 %	59 %
2 nd Year LO Reports	28 %	40 %
3 rd Year LO Reports	19 %	40 %
4 th Year LO Reports	31 %	43 %

From Table 6.19, it can be seen that 59% of first year student teachers required university tutor advice or support with classroom management and routines, but in subsequent years, there was a substantial drop of the number of cases needing assistance, to 40% – 43%. There is an interesting increase in the number of fourth year student teachers receiving comments about class control. This can be explained by the TE requirement of fourth-year student teachers having to maintain class control ‘continuously’ over a ten-day period, compared to previously when they were required to manage their class one lesson at a time.

⁹² This relationship will be further explored in Chapter 8 (see pp. 392 - 394).

Within the facet of Classroom Management, the following four levels emerge from the data:

Level 1 of Classroom Management: Learner misbehaviour unchallenged

Level 2 of Classroom Management: Struggles for class control

Level 3 of Classroom Management: Explicitly enforces classroom routines

Level 4 of Classroom Management: Creates organised learning environments

Through these levels, a development of awareness and responsiveness to learner behaviour is seen, as well as an increase in organisation and the consistent use of classroom routines. Levels 1 and 2 are characterised by classroom control problems as a result of weak class management. At Level 1, the student teacher continues 'teaching' regardless of an unsettled class, whereas at Level 2, the student teacher is aware of the misbehaviour and tries to address it. At Levels 3 and 4, student teachers establish and use classroom routines to facilitate classroom management. At Level 3, the routines are very visible and need to be consistently reinforced to maintain class order, whereas at Level 4, the classroom management is almost invisible, as learners are meaningfully engaged and organised throughout their lessons.

Each of these levels will be considered in more detail.

Level 1 of Classroom management: Learner misbehaviour unchallenged

Description of Level

At this level, student teachers present their planned lesson, irrespective of what learners are doing. They give instructions regardless of whether or not all learners are attentive and participating. Student teachers do not address poor learner behaviour, but tend to 'lecture' over a buzz of learner chattering, directing the lesson at a few attentive learners. University tutors frequently make remarks such as, *"Make sure that your learners are all listening and not moving around when you talk"* (UT LO 1). University tutors suggest that such student teachers need to

“develop awareness for whole class management, rather than focusing entirely on individual learners” (UT LO 2). Without an awareness of learners, student teachers do not anticipate, or respond to, potentially disruptive behaviour of their learners.

Such student teachers act as if they are teaching a mere handful of learners, as illustrated by the following comment, *“When taking answers/questions [from learners], you are moving right up to that learner – and the rest of the class can play”* (UT LO 2). This also manifests in a tendency to take questions and answers from a certain section of the class, evident in comments like, *“Ask everyone – you seem focused on your left hand side only”* (UT LO 2). Some student teachers focus solely on a few individuals within the class and teach to them, ignoring all others.

Without good classroom management and effective organisation, student teachers take considerable time in starting the lesson. In one such case, the university tutor observed, *“You really struggled to have them settled down, perhaps because you took [too much] time to focus them on the lesson. I did not see you take control of this class”* (UT LO 1). In other cases, the supervising teacher warns the class to behave prior to the observed lesson, or settles the class for the student teacher. These student teachers then start their lesson with well-behaved learners and an air of confidence that they are not always able to sustain. A university tutor’s comments reflect this change over the course of an observed lesson, saying, *“You are confident and in control.... At times, you need to be a little firmer.... The learners are in need of some centering [sic].... Gosh, but some of these kids are restless!”* (UT LO 2). Although this lesson started well, the student teacher did not challenge disruptive behaviour as it arose through the lesson, gradually culminating in a loss of class control.

Manifestation

Unawareness of learner behaviour frequently manifests as a problem with the pacing of the lesson. Student teachers give too much time for a task or belabour an

explanation, which leads to learner boredom, restlessness and a subsequent loss of class control. A number of university tutors attempt to make student teachers aware of how to ‘read’ their learners, by saying, for example, “*An increase in the noise level is a good indication that learners have completed the task – move on*” (UT LO 2). Student teachers are not yet taking their pacing cues from learners.

Coping strategies

In some cases, student teachers continue ‘teaching’ even though learners are largely ignoring them. Such learner inattentiveness prompts university tutor comments such as, “*Be firm in asking learners to be quiet when you give instructions. They must stop what they are doing and listen to you*” (UT LO 1). At this level, student teachers are either unaware that learners are not attentive, or are directing their lesson at the few learners who are attentive.

In other cases, student teachers “*actually avoid engaging too much*” as a coping strategy (UT FGD). Some avoid teaching by not approaching their supervising teacher to request lessons to prepare. In these cases, university tutors quickly notice that there are too few lesson plans in the file. A university tutor explains that she makes a specific point of counting lesson plans, “*not because I expect them to grasp everything, it’s so I can have evidence of them teaching when I am not there to watch them*” (UT FGD). Alternatively, others avoid engaging with learners by planning lessons where their interaction with learners is minimal. In one such example, the university tutor described how a student teacher “*delivered a lesson identical to the last one, reading the notes, and then with no discussion, learners just got on with the questions in the worksheet*” (UT LO 1). The university tutor stated that the learners were “*extremely gracious and patient*” with the student teacher during the lesson, and “*behaved well – you were lucky!*” (UT LO 1). He did not attribute their good behaviour to the classroom management of the student teacher. However, he encouraged the student teacher by stating expectations, saying, “*Your own facilitation will hopefully get to be more confident, more lively and more interesting*” (UT LO 1).

University tutor guidance

University tutors may need to alert student teachers at this level to the goings-on within the classroom. The student teacher seems unaware of possible situations that may precipitate problems, as pointed out in the following comment, “*As you circulate and interact with groups, keep an eye out for what is happening elsewhere in the class: Some boys were rocking a bookshelf, possibly with disruptive consequences*” (UT LO 1). In such cases, some university tutors attempt to alert the student teacher to the need for awareness of all learners during lessons.

University tutors urge student teachers to become responsive and aware of their learners. In a particular case, the university tutor explicitly drew her student teacher’s attention to the learners, saying, “*Remember that the priority is to teach your learners, and engage with them effectively*” (UT LO 1). In such cases, the student teacher seems more focused on delivery of her lesson steps, than on her learners. The university tutor attempts to switch her focus to genuine teacher-learner interaction that enables learning.

Table 6.20: Summary of Facet 4, Level 1: Learner misbehaviour unchallenged

LEVEL 1:	Learner misbehaviour unchallenged
Description	Teach lesson regardless of inattentive learners; Can’t sense when it’s time to move on
Manifestation	Learners inattentive: chatter or walk around unchallenged during teaching Student teachers do not respond to misbehaviour, do not call learners to order Take a long time to get started Problematic pacing
Coping strategies	Talk over learner chatter – present lesson as per planned lesson steps
University tutor guidance	Alert student teachers to what learners are doing – how to ‘read’ their learners; taking pacing cues

Level 2 of Classroom management: Struggles for class control

Description of level

At this level, learners do not always co-operate with a student teacher. They may disregard a student teacher who is trying to “explain” or give instructions, and

ignore all attempts of the student teacher to assert authority and take charge of the lesson. Unlike those at Level 1, these student teachers are fully aware of discipline problems they may be having, and are actively attempting to address them. A university tutor observed, for example, *“Many of [the learners] were quite restless and chatty, which bothered you”* (UT LO 1). One student teacher remembers how, when teaching at this level, *“the feeling of being in control made [her] think the lesson had been a success”* (S 4 RJ). This perspective is confirmed by a second year student who asserts, *“Even though we are student teachers, we are still in charge and [the learners] have to do what we say”* (S 2 RTE). At this level, student teachers believe that they have a right to expect learners to co-operate. Student teachers challenge learners (although not always successfully) when they are not behaving appropriately.

More experienced student teachers can also revert to a struggle for control when establishing themselves in new and particularly challenging class environments. A university tutor alerted her student teacher to the potential discipline problem that is beginning to manifest, saying, *“Insist on silence before speaking to the class. How could you have controlled this, another way? You are going to need to set the basic boundaries very quickly with the class. There was too much chatting going on – you did try and address it, but you’re going to have to do it far more firmly, as your intervention didn’t have the effect you desired”* (T LO 4). Although it was not effective, the student teacher in this example attempted to challenge learner misbehaviour during the course of her lesson.

At this level, student teachers tend to blame their poor class control on ill-disciplined learners, poorly managed schools or problems with their supervising teacher. At this level, student teachers fail to assume responsibility for discipline problems they experience, with comments like, *“The children behaved like delinquents. They were the worst behaved learners ever! There was no way of teaching them”* (S 2 RTE). At this level, student teachers do not yet consider how their teaching may be leading to class misbehaviour, but tend to deflect the blame.

Some student teachers lose class control through their inability to give instructions effectively. From university tutor comments, student teachers at this level struggle with giving instructions in two ways:

- The student teachers need to learn how to settle the class, and call them to attention so that they are quiet and attentive before instructions are given. University tutors gave advice, such as, *“Try not to start giving an instruction before all learners are listening. If you tell them to be quiet, wait until they are, before you speak”* (UT LO 2).
- University tutors spend time helping student teachers to break up their instructions into manageable bits, so that they do not overwhelm the learners with complicated, unmanageable tasks. Comments designed to address this problem include, *“Giving too many instructions at once will only confuse learners. Rather give the instructions one by one and wait until they have completed the task before giving them another one”* (UT LO 4), and *“You do need to break up your instructions – don’t cover the extension activities before they’ve completed the main activity”* (UT LO 1).

There exist a multitude of other root causes of the struggle to establish control. Some student teachers are not sufficiently assertive, while others are inconsistent in their use of classroom routines. However, in many cases student teachers’ struggle for control is a manifestation of other problematic facets of their teaching practice, such as limited topic knowledge, inappropriate use of teaching strategies, unclear instructions and an inability to communicate effectively.⁹³

Manifestation

When classroom management is problematic, the learning process is often interrupted as the student teacher focuses on establishing class control. In one such lesson, the university tutor noted, *“Once again, your lesson was overwhelmed by management and discipline issues”* (UT LO 4). Another

⁹³ The relationship a student teacher’s classroom management has with other facets of teaching will be further explored in Chapter 8.

university tutor kept a running commentary on a student teacher's attempt to address a number of class management concerns, writing, *"Don't allow the class to come up to you if you're giving homework. Good – you did send someone away. You need to have a quiet word with Thato – he's shouting out quite often, but by ignoring him, he gradually piped down. Good – you spoke firmly to them about their behaviour. Insist on no comments while you're giving homework, and silence while they are copying it down. Good - you started the count, but it took longer than it should have. There's quite a lot of litter lying around – how do you deal with this? Good – you addressed the litter at the end. Insist that pencil boxes are closed and nothing is out – a boy was cutting his tie! I'm pleased to see you're making use of clapping, counting and a disapproval list to deal with the class"* (UT LO 4) While effective teaching is so much more than classroom management, without it, the intentions of carefully thought-out lessons are undermined.

Loss of class control leaves these students feeling threatened and exasperated, as evident from one student teacher's report that says, *"There were times when the student teacher was overwhelmed and it all just became too much for her. But as she got used to [the learners] and she tried different types of coping methods, she got used to the real situation of having 40 noisy kids in front of her and she survived"* (UT LO 1). Experiencing a struggle for control may undermine student teachers' confidence and can lead them to doubt their career choice. One student teacher reports, *"The learners refused to listen or do work. Not one discipline technique worked. I'm debating whether I still want to teach"* (S 2 RTE). This is a particularly stressful time for student teachers.

Coping strategies

Student teachers at this level may respond by raising their voice above their learners' chatter or rushing to give all the instructions at once – while they still have a small degree of control. These coping strategies, however, often exacerbate the problem, undermining both the student teachers' self-confidence and the learners' confidence in the student as teacher.

In desperation, some student teachers may resort to control tactics used when they were scholars – even using corporal punishment, in spite of having been warned that it is illegal for them to hit learners. One student teacher, for example, admits, *“I didn’t want to shout but [the class behaviour] was so bad that I had to use corporal punishment”* (S 3 FGD) and another student spoke of the problems he had in *“finding an alternative to the corporal punishment that [he] was accustomed to as a scholar”* (S 1 FGD). Student teachers whose own schooling was dominated by the use of corporal punishment find it difficult to formulate a vision for other discipline methods.

Other student teachers attempt to establish control of the class through the selection of teaching strategies that consciously and actively attempt to minimise the potential for disruption during their lessons. A fourth year recalls, *“I used to think that a ‘good lesson’ was when all learners were silent. Participative learning (including group work) made me very nervous”* (S 4 RJ). Student teachers at this level use tightly structured individual tasks, not as an insightful attempt at meaningful learning, but rather as an agent of class control. One student teacher explains how she coped in her second year, saying, *“I taught a lesson and out of an hour, I got to teach 10 minutes. I just lectured them to keep control”* (S 4 RJ). One fourth year student teacher explains that because of discipline problems, she chose to restrict the teaching strategies she used, saying, *“In my attempts at group work and whole class activities, I found the learners became disruptive, hence my teaching strategy stayed the same. Learner development all depended on the discipline. Lessons were more productive when I didn’t have to be sorting out discipline problems, and I was able to concentrate on the work”* (S 4 RTE). Such student teachers react to the learners, rather than setting the boundaries for the interaction.

Student teachers admit that sometimes, *“a lot of ‘dirty’ work goes on behind the scenes,”* with supervising teachers removing potentially disruptive learners from the class for the duration of the university tutor visit. The student teachers

themselves may have tried to “*prepare the class for the arrival of the ‘visitor’ and ask them to behave.*” (S 3 FGD). Some classes may, therefore, be very co-operative at the beginning of the lesson. If the lesson progresses without the student teacher consistently sticking to classroom routines, the teacher’s request becomes a distant memory, and learners begin to misbehave and ignore the student teacher. In such cases, it can create confusion if university tutors assume that such student teachers are independently able to control the class in the first place.

University tutor guidance

University tutors offer advice and support to struggling student teachers in a number of ways. Some university tutors express support and encouragement, for example saying, “*By the looks of it, you have your hands full with these Grade 5s and they are keeping you on your toes. I hope you will, more and more, find ways of keeping them on their toes, without falling back too frequently on raising your voice*” (UT LO 3). Others provided a model for the student teacher to copy, such as, “*Settle class down e.g. say ‘I want to hear a pin drop before I speak/explain/instruct’*” (UT LO 2); and others provided a goal to work towards, such as “*Be firm in asking learners to be quiet when you give instructions. They must stop what they are doing and listen to you*” (UT LO 1). Other university tutors share strategies for improving class control, such as “*I suggest you address the learners who are particularly uncooperative by name. Eventually they will realise that you find their behaviour personally and individually unacceptable*” (UT LO 1). Another university tutor warned his student teacher of the dangers in taking a long time to get the lesson started, saying, “*You’re asking for trouble with long periods of silence or inactivity – these can be times of consolidation, or extension*” (UT LO 4). The university tutor is suggesting that classroom management would be improved by a more efficient use of available time during the lesson.

Table 6.21: Summary of Facet 4, Level 2: Struggles for class control

LEVEL 2:	Struggles for class control
Description	Aware of poor learner behaviour; trying to address class control Highly stressful for student teacher
Manifestation	Class behaviour upsets student teacher; ongoing attention to learner behaviour throughout lesson – undermines learning opportunities. Learners may be well behaved at first – threatened by supervising teacher
Coping strategies	Inconsistent use of class routines Shouting or threatening punishment Tightly controlled lessons – lecturing teaching strategies Removal of disruptive learners from class before university tutor arrives; threatening class with punishment if they don't behave
University tutor guidance	Goals – silent learners during instructions Coaching in survival strategies

Level 3 of Classroom management: Explicitly enforces classroom routines

Description of level

Student teachers realise that “*shouting at the learners all the time only makes them lose respect for you*” (S 2 RTE), and that “*being firm, without shouting, made learners respond better and also behave better*” (S 2 RTE). Student teachers put into place a basic routine, which they adhere to. A student teacher describes how “*You always have to be consistent: if you say you are going to do something, you do it*” (S4 FGD). This student teacher realises that idle threats undermine class control.

Some student teachers who actually are able to manage a classroom at Level 4 (to be discussed next) revert to this level at the beginning of each TE. In one such case, the supervising teacher noted how a student teacher “*started her TE with the desks separated; this helped her with discipline and control of the more boisterous learners. Once this was mastered, she moved the desks into groups*” (ST 4). The same student teacher reflects how she first needed to establish class discipline explicitly, before she could manage the class implicitly, saying, “*I enforced strict rules with [the learners] and stuck to my guns. Now, in the third week of TE, I have not had to use the ‘time-out’ desk once, whereas before, I was using it every day*” (S 4 RTE). For the short duration of TE, some student teachers

begin managing the class explicitly, by actively establishing classroom routines at this level.

Manifestation

Student teachers at this level use routine and structure to set up a more organised class, and often find that lessons become more manageable. A university tutor commented, *“You led the class in well - your signal for silence worked brilliantly”* (UT LO 4). Other such routines used by the student teachers in this study include lining up; raising of hands to answer questions; folded arms during the giving of instructions, and so on. A university tutor commented that one of his student teacher could *“write a whole book”* on the different methods she employs to call learners to attention (UT LO 4). The student teacher is seen consistently and explicitly to enforce these procedures throughout the lesson. A university tutor similarly observed how a student teacher *“used a very innovative approach to establishing classroom control: if she felt an individual was not behaving appropriately, she would give him/her a beanbag, instead of stopping the class to deliver a verbal reprimand. Towards the end of her TE, she hardly had to use this strategy as the class were co-operating in a very positive manner”* (UT LO 4). At this level, the student has sufficient class control to deliver a lesson, although the lesson may be punctuated by enforcing certain routines to maintain order.

Coping strategies

Many student teachers adopt the classroom routines of their supervising teachers, whether or not they support such methods. A university tutor points out the problem created when a student teacher is assigned to an incompetent supervising teacher, saying, *“Sometimes during feedback sessions I find that student’s mistakes are due to them mimicking a teacher.”* Student teachers perceive conflicting advice as confusing and frustrating, as they are receiving mixed messages, and are unsure of whose guidance to trust.

Student teachers at this level can often be seen relying on ‘teacher tricks’ to settle learners, like clapping, counting, hand signals and actions. When they do experience difficulties, they have a repertoire of techniques from which to draw. They also feel the need to have a punishment strategy in place, as a back-up plan to handle misbehaviour when it happens. Student teachers sometimes devise elaborate reward and punishment systems as a means of managing their class. A fourth year student teacher, for example, describes how he *“tried to set up a system that used points to reinforce desired behaviour, and a treat was up for grabs at the end of three weeks”* (S 4 RTE). Classroom management at this level can be quite exhausting, as student teachers explicitly and consistently enforce their routines throughout their lessons, monitor behaviour and reward learners accordingly.

University tutor guidance

When student teachers explicitly enforce their routines, they are able to maintain enough class control to deliver their lesson, however, at times these explicit routines may interfere with the learning process. One university tutor, for example, commented, *“You have a confident, assured teaching personality and you generally make good use of this, though you need to be careful not to overwhelm the learners – it is important to find a balance between controlling the learning environment and allowing the learners space to explore and think independently”* (UT LO 2). A number of university tutors encouraged such student teachers to *“concentrate on the quality of the learning activity”* as a means of establishing a more authentic form of classroom discipline (UT LO 4).

Table 6.22: Summary of Facet 4, Level 3: Explicitly enforces classroom routines

LEVEL 3:	Explicitly enforces classroom routines
Description	Establish class routines – attempt to enforce explicitly and consistently.
Manifestation	Able to settle class and begin lesson teaching to attentive learners – if other problems, may lose class control as learner interest not maintained.
Coping Strategies	Mimic teachers’ routines – use of counting, hands up; line up; actions to call learners to order.
University Tutor Guidance	Encourage student teachers not to control so tightly that learning is stifled Pay attention to the quality of learning experience as a means of obtaining class control

Level 4 of Classroom management: Creates organised learning environments

Description of level

Student teachers at this level have thought carefully through the management and organisational aspects of the lesson and can make contingency plans. They interpret the dynamics within the class and very often address situations *before* a potential problem has a chance to arise. A university tutor who observed such a student teacher in her second year described how “*she is able to ‘read a situation’ and offers assistance without having to be asked*” (UT LO 2). Such students are highly perceptive to needs of learners and anticipate where their assistance and intervention is needed. A university tutor commented, “*Good alert walking around checking whether Grade 5s are following instructions. It appears you already know which learners (like Kyle) would need extra chivvy⁹⁴*” (UT LO 2). Student teachers at this level focus on engaging and involving the learners in learning experiences. A university tutor remarked, “*Each activity flowed into the next in a structured way, and you kept good control when there was potential for chaos*” (UT LO 3). In this example, the university tutor describes a seamlessly managed lesson, where the student teacher assumed control of the class, but did not need authoritarianism to assert her professional authority as a teacher.

Manifestation

Although their classrooms are extremely well managed, the high degree of classroom management sometimes seems invisible. A university tutor described a student teacher’s classroom management as follows, “*Your organisation and instructions are excellent, and you time all parts of the lesson carefully – there is absolutely no wasting of time as a result.*” (UT LO 4). Student teachers feel confident in their ability to regain learner attention and co-operation at any point during an explorative learner activity, but very seldom need to intervene, because learners are secure in a classroom routine. A university tutor describes such a

⁹⁴ The word “chivvy” means to harass or pester.

student: *“Her class adored her, not only because she made learning a profound experience for them, but she also has a wonderful disposition, treating them with respect and fairness”* (UT LO 4). In many cases, then, these student teachers base their classroom management on a firm foundation of interesting, informative lessons and worthwhile learning experiences, which are fluid in their execution and in which learners are completely engaged. Learners who feel secure in the student teacher’s knowledge and teaching ability accept his or her authority as a teacher. A university tutor, for example, describes how a student teacher *“sees to it that learners settle down and become involved in activities promptly and with little fuss. As such, the need to discipline⁹⁵ her class was seldom necessary”* (UT LO 4). In this case, the student teacher assumes control of the class, without having to plead for co-operation, or make threats. Her classroom management is implicit within the structured learning environment she is able to create.

The learners feel most secure when they know exactly what is expected of them, are not overwhelmed by lengthy explanations and instructions, and all the resources they need are readily accessible. A university tutor described such a lesson, saying, *“Learners were involved effectively – pointing learners to the text gave learners authentic and formative knowledge. Questions were carefully thought out. Good control of the class at all times, and learners felt confident to answer questions after you had involved them at the level you did”* (UT LO 4). The university tutor alludes to a relationship between thoughtful planning of worthwhile learning experiences and the student teacher’s ability to manage the class.

Coping strategies

A student teacher reflects how her class control is linked to her degree of understanding of content and teaching skills, *“Now in fourth year, I have more classroom management skills and subject knowledge – so it is easier to discipline*

⁹⁵ It may be argued that this student teacher is inherently ‘disciplining’ her class – I interpret the university tutor’s use of the word ‘discipline’ to be synonymous with ‘punish’ or ‘reprimand’.

the class” (S 4 RJ). University tutors, too, acknowledge the link between class control and teaching skills and knowledge. A university tutor pointed out, *“His insight into the relevant learning areas has shown that he is capable of catching the learners’ attention as well as making the lesson efficient and productive. This quality is necessary in order to keep the class stimulated and well behaved”* (UT LO 4).⁹⁶

University tutor guidance

University tutors highly commend student teachers with this level of classroom management, as their class control comes from being organised and devising authentic learning experiences in which learners are genuinely interested and engaged. A university tutor, for example, applauded a student teacher’s facilitation by saying, *“Your facilitation showed much insight into your learners’ needs for structure, focus and motivation. Learners were meaningfully engaged in thinking, identifying and discriminating. Wonderful!”* (UT LO 4). At this level, student teachers use their class time productively, involving learners in active learning, and as such, discipline problems seldom manifest themselves.

Table 6. 23: Summary of Facet 4, Level 4: Creates organised learning environments

LEVEL 4:	Creates organised learning environments
Description	Well organised; able to make contingency plans Keeps learners genuinely interested and meaningfully occupied Very little explicit attention to classroom management routines – almost invisible classroom management
Manifestation	Responsive to learner behaviour cues – pacing good Well-behaved learners who have accepted student teacher’s routines and authority
Coping strategies	Worthwhile content captures learner interest; participative activities; variety in teaching strategies
University tutor guidance	Draw student teachers’ attention to recognising a link between their organisation of a safe learning environment and the inherent discipline in the lesson

⁹⁶ This relationship will be further explored in Chapter 8.

Table 6.24: SUMMARY OF FACET 4: CLASSROOM MANAGEMENT

LEVEL	1: Learner misbehaviour unchallenged	2: Struggles for class control	3: Explicitly enforces classroom routines	4: Creates organised learning environments
Description	Teach lesson regardless of inattentive learners; Can't sense when it's time to move on	Aware of poor learner behaviour; trying to address class control, Highly stressful for student teacher	Establish class routines – attempt to enforce explicitly and consistently.	Well organised; able to make contingency plans Keeps learners genuinely interested and meaningfully occupied Very little explicit attention to classroom management routines – almost invisible classroom management
Manifestation	Learners inattentive: chatter or walk around unchallenged during teaching. Student teachers do not respond to misbehaviour, do not call learners to order Takes a long time to get started; Problematic pacing	Class behaviour upsets student teacher; ongoing attention to learner behaviour throughout lesson – undermines learning opportunities. Learners may be well behaved at first – threatened by supervising teacher	Able to settle class and begin lesson teaching to attentive learners – if other problems, may lose class control as learner interest not maintained.	Responsive to learner behaviour cues – pacing good Well-behaved learners who have accepted student teacher's routines and authority
Coping Strategies	Talks over learner chatter – presents lesson as per planned lesson steps	Inconsistent use of class routines Shouting or threatening punishment Tightly controlled lessons – lecturing strategies; Removal of disruptive learners for university tutor visits; threatening punishment if class doesn't behave	Mimic teachers' routines – use of counting, hands up; line up; actions to call learners to order.	Worthwhile content captures learner interest; participative activities; variety in teaching strategies
University Tutor Guidance	Alert student teachers to what learners are doing – how to 'read' their learners; taking pacing cues	Goals – silent learners during instructions Coaching in survival strategies	Encourage student teachers not to control so tightly that learning is stifled Pay attention to the quality of learning experience as a means of obtaining class control	Draw student teachers' attention to recognising a link between their organisation of a safe learning environment and the inherent discipline in the lesson

FACET 5: MONITORING LEARNING

Introduction

Shulman (1987b) suggests that *evaluation* of learning is an aspect of the pedagogical acts that teachers perform. He describes this process as “checking for understanding and misunderstanding that a teacher must employ while teaching interactively, as well as the more formal testing and evaluations that teachers do to provide feedback and grades” (p. 106). It is the “checking for understanding and misunderstanding... while teaching interactively” that is most relevant to this study, as it manifests (or does not) in the lessons that university tutors observe. If teaching is fundamentally about helping learners to develop conceptual understandings, then to support learning effectively, teachers should be “constantly checking for [learner] understanding” (Shepard et al., 2005, p. 276). Hayes defines the monitoring of learning as “a process of active encounter with children to acknowledge their progress, correct their misunderstandings and redirect their thinking” (Hayes, 2003, p. 245). Morrow’s (1999) definition of teaching as the *practice of organising systematic learning* highlights inextricable link that teaching has with learning. This implies that to determine if teaching has been effective, it is necessary to consider the degree of learning that results from the actions.

Investigating prior knowledge

Monitoring learning may take place *before* a learning experience. Grossman et al. (2005), for example, stress the importance of monitoring learners’ conceptions prior to teaching, saying, “Whatever their age, students do not enter classrooms as *tabulae rasae*, or empty vessels. Thus it is essential for teachers to determine what kinds of understanding of the subject their students already possess, and to craft instruction that is appropriate for the student’s level of knowledge and development” (Grossman et al., 2005, p. 215). Such monitoring may take place at the beginning of a new unit of work, or at the beginning of a lesson where new conceptual learning is planned. Effective instructional strategies “draw on students’ prior knowledge as a resource” (Shepard et al., 2005, p. 286).

Monitoring learning during instruction

Formative assessment is carried out *during* the instructional process to “discover what a student understands or does not understand”, for the purposes of “improving teaching or learning” (Shepard et al., 2005, p. 275 - 276). Formative assessment involves “keeping a close eye on how children are coping with the practical application of the work...[and] should provide clues about where and how to intervene” (Hayes, 2003, p. 245). Without active monitoring and feedback regarding their conceptual errors, learners are likely to “persist in bad habits or misconceptions” (Shepard et al., 2005, p. 288). University tutors most frequently observe formative assessment in lessons when student teachers monitor learner understanding during class discussions and learner activities. Formative assessment can also include the written comments a teacher provides in response to a piece of work, if the comments were designed to help the learner improve their understanding of the content.

Monitoring learning after instruction

Summative assessment, in contrast, is generally carried out after a unit of lessons, “for the purpose of giving grades, or otherwise certifying student proficiency” (Shepard et al., 2005, p. 276). Summative assessment tasks should be “culminating performances” in which learners exhibit and apply their knowledge (Shepard et al., 2005, p. 297). In the context of this study, there may be summative assessment tasks in the student teacher’s preparation file, but these are not scrutinised by university tutors as a matter of course, unless the student teacher has to set a summative assessment task for a university course assignment. University tutors sometimes look at examples of marked learner work, but this, too, has not been standard practice.⁹⁷

⁹⁷ The three-week duration of TE session at the Wits School of Education is short, and limits the potential for summative assessment.

Monitoring learning and reflective practice

Monitoring learning provides a means by which student teachers may consider what aspects of their own “teaching practices are and are not working, and what new strategies are needed” (Shepard et al., 2005, p. 292). Grossman et al. (2005), too, highlight the importance of monitoring learning for teacher development, saying, “To design and improve instruction, teachers need a sense of what students already know within a given subject matter, and what they learned through instruction” (Grossman et al., 2005, p. 223). With this knowledge, teachers are able to reflect on their own teaching, and consider “how instruction can be modified or extended so that adequate opportunities are provided for each student to master the concepts or skills” (Shepard et al., 2005, p. 292). Monitoring learning is thus essential for informing subsequent lessons.

Trends from the data

In this facet, only one theme emerged from the analysis of the lesson observation reports. On this theme of *monitoring learning*, the frequency of concerned comments dropped from 35% of lesson observation packs in first year to 19% in fourth year, as seen in the following extract from Table 4.4 (p. 139), which has generated Table 6.25.

Table 6.25: The percentages of student teachers whose university tutor expressed concern about the student teacher’s monitoring of learner understanding, for the different years of study

Year of study	Monitoring learning
1 st Year LO Reports	35 %
2 nd Year LO Reports	28 %
3 rd Year LO Reports	28 %
4 th Year LO Reports	19 %

A gradual reduction in concerned comments in this facet is seen over the four years, although the data show university tutors were still challenging a significant number of fourth year student teachers to actively monitor learning. In this facet of teaching practice, the following four levels of practice have emerged from the data:

Level 1 of Monitoring Learning: Assumes learning

Level 2 of Monitoring Learning: Infers class understanding from individual responses

Level 3 of Monitoring Learning: Monitors learners' answers

Level 4 of Monitoring Learning: Probes learner understanding during lesson

Development in this facet manifests as increased probing of learner understanding during a lesson. Across the levels, the monitoring shifts from assumed understanding (Level 1), to greater degrees of checking and interrogating learning (Levels 2 - 4).

Each of these levels will now be explored in some depth.

Level 1 of Monitoring learning: Assumes learning

Description of level

Student teachers at this level perceive teaching to be the transfer of information, rather than development of conceptual understanding in learners. Student teachers assume that if they have said it, then the learners have learnt it. Student teachers, across all years of study, were observed assuming that learning and understanding had taken place when learners listened to, or read, information given by the student teacher. The lack of attention to learning prompts university tutor comments such as, *"Keep checking the learners are 'learning' what you are saying!"* (UT LO 1) and, *"Just because you told them the information, it doesn't mean they understand"* (UT LO 3). These examples reveal how at this level, student teachers equate teaching with 'telling information', and learning with 'hearing information'. In their comments, university tutors challenge this misconception.

Manifestation

The student teacher may ask questions during the lesson, but this is not done to gain insight into learner understanding. For example, a university tutor comments,

“When you ask your learners questions, respond. Don’t just move to the next learner without saying anything, because a learner wouldn’t know if they gave you the correct answer or not” (UT LO 1). In such cases, questioning is a tool that student teachers use to ‘involve’ learners in a lesson. There is therefore a tendency for student teachers at this level not to engage sufficiently with learner responses. A university tutor pointed this out to a student, saying, *“You are not monitoring quality or suitability of learners’ answers, by never responding to them”* (UT LO 1) and *“I felt that some of the comments of the learners were rather implausible/inaccurate, but were accepted uncritically and tended to distort the collective interpretation somewhat”* (UT LO 3). This comment reveals a sense that the student teacher is using questioning as a way of inviting learners to participate, but not seeing the potential of questioning as a tool for probing learner understanding and misunderstanding.

At this level, student teachers assume that the ‘correct’ answers are self-evident, or that methods of attaining correct answer are clearly understood. Student teachers are likely to mark homework and tasks by calling out the correct answer, and requiring learners to tick or ‘correct’ their own work, without explaining, or probing to see what has been understood. A university tutor, for example, noticed that *“the learners had to rely on each other for the correct answers”* and advised the student teacher to *“run through a selection of answers to ensure learners are on the right track”* (UT LO 3).

This level is characterised by an inability to adapt and respond to the changing dynamics within the classroom, as the student teacher focuses more on their performance of teaching than on how the learners understand. This can be seen in the following university tutor comment, *“Don’t assume that all your learners understand the vocabulary. You were in a hurry to get on to the worksheet, and I am concerned that some of this text went over their heads, and lacked meaning. Do your learners know what ‘relent’ means in question 4?”* (UT LO 3). Inappropriate pacing during the lesson is therefore common, as student teachers move on before learners fully understand, or belabour a point after learners have

grasped it. When learner understanding is not monitored, the pacing of the lesson often tends to be too fast or too slow, which manifests in learner misbehaviour resulting from boredom. One such student teacher reflects on her own teaching practice, saying, “*A weakness of mine is that I tend to rush through things without checking to see if my learners are on the same level as me, or even see if they understand the work they are given*” (S RTE 4). Such student teachers tend to follow their planned lesson steps irrespective of how learners are responding.

Coping mechanisms

Assuming that learners understand, these student teachers tend to walk around the class aimlessly while learners are busy completing a task. They may perceive the purpose of circulating as a classroom management issue and not see the potential for monitoring learning. They only attend to those who specifically ask for assistance. A university tutor, for example, informs the student teacher “*When the learners worked on the worksheets, you moved around the classroom. You could have walked around and looked at the work of every group, however*” (UT LO 3). By walking around the room, student teachers make themselves available to answer learner queries – but are not yet using it as an opportunity to actively monitor learner work-in-progress.

University tutor guidance

Student teachers at this level are often surprised when university tutors tell them that their learners did not understand, not having gathered that information for themselves during the course of the lesson. This revelation requires certain student teachers to fundamentally reconsider their perceptions of teaching as the transmission of information and learning as the receiving of information. University tutors suggest ways to become more aware not only of their ‘teaching’ but also of the ‘learning’ in the classroom. A university tutor, for example, encouraged a student teacher to question more, saying, “*As learners read, instead of you explaining everything, rather ask questions to check if they follow and understand. If you explain everything, they will stop thinking and interacting with*

the text – this will not encourage independent learning” (UT LO 3).⁹⁸
Questioning encourages independent thinking and checks levels of understanding.

At this level, many university tutors explicitly state the need for student teachers to interact and respond to the answers that learners provide, as in the comment, *“Some of the responses [to questions asked] were fairly subtle – listen carefully to what learners say and respond to them constructively”* (UT LO 2). Some university tutors give examples of where responses (or lack thereof) had been problematic, such as, *“Where is the ‘end of South Africa’? Does [the learner] mean the southern Cape? Deal with it”* (UT LO 1). In this case, the university tutor tries to alert the student teacher to the misunderstandings that are evident from learner answers. However, the student teacher still lacks the content knowledge to exploit this opportunity for further learning.

Table 6.26: Summary of Facet 5, Level 1: Assumes learning

LEVEL 1:	Assumes learning
Description	Assumes learners have understood what they have been told Focuses on teaching – explaining everything to learners Little or no questioning of learners during lesson
Manifestation	Follow lesson plans inflexibly - regardless of learners’ understanding, behaviour or concentration Pacing of lesson can lead to confusion or boredom and loss of class control
Coping strategies	Perceives no need to deviate from lesson plan steps Aimless wandering around the classroom while learners working on task
University tutor guidance	Point out places where learner understanding was absent or problematic learner answers Suggest strategies for monitoring learner answers and on-task monitoring

Level 2 of Monitoring learning: Infers class understanding from individual responses

Description of level

At this level, the student teacher treats the class as a uniform whole, assuming that if one learner is able to answer questions correctly, then all learners in the class

⁹⁸ This quote has already been used. See p. 228.

have a similar understanding. An abundance of comments dealing with this particular problem was evident, with remarks such as, *“Try to get different learners to respond to questions. There appear to be the same learners selected to answer”* (UT LO 2). At this level, the knowledge obtained from one learner is interpreted as common patterns of understanding across the class. A university tutor summed up this concern, saying, *“Just because one learner knows the answer, it doesn’t mean that the rest do!”* (UT LO 4). At this level, student teachers ask learners questions, but more to increase learner participation in the lesson than to check understanding.

Manifestation

At this level, student teachers engage with those learners who actively participate, and volunteer answers. A student teacher remembers how, *“in first year, [she] was pleased when a learner responded to questions – and it didn’t matter if it was the same learner all the time”* (S 4 RJ). Student teachers direct their teaching and questions to certain learners, at the exclusion of others.

Student teachers tend to rely on the learners who are able to provide them with the evidence of understanding that they are looking for, as they *“want to make a good impression”* on their university tutor (S 3 FGD). University tutors made frequent comments like, *“Vary the learners whose hands you respond to – you took many answers from Sibusiso!”* (UT LO 2). Learners who form a vocal minority tend to dominate lessons and volunteer answers to questions.

Coping strategies

The need to monitor learner understanding may be acknowledged superficially, with the student teacher asking a generic *“Do you all understand?”* which invariably invokes a unanimous learner chorus of *“Yes, Ma’am/Sir”*. Many university tutors made comments like, *“When you say ‘Do you all understand?’ and they all say ‘yes’, you should not just assume that they do”* (UT LO 4). This response is taken to be a confirmation of learner understanding, which means that

the lesson may proceed. The student teachers may therefore stop to check class understanding, but their means of doing so do not necessarily reveal misunderstandings that may be taking place in the learning process.

University tutor guidance

University tutors make suggestions about how to monitor understanding more effectively. For example, university tutors suggested, “*Rather than ask ‘Do you understand?’ ask them a question or ask them to explain in their own words, or to give examples*” (UT LO 1) A university tutor explained to such a student, “*Asking them if they understand is not always effective. Give them opportunities to talk about the process – through which you arrive at the answer (whether they understood or not)*” (UT LO 2). Such university tutors are suggesting strategies for actively monitoring learning.

University tutors explicitly suggest strategies that encourage in-lesson monitoring to their student teachers. For example, university tutors made suggestions like, “*When the learners respond to questions, make a point of also asking those whose hands don’t go up – This can also be your assessment of their comprehension of the subject matter. If you detect a lack of understanding, you can then correct it*” (UT LO 2). Another university tutor required that her student teacher consider the role of teachers, saying, “*As teachers, we are supposed to teach the learners who do not know or understand something – not those who know. So try to draw the other learners (whose hands are not up) into the discussion*” (UT LO 1). Similarly, a number of university tutors suggest that student teachers circulate around the class more purposefully to “*create the opportunity to assess your input, and if necessary, clarify points or conduct further explanation*” (UT LO 2). Here, university tutors attempt to make student teachers aware of possibilities for active teaching while learners are working on their task. In these examples, the university tutors make their student teachers aware that their teaching is not over once learners begin their work.

Table 6.27: Summary of Facet 5, Level 2: Infers class understanding from individual responses

LEVEL:	Infers class understanding from individual responses
Description	A few vocal learners dominate answering of questions Transmission monitored by learner's answers to questions Understanding of silent learners inferred from responses of vocal learners
Manifestation	Answers taken from a few learners who volunteer Rest of class sits quietly
Coping strategies	An attempt to 'monitor' learning by asking rest of class, "Do you all understand?"
University tutor guidance	Strategies for probing understanding, e.g. ask questions, re-explain work in own words Asking questions to learners who don't volunteer Check work when circulating during learners' task

Level 3 of Monitoring learning: Monitors learners' answers

Description of level

At this level, student teachers tend to question learners as a way of involving them in the lesson. However, questions also provide an opportunity for them to test if learners can remember or comprehend the lesson content. A final year student, for example, recalls how she "*felt satisfied that [her] outcomes had been achieved when [she] saw learners had been able to answer the questions correctly*" (S 4 RJ). At this level, the student teachers assess learning according to whether learners correctly answer the questions they ask and complete the work they set. When learners provide 'correct' answers to their questions, they infer that learning has taken place.

Often, student teachers at this level design their questioning around lower order cognitive thinking (such as recall and comprehension of information), which are easily assessed, but do not allow for more explorative thinking and problem-solving approaches. A university tutor responded to such a lesson, saying, "*There is scope for her to raise the level of cognitive challenge in her classes*" (UT LO 2). Alternatively, when questions are more challenging, the answers provided by learners are sometimes superficially accepted. A university tutor summed up the way a student teacher monitors learning, saying, "*The questions she asks are relevant and often stimulating, but when using questions, she must ensure that she*

involves as many learners as possible, and that she probes learners' answers more" (UT LO 4). A fourth year student suddenly realises the limitations of her assessment strategy and reflects, *"My assessment was very mark-based. Maybe I should try formative assessment next time, for learners to grow and improve"* (S 4 RTE). Such student teachers may go back to address misunderstandings at a later stage, but are not always aware of them during the course of the lesson.

Manifestation

At this level, university tutors urge student teachers to make allowances for different levels of understandings of learners in the class, allowing those who had understood to continue, while those who misunderstood receive extra assistance. A university tutor, for example, drew a student teacher's attention to the potentially different levels of understanding within his class of learners, saying, *"The majority of learners have completed the 'effect of forces' table correctly – a few have done hardly anything – do they not understand or are they playing, or is it a combination? There was one boy sitting on his own. He did not participate at all. How is he assessed?"* (UT LO 4) Reflecting on this, this student teacher writes that when he looked at *"learner responses to [his] lessons, worksheets and tasks"* he saw how *"some [learners] got on beautifully, and others had no clue at all"* (S 4 RTE). However, he did not notice this during the course of his lesson but assessed learner understanding while marking. A student teacher reflects how, *"Often what I am saying is not understood – I can see it from what they write in their books"* (S4 FGD). These student teachers often only realise where learners have misunderstood once they are assessing learners' work *after* the lesson.

Coping strategies

Student teachers at this level feel more able to assess understanding when each learner is working individually. These student teachers often use collaborative learning in their build-up to a task, but still require learners to work individually on their answers so that they can assign a mark. A university tutor, for example,

questioned a student teacher as follows, “*Is there any particular reason why learners are working on their own? They are likely to gain more from discussing answer possibilities with neighbours*” (UT LO 3). In such examples, the university tutor addresses a tension the student teacher faces between maximising learning, and opportunities for her to check the understanding of each learner individually.

University tutor guidance

Some university tutors notice the tendency of student teachers to ask recall questions and prompt their student teachers to pitch their lessons at higher levels of cognition. A university tutor, for example, commented, “*The lesson flowed well, but I felt that it could have been more intellectually challenging. How could you have done this?*” (UT LO 3). Without providing concrete suggestions, the university tutor invites the student teacher to reflect on the demands the lesson placed on learners.

Other university tutors suggest ways in which student teachers could assess the learning, beyond the level of simple comprehension. For example, a university tutor told her student teacher, “*Don’t just ask the question – direct to specific learners*” (UT LO 4). Another suggested “*Perhaps the learners could draw stick figures and show what is happening with arrows*” in order that the student teacher “*further ensures their understanding*” (UT LO 4). In such examples, the university tutor actually provided a suggestion for how the student teacher could probe for deeper understanding by requiring learners to apply knowledge rather than simply repeat it.

Table 6.28: Summary of Facet 5, Level 3: Monitors learners' answers

LEVEL 3:	Monitors learners' answers
Description	Evidence of understanding from learners' ability to answer questions in books May monitor quality of answers/recall during lesson, but does not attend to learners to assess how they are coping with written task during lesson
Manifestation	Become aware of learners whose work is not done/did not understand when marking books after lesson
Coping strategies	Relies on easily assessed answers – tends to test recall Emphasis on individual work – so that individual answers can be monitored
University tutor guidance	Benefits of corroborative learning Attention to tasks that apply knowledge and assess understanding, rather than recall

Level 4 of Monitoring learning: Probes learner understanding during lesson

Description of level

Student teachers assess whether learners have understood the work by designing tasks that require learners to apply concepts to new situations and in different ways. A fourth year student teacher *“saw [her] questioning skill improve from asking basic questions to asking questions that made the learners really think. By not giving learners the answers right away and having them ponder, learners brought up some solutions that [she herself] did not even think of”* (S 4 RTE). These student teachers require more cognitively challenging work from learners and monitor their ability to cope with the tasks during the course of the lesson. A university tutor noticed, *“When [learners] are busy, she facilitates and keeps a watchful eye on their work”* (UT LO 4). Tasks have been carefully structured to test understanding of the topic. It is through providing learners with the opportunity to apply their knowledge to a new context that student teachers judge whether learners have understood the concepts.

At this level, student teachers are deliberately and thoughtfully monitoring learning as the lesson is progressing, looking for evidence of understanding beyond the ability of learners to provide a ‘correct’ or valid answer. They consciously probe conception by various strategies, such as requiring learners to

verbalise their thinking, thereby revealing any misconceptions they may have constructed. In one such lesson, the university tutor observed how *“learners were given the opportunity to formulate mathematical formulae and articulate their reasoning”* (UT LO 4). While the learners are working, student teachers actively monitor the learners’ work, seek potential misunderstandings during the lesson and assist those who need support. A university tutor commented, *“I liked the way you helped individual learners who were battling – it meant you were able to give them individual attention while the rest of the class continued working”* (UT LO 4). A student teacher reflects on how her focus has shifted from the amount of work done to the learning that takes place, saying, *“I learnt that lessons are more about what the learners have learnt, not the amount of work that is covered”* (S 4 RTE). In this way, student teachers become more responsive to the needs of their learners.

Manifestation

At this level some student teachers appear to be aware of the need to monitor learning, and tend to do this as a whole class strategy. When student teachers notice a learner who has misunderstood, they tend to pay particular attention to that learner or stop the whole class and re-teach the concept to all learners. A university tutor, for example, noted how her student teacher *“kept stopping to check their understanding. Excellent handling of problems cropping up by stopping the class and giving some more whole class input on the board”* (UT LO 3). At this level, student teachers deviate from planned lesson steps when the need arises.

Student teachers make explicit effort to probe learner understanding and conceptions as the lesson progresses. This level of monitoring learners also gives student teachers the confidence to use their lesson plans more flexibly and deviate from them to address conceptual misunderstandings. Student teachers, who come to regard a lesson plan as a flexible tool rather than a contractual obligation, are able to take cues from their learners and adjust their plan as the lesson proceeds. Many of the student teachers reflect in their journals that they are now *“able to*

see when something is not working and move away from the lesson plan and do something else to save the lesson” (S 4 RJ). A university tutor congratulated her student teacher, saying, “Learner development was continually assessed. She would not just continue with the planned lesson, but would re-strategise and re-teach, when problems were picked up” (UT LO 4). When student teachers are looking consciously for learner understanding, they tend to be more flexible in adjusting their planned lessons. A student teacher reflects, for example, “Some of my lessons changed, as I realised they were either too difficult or too easy for the learners” (S 4 RTE). Receptivity to the learners, combined with the confidence to deviate from the lesson plan, result in better pacing of student teachers’ lessons.

Coping strategies

At this level, student teachers are beginning to develop their ability to reflect on the impact of their teaching on learner understanding. They become less dependent on comments from supervising teachers and university tutors. A student teacher, for example comments, *“I reflected after my lessons a lot more than ever before and this really helped me a great deal. I actually sat and thought long and hard about what went wrong and what was good – it really helps develop lessons for the next day so much more than I thought it would!” (S 4 RTE). Such reflections on learning inform the planning of subsequent lessons.*

When student teachers reach this level of functioning, they find they are able to differentiate their teaching vis-à-vis different levels of learners within a class. University tutors describe such student teachers’ abilities as follows: *“She was very conscious of the different levels of ability of her learners in different classes, and attempted to adjust her style, pace and approach to meet their needs,” (UT LO 4) and “She was always conscious of their needs and made sure that every learner got the kind of attention linked to their particular requirements” (UT LO 4). Another university tutor observed a student teacher who was able to “adapt her knowledge and lessons to the learners’ level” (UT LO 4). A differentiation processes such as this is managed, for example, by the student teacher “helping a small group of learners quickly and quietly at the front of the class, while the rest of the class who did understand the concept carried on working on their own”*

(UT LO 4). At this level, student teachers cope with learners' different levels of need.

University tutor guidance

The student teacher at this level has some understanding of what constitutes a meaningful assessment within a learning area. A university tutor described how she was *“very impressed with [her student teacher’s] ability to explain concepts and try strategies that would enhance their conceptual development. [The student teacher] never assumed that every learner understood what she was saying all the time, and she took the time to assess what they had understood by employing highly developed and appropriate questioning techniques”* (UT LO 4). A university tutor asked his student teacher to note explicitly in her preparation when she deviated from her planned lesson steps. He indicated, *“I would love to see some inklings in your file of the kind of spontaneous things we were discussing – where lessons are altered mid-stream for good reasons”* (UT LO 4). By asking her to note such instances in writing, the university tutor required that the student teacher reflect on her reasons for deviating and bring her tacit thinking to greater consciousness.

University tutors commend student teachers for attending to issues of real learning and understanding during the course of their lessons. A university tutor summed this up by saying, *“I was impressed with the way you remediated, because learners had not grasped the concept”* (UT LO 4). Instead of emphasising the initially confusing way that the student teacher had taught, the university tutor commended the student for adapting her lesson to rectify the arising confusion.

Table 6.29: Summary of Facet 5, Level 4: Probes learner understanding during lesson

LEVEL 4:	Probes learner understanding during lesson
Description	Monitors learners individually through ability to apply concepts to new contexts, different questions Monitors and checks work whilst learners are working during lesson Opportunities for learners to articulate their conceptions
Manifestation	Begins to actively reflect on own teaching practice, and able to re-strategise Responsive – flexible. Can deviate from lesson plan if misunderstandings are evident - appropriate pacing Differentiation, based on recognitions of different degrees of understanding
Coping strategies	May remediate as a whole class strategy – this can lead to restlessness of those who understand Repeats lesson if poor learner understanding evident from their work Assists groups of learners who are struggling
University tutor guidance	Reflective practice, strategies for active monitoring during lesson Encourage use of extension activities for those who understand, to allow time for remediation Promote awareness of need for differentiation Highly commend student teachers for perceptiveness and flexibility Prompt reflective practice to make tacit thinking explicit

Table 6.30: SUMMARY OF FACET 5: Monitoring Learning

LEVEL:	1: Assumes learning	2: Infers class understanding from individual responses	3; Monitors learners' answers	4: Probes learner understanding during lesson
Description	Assumes learners have understood what they have been told; Ask a generic "Do you all understand?" Satisfied by learners saying they understand.	A few vocal learners dominate answering of questions Understanding of silent learners inferred from individual responses	Evidence of understanding from learners' ability to answer questions in books May monitor quality of answers/recall during lesson, but does not attend to learners' to assess how they are coping with written task during lesson	Monitor learners individually through ability to apply concepts to new contexts, different questions. Monitors and checks work whilst learners are working during lesson Opportunities provided for learners to articulate their thinking
Manifestation	Follows lesson plans inflexibly - regardless of learners' understanding, behaviour. Pacing of lesson can lead to confusion or boredom and loss of class control Does not probe or engage with learners' answers	Answers taken from a few learners who volunteer Rest of class sits quietly	Becomes aware of learners whose work is not done/did not understand when marking books after lesson.	Begins to actively reflect on own teaching practice, and able to re-strategise Responsive – flexible. Can deviate from lesson plan if misunderstandings are evident - appropriate pacing Differentiation, based on recognitions of different degrees of understanding
Coping strategies	No need to deviate from lesson plan steps Aimless wandering around the classroom while learners working on task.	An attempt to 'monitor' learning by asking rest of class, "Do you all understand?"	Relies on easily assessed answers – tends to test recall. Emphasis on individual work – so that individual answers can be monitored	May remediate as a whole class strategy – this can lead to restlessness of those who understand Repeats lesson if poor learner understanding evident from their work Assists groups of learners who are struggling
University tutor guidance	Point out places where learner understanding absent/problematic learner answers; Suggest strategies for monitoring learner answers and on-task monitoring	Strategies for probing understanding, e.g. ask questions, re-explain work in own words Ask questions to learners who don't volunteer	Benefits of corroborative learning; Attention to tasks that apply knowledge and assess understanding, rather than recall Stress the importance of providing extension tasks to those who understand and complete work quickly.	Reflective practice, strategies for active monitoring during lesson; Encourage use of extension activities; Promote awareness of need for differentiation Highly commend student teachers for perceptiveness and flexibility Prompt reflective practice to make tacit thinking explicit

Concluding remarks

In this chapter, each facet of teaching practice has been examined in turn and largely in isolation from one another. Together the five facets describe developmental levels of student teachers' teaching, which may be represented on a multifaceted diagram as follows:

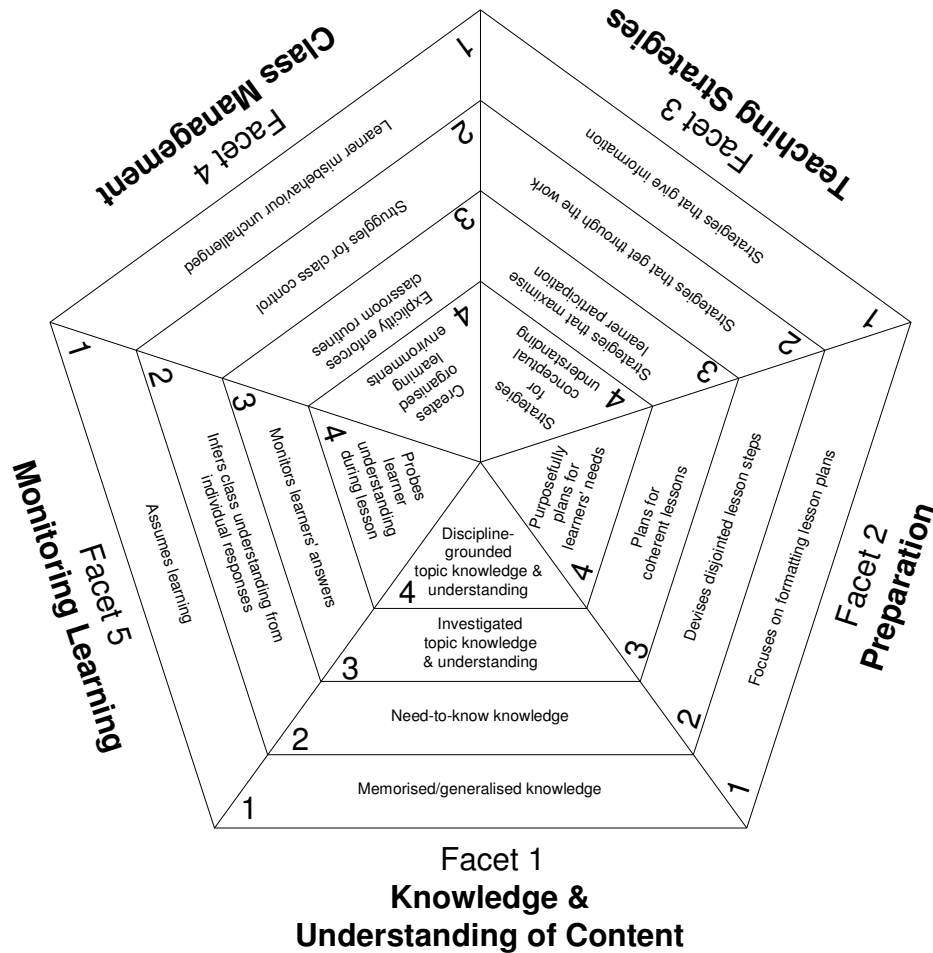


Figure 6.1: Levels of teaching practice across five facets

Ideally, as student teachers develop their teaching practice, their levels of teaching practice shift from the outer edges of the web towards the central region. Table 6.31 (p. 282) contains a description of each level of each facet.

Table 6.31: Summary of developmental levels of student teaching

FACET	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
FACET 1: KNOWLEDGE & UNDERSTANDING OF CONTENT	Memorised/generalised knowledge Lacks conceptual understanding of lesson topic; teaches vague content from ‘general knowledge’	‘Need-to-know’ knowledge Student teachers know just what is needed for that lesson – mechanical understanding.	Investigated topic knowledge & understanding Student teachers research lesson topic thoroughly Comprehend investigated information	Discipline- grounded topic knowledge & understanding Insights into learning area and topic – able to make links to other knowledge Able to cope with questions from learners
FACET 2: PREPARATION	Focuses on formatting of lesson plan Preparation perceived as writing out of plans: Strategic compliance: may only write detailed plans for observed lessons	Devises disjointed lesson steps Lesson plans neatly and thoroughly done, but inconsistencies in lesson structure: Lack of cohesion between outcomes, instruction, activity, assessment and resources	Plans for coherent lessons Carefully selects or formulates outcomes, but these are not directly linked to goals of learning area Use of relevant resources; coherent lesson steps in isolated lesson	Purposefully plans for learners’ needs Addresses development of core knowledge, skills and attitudes/values of the learning area. Adapted to needs of learners.
FACET 3: TEACHING STRATEGIES	Strategies that give information Perception that teaching is about transmitting information. Some enjoy own teaching performance, and explaining content – tendency to lecture/lead whole class discussions	Strategies that get through the work Employ strategies that allow the student teacher to teach the topic with least potential for disruption. Follow a similar routine of lesson steps across all lessons.	Strategies to maximise participation Plan fun lessons to keep learners busy, use adventurous teaching strategies.	Strategies for conceptual understanding Consideration of how best to organise knowledge and learner activities to promote conceptual understanding and authentic learning Approaches develop disciplinary skills & thinking.
FACET 4: CLASSROOM MANAGEMENT	Learner misbehaviour unchallenged Teach lesson regardless of inattentive learners Can’t sense when it’s time to move on	Struggles for class control Aware of poor learner behaviour Try to address class control Highly stressful for student teacher	Explicitly enforces classroom routines Establishing class routines – attempting to enforce explicitly and consistently.	Creates organised learning environments Well organised, but able to make contingency plans. Keeps learners genuinely interested and meaningfully occupied. Almost invisible classroom management
FACET 5: MONITORING LEARNING	Assumes learning Assumes learners have understood what they have been told; Ask a generic “Do you all understand?” Satisfied by learners saying they understand.	Infers class understanding from individual responses A few vocal learners dominate answering of questions Understanding of silent learners inferred from individual responses	Monitors learners’ answers May monitor quality of answers to recall questions during lesson, but does not attend to learners to assess how they are coping with written task during lesson, until marking after lesson	Probes learner understanding during lesson Monitors learners and checks work whilst learners are working during lesson Opportunities for learners to articulate their conceptions

The separate facets have been arranged in a ‘spider web’ or pentagon for two reasons. Firstly, the web structure reflects the complexities associated with teaching. Secondly, it has been argued that PCK is a blending, or coming together of a variety of different knowledge bases. In this model, the development of pedagogically reasoned practice may be physically represented as a “coming together” of a variety of facets, culminating in a grasp of PCK at Level 4. However, this arrangement does have constraints. It may seem to suggest that ‘Level 4’ describes the ultimate level of expert teaching practice, which is not the intention. Rather, it is intended to show the levels of teaching practice that were observed in a group of undergraduate student teachers, within the context of a supported TE programme.

In this chapter, there have been instances where the data suggests that particular facets may affect student teachers’ teaching practice within another facet. To explore whether relationships between the five facets exist, it is necessary to closely examine the developmental pathways taken by individual student teachers as the ‘learn to teach’. These portraits will be studied in the following chapter, with particular attention to how their teaching in one facet supports or hinders their teaching in other facets. It will then be possible, in Chapter 8, to examine the specific ways in which facets affect one another.

CHAPTER 7: PORTRAITS OF TEACHING PRACTICE FOR FIVE STUDENT TEACHERS

This chapter will analyse changes in the teaching of five student teachers over four years. Each of these student teachers was deemed by their university tutors to be suitable for the teaching profession and related well to the learners in their class. Most could communicate in English adequately. As with all the students considered in this study, these five proceeded through the BEd programme in four years. Details of the five student teachers are summarised in Table 7.1. as follows:

Table 7.1: Summary of details of student teachers whose portraits will be investigated

Student Teacher	Gender	Race ⁹⁹	Type of own schooling	Academic majors	Final TE mark during 4 th year
Brenda	Female	White	Suburban school	Geography, English	75%
Amos	Male	Black	Township school	Geography, History	68%
Zanele	Female	Black	Township school	Geography, Life Orientation	65%
Maggie	Female	Black	Rural school	Geography, Biology	64%
Joseph	Male	White	Suburban school	Geography, Drama	60%

These five student teachers were selected based on the following three criteria:

- (i) Their developmental trajectories offer particularly useful insights into the way five facets of teaching (knowledge and understanding of content, preparation, teaching strategies, class management and monitoring learning) interact with each other. Certain portraits demonstrate aspects of the interaction of facets at different levels, resulting in the student teacher experiencing particular challenges as they ‘learn to teach’. These challenges range from inflexibility to inadequate learning; learner restlessness; inability to identify learner misunderstandings; and loss of class control.
- (ii) The five represent a spread of the final TE marks,¹⁰⁰ ranging from Joseph who obtained the cohort’s second lowest mark (60%) for TE, to Brenda

⁹⁹ The consideration of race is relevant in this study only because these students’ educational backgrounds (and hence influences on their beliefs about teaching) were racially linked.

who achieved a borderline distinction (75%),¹⁰¹ as indicated on the graph that follows:

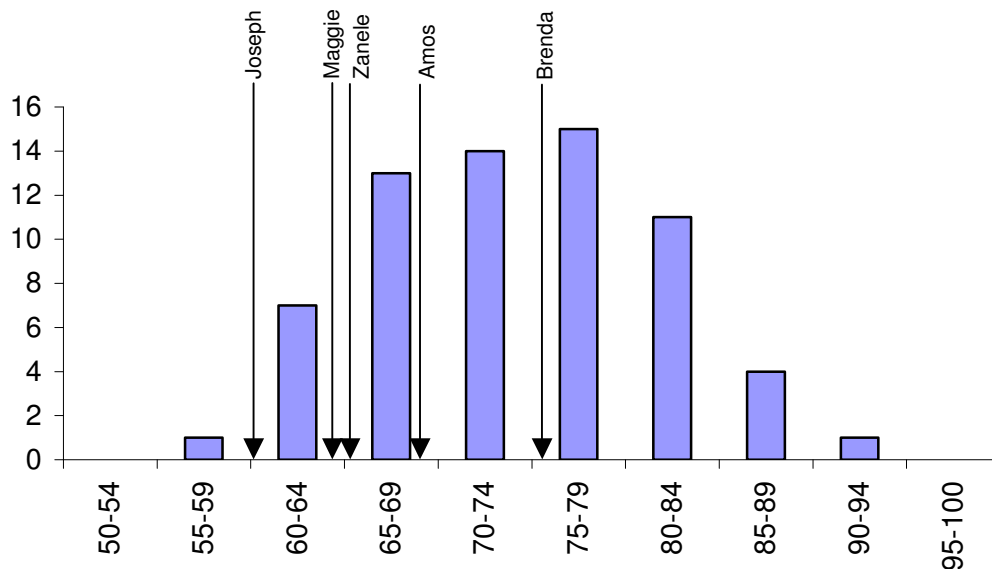


Figure 7.1: Position of five student teachers in final mark distribution graph

Figure 7.1 shows that four of the five student teachers selected for this study obtained marks between 60 – 69%. I chose this mark range to be particularly interesting as I believed it would reveal insights into the criteria university tutors employ to judge teaching worthy of graduating from the BEd programme, but not worthy of obtaining a distinction.

- (iii) The five student teachers whose portraits will be scrutinised all majored in a common subject, namely Geography. The fact that all these students had taken Geography as an academic major meant that I was able to obtain additional insights from their reflective journals kept during the Learning

¹⁰⁰ There are student teachers whose teaching practice developed smoothly over four years, culminating in distinctive practice at Level 4 in all facets. The progress of such students will not be described in depth, because of the limited insights such a discussion would provide into the nature of challenges student teachers encounter when learning to teach.

¹⁰¹ It should be again noted here that 31 out of the 66 student teachers were awarded distinctions for their final TE session – however, only one distinctive portrait will be examined here.

Area (Social Science) course¹⁰². However, their subject knowledge across aspects of other learning areas is varied, as indicated in Table 7.1.

- (iv) The five student teachers selected represent diversity in terms of race, gender and educational background. Three are black and two are white. Two are male and three are female. As learners, two went to a well-resourced urban school; two went to township schools and one came from a rural farm school, as indicated in Table 7.1 (p. 285).

Through their case studies, it will be shown how the facets interact with each other, enabling different pathways of 'learning to teach'. The student teachers will be discussed in descending order, according to their final TE marks.

This chapter draws on three groups of voices:

- i) The voices of the university tutors as documented in lesson observation reports
- ii) The voices of the supervising teachers have been used on occasions when their lesson observations were submitted with the student teachers' reports. They were given an opportunity to make comments on the formative assessments and were required to write a summative report on fourth-year student teachers.
- iii) The voices of the student teachers themselves, as per their reflections on their teaching during focus group discussions, entries in their reflective journals and their reflective essays on their final TE sessions

For the most part, these sources of data made it possible to identify the level at which each student teacher taught within each facet of teaching practice over the four years of study. However, in some instances, no relevant data were available. This may be because that facet did not pose a problem, as university tutors indicate that they "*tend not to notice when something goes right*" (UT FGD).¹⁰³ However, an assumption that 'all is fine unless explicitly commented on' is

¹⁰² See p. 133.

¹⁰³ Quote already used on p. 139.

inherently flawed. When the lesson is highly problematic, university tutors “*just pick out five or so critical points to discuss rather than overwhelm the student*” (UT FGD). Therefore, where no data exist about a facet of the student teacher’s teaching practice, it will be specifically noted.

The portraits of the student teachers will be discussed using the facet levels as a conceptual framework.¹⁰⁴ The diagram, shown in Figure 6.1, p. 281, will be provide a structure onto which a student teacher’s levels of teaching will be plotted for each year of study. The level of teaching demonstrated by the student teacher will be shown by shading the relevant level for each facet. The changes evident in the diagrams will therefore produce a portrait that shows the development of each of their teaching over a four-year period.

The examination of the five portraits will reveal three developmental patterns associated with ‘learning to teach’. Firstly, there are variations between the levels of teaching of student teachers within the same year of study. Secondly, it will be shown that the teaching of student teachers is generally not uniform at one level across all facets. There are often facets where their teaching is at a higher level than others. These are termed ‘leading facets’. In other cases, a lower level of teaching in a facet constrains their progress. These are ‘lagging facets’. Thirdly, it will be shown that the teaching of particular student teachers changes across various contexts and across various learning areas. The chapter will end with a discussion of the factors that contribute to the non-linearity of the process of ‘learning to teach’.

¹⁰⁴ As shown in Figure 7.1, p. 285.

A portrait of Brenda

Brenda is a white female student who completed her schooling in a well-resourced suburban school. She recalls her schooling as being in a “*very transmission mode environment, where [learners] just got reams of notes to highlight and ask any questions [they] may have*” (S 3 FGD).

After matriculating, she spent four years working as a travel agent. In her job, she was training others and found that she “*really enjoyed the teaching side of things*” (S 3 FGD). She reconsidered her career choice and registered for a teaching degree. She began her teacher education with quite idealised and romanticised views of how she “*didn’t want to be like ‘shouting fishwife’ teachers [she] had*” but rather had visions of herself being “*young, ‘vibey’ and approachable*” (S 3 FGD). She anticipated that she would not need to shout, as her learners would “*listen to [her] and ... grasp every concept that [she] puts out there*” (S 3 FGD).

Brenda related that many schools she visited during TE session “*were very structured, like my own high school*” (S 3 FGD). Brenda adjusted easily and “*had very little problem slotting in*” (S 3 FGD).

Brenda was a diligent, serious student, who demonstrated a “*highly committed and professional attitude*” (UT LO 4). She was extremely hard working, setting very high standards for herself. She quickly started to devise participative lessons, but her early attempts were undermined by her lack of classroom management skills. By her fourth year, she had at her disposal a large repertoire of routines for managing her classroom.

It will be shown how Brenda took extreme care to research her lesson topics in some depth and gave much thought to preparing purposeful and educationally sound learning experiences for her learners. She relied heavily on her carefully considered preparation, which drove her teaching practice. Many of her lessons

worked out superbly. However, her teaching practice consistently lagged in Facet 5: 'Monitoring learning', which resulted in a tendency not to consider levels of learner understanding during the course of her lessons. It will be shown how her leading facet (Facet 2: 'Preparation') interacts with the lagging facet (Facet 5: 'Monitoring learning'), culminating in her persistent reluctance to deviate from her planned lesson steps.

University tutors, throughout her years of study, encouraged Brenda to relax, enjoy her teaching and shift her focus away from her own performance and concentrate more on responding to her learners. In a final comment, her university tutor advised her, "*Being a little more relaxed and more attentive to learners' needs, [and] being genuinely involved in the classroom process, is a personal discipline worth working at*" (UT LO 4). However, it was his belief that in another context, free of the assessment implicit in a TE, she would probably become "*more responsive to the learners quite naturally*" (UT LO 4). Despite these concerns, Brenda obtains 75% for her TE mark, making her one of 31 student teachers (out of the group of 66) who were awarded a distinction mark for TE.

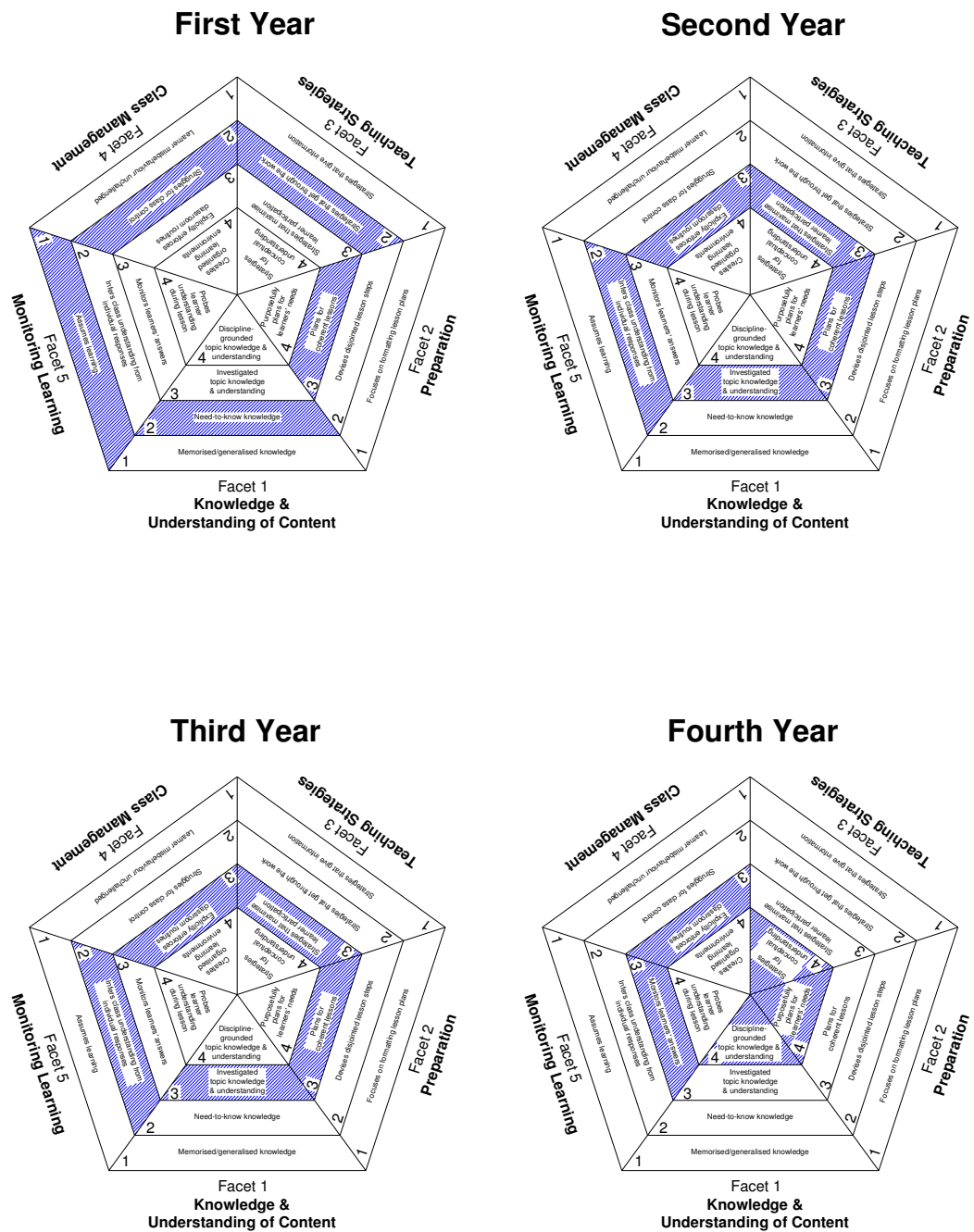


Figure 7.2: The development of Brenda's teaching practice over four years of study

Brenda's first year:

KNOWLEDGE & UNDERSTANDING OF CONTENT: Probably need-to-know knowledge (Facet 1, Level 2)

Lesson observation reports from Brenda's first year do not reflect her levels of subject matter knowledge or understanding of lesson content. However, Brenda herself recalls how uncomfortable she felt in teaching lessons where she knew only what learners needed to know. She "*found it difficult to teach a concept that [she was] weak at, for example telling time on a clock*" (S 3 FGD)¹⁰⁵. Sometimes she found that "*no matter how you try the students don't grasp the concept and it can drag on and on*" (S 3 FGD). Brenda concedes that during her first year, she taught lessons with a need-to-know knowledge of the lesson topic (Facet 1, Level 2).

PREPARATION: Plans for coherent lessons (Facet 2, Level 3)

Brenda's lesson plans were "*detailed and thorough*", right from the beginning, with "*worthwhile outcomes and activities*" (UT LO 1). However, she wrote a script for her lesson. Her university tutor encouraged her rather to plan key ideas, saying, "*Maybe if you didn't plan every word, you would relax a bit more – now that you have confidence to stand in front of the class*" (UT LO 1). In her first TE, Brenda was heavily dependent on her lesson plans, holding onto them throughout her lessons. Her university tutor commented, "*When your lesson is well thought out, you don't need your lesson plan with you*" (UT LO 1).

Brenda remembers how she initially relied heavily on guidance from "*experienced teachers and textbooks*" to formulate her outcomes and find suitable activities (S 3 FGD). With the assistance and support of her supervising teacher, she was able to plan coherent lessons at Level 3. The observed lessons were therefore coherent, although no evidence exists regarding the quality of lessons she may have prepared independently.

¹⁰⁵ She confirmed that this was a topic she taught in her first year.

TEACHING STRATEGIES: Strategies that get through the work (Facet 3: Level 2)

In Brenda's first attempt at teaching, she did a lot of talking and explaining. Her university tutor suggested that she "*try to maximise learner participation in [her] teaching time. e.g. give a question where learners can chat in pairs for 1 - 2 minutes*" and "*involve the learners as much as possible*" (UT LO 1). Her university tutor was providing a vision of teaching strategies at a higher level (Facet 3, Level 3: Strategies that maximise participation). She integrated the feedback readily and by her second observed lesson, Brenda taught using a lesson formula to get through the work, which consisted of "*a pair discussion [around] a couple of probing introductory questions, followed by a worksheet activity*" (S 4 RJ). She taught at Level 2 (Strategies that get through the work) for most of her first year.

By her second TE session, Brenda attempted to experiment with more sophisticated participative teaching strategies. However, her level of classroom management (Facet 4, Level 2) was lagging behind her attempts to employ participative teaching strategies (Facet 3, Level 3). Her university tutor noticed this mismatch and acknowledged that her first attempt was not well managed, saying, "*This lesson needed a lot of organisation. It's good that you are experimenting with group work, but you need to structure the lesson more carefully. Experience is needed – keep trying!*" (UT LO 1). She encourages Brenda to persevere. Brenda experienced a tension when her classroom management skills were not yet able to support this type of teaching strategy. Her leading facet (Facet 3: 'teaching strategies') was hence unsupported by a lower level of teaching in another (Facet 4: 'classroom management').

CLASSROOM MANAGEMENT: Struggle for Control (Facet 4, Level 2)

Brenda was initially very nervous to stand up and teach learners. In her first observed lesson, she was told to "*take charge and provide the leadership*" (UT LO 1). By the next lesson, Brenda framed her learners extremely tightly, to

minimise potential for disruption (Facet 3, Level 2). Her university tutor encouraged her to loosen her control slightly, saying, *“Be careful not to be too strict that you don’t allow for any spontaneous interaction. It’s okay to have an occasional laugh”* and *“Try to relax and have fun while you are teaching – enjoy being with the learners!”* (UT LO 1). Brenda recalls how she learnt to cope by *“mirroring an existing routine set out by [her supervising] teacher”* (S 3 FGD). She did this, sometimes against her ideals about what kind of a teacher she wanted to be, *“trusting what had been established to be tried and true”* (S 3 FGD).

Although her learners were very well behaved during the observed lessons, Brenda’s high degree of formality is typical of the coping strategies associated with defensive teaching at Level 2 of ‘classroom management’, where the student teacher fears losing class control.

MONITORING LEARNING: Assumes learning (Facet 5, Level 1)

There is no direct evidence related to Brenda’s monitoring of learner understanding. However, she confirms her initial dependency on her planned lesson steps (Facet 2, Level 3) saying, *“My idea of a great lesson in first year was when I had successfully relayed what had to be done, as per my planned introduction, body and conclusion”* (S 4 RJ). Her leading facet (Facet 2: ‘preparation’) enabled her choices of teaching strategies but inhibited the way she monitored learning. Her scripted lessons did not allow for unexpected learner responses. She did not make provision for the possibility that learners might not understand. This may imply that in her first year of study she assumed learners’ understanding (Level 1), focusing primarily on her own teaching performance.

Brenda’s second year

In the first TE session in her second year, Brenda taught Geography and English at a High School. Her second TE session was once again in the Intermediate phase of a primary school.

KNOWLEDGE & UNDERSTANDING OF CONTENT: Investigated topic knowledge and understanding (Facet 1, Level 3)

Brenda was well aware of the importance of studying lesson content thoroughly and recalls *“spending hours researching a particular topic”* to acquire more thorough knowledge (S 3 FGD). Her university tutor was quite satisfied with her level of subject matter knowledge, saying, *“Lesson content and cognitive level was suitably challenging for the learners. They offered what were, on the whole, valuable contributions, which demonstrated their application of new knowledge to the learning situation”* (UT LO 2). Brenda actively ensured that she had investigated the topic for each lesson and was evidently teaching at Level 3 of Facet 1: 'Knowledge and Understanding of Content.

PREPARATION: Plans for coherent lessons (Facet 2, Level 3)

Brenda's lessons continued to be *“thoroughly prepared”*, as indicated in a number of comments like, *“Lesson plan is well laid out. Outcomes clearly stated”* and *“As usual, your preparation is detailed and of a good standard”* (UT LO 2). Her *“carefully considered”* preparation included *“appropriate”* learner activities (UT LO 2). Her thoroughly investigated topic knowledge (Facet 1, Level 3) enabled her to prepare informed lessons and construct worthwhile activities. However, at times her exploration of the topic (Facet 1, Level 3) overwhelmed her with information. Without the grounding in a disciplinary base, Brenda sometimes found it difficult to focus and select content that would be core to the topic. Furthermore, Brenda's tendency to focus on her own teaching and not on the prior knowledge, understanding or capabilities of her learners (Facet 5, Level 1), meant that her lesson plans often contained more than learners could realistically achieve during the course of a lesson. In one such lesson, her university tutor noted, *“You have set out to achieve quite a lot this lesson, including the peer assessment. Think a little more about your timing”* (UT LO 2). In another lesson, she planned too much and eventually realised that *“the class won't complete the lesson in the time available”* (UT LO 2). On one occasion, the university tutor intervened quietly and helped her to focus and restructure her lessons. He noted that she *“adapted [his suggestion] well and altered the focus so that the final outcome*

would be achieved” (UT LO 2). She herself reflects, “*One of my difficulties was time management. I had to go back to my planning and see where I went wrong and why did it take so long*” (S 3 FGD).

Indications are that Brenda was planning coherent learning experiences, at Level 3 of Facet 2: ‘preparation’. However, she was still following her lesson plans closely, only deviating from her plan when explicitly advised to do so. Her lessons were not yet fully adapted to the needs of her learners.

TEACHING STRATEGIES: Strategies that maximise participation (Facet 3, Level 3)

During the first TE session, Brenda continued teaching at Level 2 of ‘teaching strategies’, getting through the required work. She was leading a class discussion and giving learners “*neat and accessible*” worksheets to complete (UT LO 2). Her university tutor coaxed her to the next level by asking her to consider maximising learner participation to a greater degree, saying, “*Try to encourage a little more learner participation. Link the lesson content more to their daily lives*” (UT LO 2). By this time, Brenda had developed her class routines so that her ‘classroom management’ (Facet 4, Level 3) was able to support her use of more participative teaching strategies. She hesitantly let go of her tightly framed lessons and again tried to experiment with adventurous teaching strategies – this time with much more success. Her university tutor summed up her progress, “*You have planned some challenging and worthwhile activities for the pupils to complete. Great that you have a variety of activities that must be completed as a group, in pairs and individually*” and “*You facilitate the groups working together well. They all seem to be working hard at completing their activity. You have been brave enough to try something new and different and it has been successful*” (UT LO 2). Brenda was teaching at Level 3 of ‘teaching strategies’, experimenting with more adventurous participative strategies to maximise learner participation.

CLASSROOM MANAGEMENT: Explicitly enforces classroom routines (Facet 4, Level 3)

Brenda demonstrated that she had moved beyond her struggle for control, typical of Level 2 of classroom management. She was now able to settle learners and had established some classroom routine. For example, her university tutor noted, *“Group control is also good – you did not allow ‘cutting out and pasting in’ of notes to go on and on; learners were required to raise their hands”* (UT LO 2). The combination of this evidence suggests that Brenda was explicitly beginning to enforce basic classroom routines, indicative of Level 3 of ‘classroom management’. However, there were still certain aspects of classroom management about which Brenda was receiving advice. Her university tutor coached her in some general aspects of classroom management, for example, *“Watch where you stand in terms of the view of the overhead – some learners could not see”* and *“If you are interrupted by an outsider bringing notices, rather hand them out at the end of the lesson”* (UT LO 2).

MONITORING LEARNING: Infers class understanding from individual responses (Facet 5, Level 2)

Brenda questioned learners during the lessons, but did so rather to encourage learner participation than to check levels of learning. In both TE sessions, university tutors encouraged Brenda to probe the learners’ understanding during her lessons. Her university tutor suggested that she *“direct questions at those whose hands are not up to assess their comprehension”* (UT LO 2). Both her university tutors indicated that while she might manage the lesson well at the start, she still needed to *“circulate through the class, attending to their needs”*, to see where *“further clarification”* was needed (UT LO 2). Her supervising teacher advised her to *“ask questions constantly to determine if learners have understood the concepts”* and *“include an exercise after each section to reinforce”* what she taught (ST 2). At this stage, Brenda was focusing largely on her planned lesson steps and her own teaching, rather than on the learners. She generalised the evidence from individual learners to assume a common understanding across the class. This is consistent with Level 2 of Facet 5: ‘monitoring learning’.

Brenda's third year

In her third year, Brenda completed one TE session at a rural farm school, in Kwena Basin, Mpumalanga. Her university tutors once again noted Brenda's anxiety and nervousness. After her first lesson observation, her university tutor encouraged her, saying, "*You are well on your way – relax now and enjoy your Teaching Experience*" (UT LO 3). By the end of the TE session, her university tutors were commenting that she had become a "*confident, pleasant and serious educator*" who had "*a lovely quiet, calm manner in the class*" (UT LO 3). Her university tutor noticed a big difference in her manner by the end of the session, saying, "*Nice manner with the children – suddenly you have relaxed*" (UT LO 3). One of her university tutors commented, "*What a privilege to see you in action!*" and another congratulated her on the "*excellent presentation on [her] outstanding lessons*" (UT LO 3).

KNOWLEDGE & UNDERSTANDING OF CONTENT: Investigated topic knowledge (Facet 1, Level 3)

Although there were no specific comments related to Brenda's level of subject matter knowledge, a university tutor pointed out, "*maybe the amount of work is overwhelming*" – a problem associated with Level 3, where the student teacher investigates topics thoroughly, but experiences difficulty in selecting core content (UT LO 3).

PREPARATION: Plans for coherent lessons (Facet 2, Level 3)

Brenda's preparation continued to be "*neat and detailed*" and she was observed as "*putting a huge amount of time and effort*" into the presentation of her lessons (UT LO 3). During her time at Kwena basin, Brenda realised that her teaching resource materials should be "*totally relevant to topic and not just pretty decorations to brighten up the classroom*" (S 4 RJ). Her university tutor "*highly commend[ed]*" her use of "*carefully chosen and designed teaching aids*" (UT LO 3). This careful consideration regarding the appropriateness of teaching resources shows the beginnings of development of Brenda's pedagogical content

knowledge, as she selected and used resources. With Facet 2: ‘preparation’ as the leading facet of her teaching practice, Brenda had clear ideas of what she wanted her learners to do and considered how to set up the classroom environment effectively. She began to consider the purpose of her lesson as well the context of her learners in preparing coherent lessons (Level 3 of ‘preparation’).

TEACHING STRATEGIES: Strategies that maximise participation (Facet 3, Level 3)

Brenda continued to use participative teaching strategies, with her lessons showing “*maximum learner participation*” (UT LO 3). Her university tutors commended the way she drew learners into her lessons, engaging them in enjoyable tasks. Her university tutors said, for example, “*Excellent introduction which led children into a greater participatory role in the lesson*” and “*You have approached this topic in such a way that your learners are engaging confidently in your lesson. Great activities – learners seemed to be enjoying them*” (UT LO 3). She strove to devise tasks that appeal to learners and capture their interest. The data suggest that Brenda was using ‘teaching strategies’ at Level 3 confidently.

CLASSROOM MANAGEMENT: Explicitly enforces classroom routines (Facet 4, Level 3)

Brenda seemed to be in control of her classroom and no longer needed to mimic the supervising teacher. She reflected how she “*now bases her ideals on teachers’ methodology with her own good intentions involved in it too*” (S 3 FGD). Her university tutors commended her “*good classroom management skills*” and her use of “*clear instructions and routines*” to structure her learners (UT LO 3). She seemed to be using class routines quite explicitly and was therefore still managing her classroom at Level 3. This level of class management was now supporting her selection of participative teaching strategies (Facet 3).

MONITORING LEARNING: Infers class understanding from individual responses (Facet 5, Level 2)

A university tutor advised Brenda to “*Quickly check which ‘big words’ the children remember – all will listen a little more carefully at the next reading*” (UT LO 3). Brenda still did not seem to be checking whether her learners comprehended, let alone understood conceptually, what she was teaching. In one instance, two university tutors were observing a particular lesson together. One of the tutors urged her to “*watch the body language of the children – they are getting tired of looking at the pictures*” and the other one said, “*The class is getting restless...You are really working hard trying to make this lesson float – but they are still bored and are talking as soon as you turn away*” (UT LO 3). The university tutors’ comments suggest that the boredom of the learners was related to Brenda’s inability to sense when they understood fully and were ready to move on. It seems that she pushed ahead with her planned lesson steps regardless. Although up to now, her preparation (Facet 2) had acted as a driving force that enabled her teaching practice, it now began to act as a constraint. She was relying heavily on her preparation to guide her teaching, rather than allowing her teaching to be guided by degrees of learner understanding. She did not seem to have made progress in this facet, still monitoring learning at Level 2.

Brenda’s fourth year

KNOWLEDGE & UNDERSTANDING OF CONTENT: Discipline-grounded topic knowledge (Facet 1, Level 4)

Brenda’s dedication to thorough research on her topics and her ability to internalise the information resulted in her university tutor exclaiming, “*What a pleasure to be in your class, paging through your file containing the accumulation of three weeks of extremely consistent work*” (UT LO 4). Brenda showed a “*great deal of knowledge and insight into the learning areas*” (UT LO 4). Her supervising teacher commended her “*research for all content-based lessons*” (ST 4). Although she made a few mistakes with respect to terminology, these errors were “*minimal and immediately corrected*” (ST 4). Brenda was able to draw on

her growing insight into disciplines and learning areas, so as to conceptualise meaningful learning experiences for her learners. She integrated lesson topics across the curriculum wherever possible and “*also referred back to previous work to show [learners] that certain concepts do not exist in isolation*” (ST 4). These links were made possible by her topic knowledge grounded in disciplinary insights (Facet 1, Level 4). Brenda’s insight into the learning areas in which she was teaching was evident to both her university tutor and supervising teacher.

PREPARATION: Purposefully plans for learners’ needs (Facet 2, Level 4)

Brenda possessed a “*keen sense of [her] own high expectations of [her]self*” and her reflections on her lessons were “*so rigorous and searching – and sharp*” (UT LO 4). She integrated her reflections into future planning. For example, although she again prepared too much for the time available, her university tutor indicated that, “*after some critical and insightful reflection, it was necessary to adjust some of the qualitative activities that had been planned*” (UT LO 4). Brenda continued to pay close attention to her teaching resources, which “*she used well – they were not ‘window dressing’*” (ST 4). Her supervising teacher also commended her on the “*excellent*” worksheets she had designed (ST 4). Her university tutor was similarly impressed, noting, “*The worksheet on rhyming words was well pitched – with a lot of challenge*” (UT LO 4).

Brenda’s supervising teacher described her preparation as “*excellent*” (ST 4). The data show that she was planning units of lessons with purpose. The university tutor made an interesting comment to Brenda, intimating that her excessively detailed lesson planning might be ultimately responsible for her lack of personal engagement with the learners in her class. He summed up with, “*Maybe [she is] prepping too much and [she] might need to stand back from all the detail – to see the heart of things*” (UT LO 4). Whereas her highly considered preparation initially served as a leading facet that enabled the development of her teaching practice, her university tutor reflected that her dependency on her lesson plans might be constraining her from genuinely engaging with the learning process.

TEACHING STRATEGIES: Strategies for conceptual understanding (Facet 3, Level 4)

Brenda's lessons drew on a wide range of teaching strategies, including "*a variety of co-operative learning and group work strategies, as well as individual work and pair work*" (ST 4). She used variety in her teaching strategies to "*keep learners on their toes*" and "*make the time a useful learning opportunity*" (UT LO 4). She still maximised learner participation in her lessons by being "*careful to involve everyone*" and got the learners to work in pairs, in groups and by themselves (UT LO 4). In one lesson, her university tutor noted, "*I enjoyed the meaningful interaction clearly structured with your learners today*" (UT LO 4). Even when exploring with an adventurous teaching strategy, like a game, her focus was on the educational aspect, rather than on the entertainment value. Her university tutor commented, "*The game was relevant and brought together a range of information relating to your topic. It was especially good to see you reinforcing information from the game in the discussion afterwards – and relating this all this to the learners' lives outside of school*" (UT LO 4). Brenda's preparation gave "*thoughtful and comprehensive consideration to learning resources and methodological possibilities*", which resulted in an informed and purposeful selection of teaching strategies to promote conceptual understanding at Level 4 (UT LO 4). Her achievement in this facet rested on a firm basis of grounded topic knowledge (Facet 1, Levels 4) and purposeful preparation (Facet 2, Level 4). Brenda had begun to use her 'knowledge and understanding of content' (Facet 1) to inform her 'preparation' (Facet 2) and selection of appropriate 'teaching strategies' (Facet 3). This shift indicates her construction of PCK from an integration of general pedagogical knowledge, subject matter knowledge and knowledge of learners and context.

CLASSROOM MANAGEMENT: Explicitly enforces classroom routines (Facet 4, Level 3)

Brenda demonstrated a wide range of classroom management techniques. Her university tutor elaborated, "*I also enjoyed your management of the learning situation in general e.g. giving recognition to good behaviour in the context of a*

relatively well-motivated class” and *“Great to see you using rhythmic clapping so effectively. It was simply one of a handful of management strategies you were using”* (UT LO 4). She was observed during an ‘administration’ period, which *“is potentially a disorganised and even chaotic, time”* but her university tutor thought she *“handled this tricky period in a very successful way”* (UT LO 4). Brenda showed some insecurity when she was using explorative teaching strategies like the game. In an attempt to maintain some control, she sometimes tried to impose unworkable rules on the learners. Her university tutor indicated that these were inappropriate, saying, *“Your rules for the game about who was allowed to speak were more or less ignored. I think you would need to do some very special magic to have them taken seriously”* (UT LO 4). Still, Brenda was largely able to control her class through established and enforced classroom routines, at Level 3 of ‘classroom management’.

MONITORING LEARNING: Probes learner understanding during lesson (Facet 5, Level 3)

Brenda’s monitoring of learning continued to be a lagging facet in her fourth year. In one lesson, learners marked their maths homework as she called out the maths solutions. Her university tutor prompted her to reflect on her use of monitoring, saying, *“I wondered why you didn’t invite solutions from the learners”* (UT LO 4). By calling out correct answers and requiring learners to tick their answers, Brenda, again, assumed that her learners understood the concepts and had correctly completed their homework. During her final TE session, her supervising teacher eventually observed Brenda taking *“time to sit with learners on an individual basis during lessons to guide and help them”* when she noticed that they were not comprehending. In her second TE session, she finally used her lesson plans more flexibly. She conceded, *“I am no longer freaked out when my lessons go over time, or if I deviate from the lesson plan, as long as learners are enjoying and understanding the concept being taught”* (S 4 RTE). Brenda only began deviating from her lesson plans when she began to monitor learning to some extent. Without the monitoring of learning, she did not perceive any need to deviate from her carefully considered lesson steps.

At times, Brenda was monitoring learning at Level 3, but occasionally (like when she was calling out maths answers), she was assuming understanding (Facet 5, Level 1).

General comments about Brenda

It has been shown how the development of Brenda's teaching practice was driven primarily by her thorough investigation of the topics she was teaching and the careful thought that went into her preparation. However, while this enabled her early attempts at teaching, it ultimately became a constraint, as she focused more on the delivery of her prepared lesson steps, than on the learning and understanding during her lessons. Her reluctance to monitor learning ultimately meant that she remained rather inflexible in the execution of her lessons, as she saw no reason to deviate from what was contained in her lesson plans. In spite of these constraints, Brenda had eventually begun to construct a fair degree of PCK, which she used effectively to prepare conceptually sound and purposeful learning experiences for her learners.

A portrait of Amos

Amos is a black male student whose parents are both teachers. In his family, knowledge is highly valued. He chose to be a teacher because he regarded himself as “*a peoples’ person*” who “*likes interacting with others*” (S 3 FGD). University tutors recognised this quality in Amos and described his “*engaging*” and “*likeable*” personality and how his “*enthusiasm*,” and “*positive attitude*” helped him to “*convey a sense of real interest*” and “*inspire learners to listen*” (UT LO 1 - 4). By all accounts, university tutors recognised Amos’ potential to develop into a “*high quality educator*” who “*has much to offer the teaching profession*” (UT LO 1).

As a learner, he attended a township school, where he experienced learning that was “*passive and the teacher is like an artificial intelligence who knows everything and [may] not be challenged*” (S 3 FGD). As someone with a broad general knowledge, Amos describes how frustrated he felt when his “*teachers used ‘old’ information*” and he was not able “*to challenge the teacher*” within the authoritarian context of township schooling (S 3 RTE).

Amos can be regarded an example of a student teacher who is passionate about his teaching, is well informed, but employs a limited repertoire of teaching strategies, employing primarily transmission-mode and class discussion teaching strategies. The memory of his frustration with the flaws of his own schooling underpins his perception of what constitutes good teaching: giving “*correct information*” to the learners and allowing them to discuss it (S 3 RTE). Throughout his years of study, Amos adjusted, but never fundamentally reconstructed, this perception. Amos notices a large difference when he compares the learning he experienced as a learner to the type of participative lessons he observes on TE. He asserts, “*My way of [rote] learning [when I was a learner] was the worst one. The way the suburban schools teach is a good way - Active learning is better*” (S 3 FGD). However, it will be shown that these views are expressed, but not enacted in his teaching.

Through his BEd, Amos acquired considerable insights into subject knowledge. He learned how to plan lessons and manage a classroom capably. However, his repertoire of teaching strategies never really progressed beyond the use of teacher-led discussions and this became the lagging facet that undermined his teaching practice in other facets. In his second year, Amos found a lesson formula with which he was comfortable and adhered to it throughout the rest of his studies, despite considerable challenges from six different university tutors, who commented that his teaching strategies led to limited learner interest and engagement with the subject matter. However, Amos had two leading facets, namely his 'knowledge and understanding of content' (Facet 1) and his 'classroom management' (Facet 4). On the grounds of these strengths, Amos passed his final TE with a mark of 68% despite the ongoing problems associated with his selection and use of teaching strategies (Facet 3).

Amos' portrait shows how proficiency in both class management and subject matter knowledge does not necessarily translate into the construction of worthwhile learning experiences. His limited repertoire of teaching strategies undermined other facets of his teaching, including his ability to plan coherently and his ability to monitor learning.

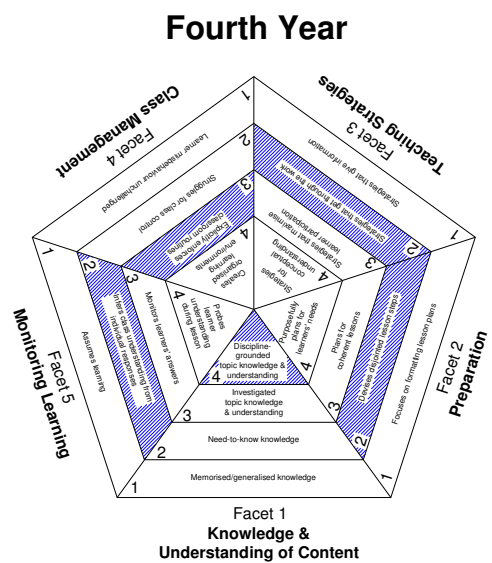
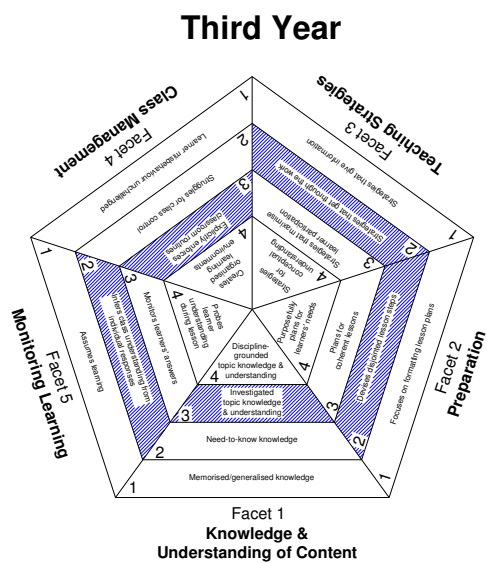
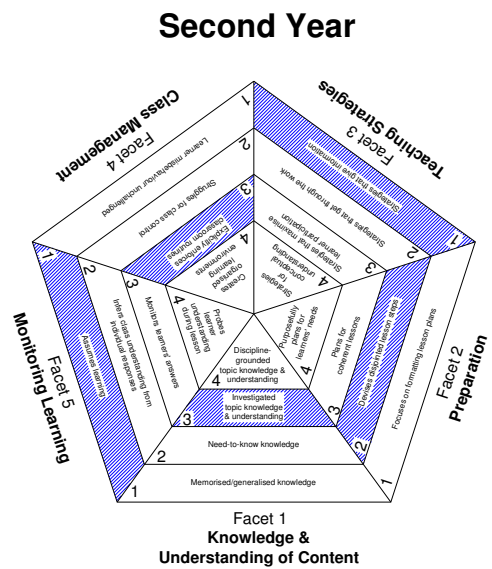
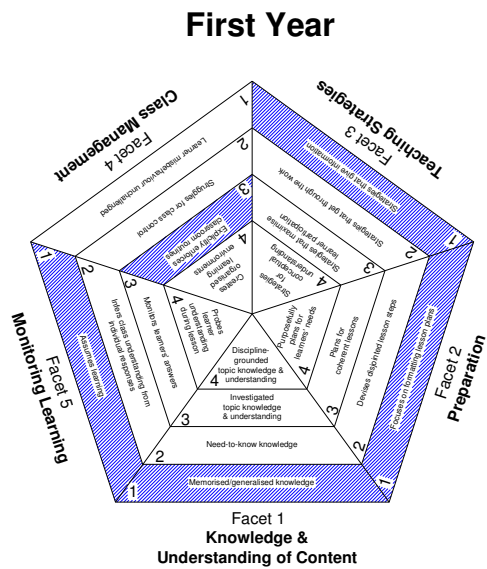


Figure 7.3: The development of Amos' teaching practice over four years of study

Amos' first year

KNOWLEDGE & UNDERSTANDING OF CONTENT: Generalised knowledge (Facet 1, Level 1)

Amos' lessons conveyed his own misunderstandings about daily and annual motion of the Earth to learners. His university tutor commented, for example, *"You explained the 24 hour cycle reasonably well using the globe and torch. Unfortunately you seemed confused on the [Earth's] annual cycle. Where does the 365-day cycle come from? How does it differ from the 24-hour cycle? Since when does the earth tilt one way and then the other?"* (UT LO 1). In another lesson, his content did not progress beyond general knowledge. His university tutor asked, *"Do you think you gave enough input of relating your lessons to plants? What is there to say other than they get leaves, flowers and lose leaves? Have [the learners] learnt anything new?"* (UT LO 1). Such questions were intended to prompt Amos to explore the depth of the content he was offering learners during his lesson. Amos' knowledge and understanding of the lesson topics began at Level 1, with him teaching from generalised knowledge of the topics.

PREPARATION: Focuses on formatting of lesson plan (Facet 2, Level 1)

In his first TE session, his university tutor told Amos that his file needed to *"document all [his] teaching"* and that *"there should be many more lesson plans"* in his file (UT LO 1). Given his self-assurance, *"enthusiasm and positive attitude"* (UT LO 1), it is unlikely that he was opting out of teaching. It is more probable that he was completing lesson plans only for the lessons that his supervising teacher and university tutor observed. This would indicate a perception that lesson planning involves simply correctly filling out a form – without much accompanied thought. He begins preparing at Level 1 of this facet.

TEACHING STRATEGIES: Strategies that give information (Facet 3, Level 1)

From the outset, Amos was eager to tell his learners what he saw as *"correct"* information, which manifested in his tendency to *"teach theory from the definition which does not facilitate understanding"* (UT LO 1). His university tutor described one introduction (of looking up the meaning of the word 'suffix') as

“alienating and boring”, adding, “hopefully Amos will be exposed to more effective methodology and more interesting approaches during his studies” (UT LO 1). His university tutor attempted to show Amos how to promote conceptual understanding, by advising him to “Rather start with examples, which you have carefully selected – so that learners can tell YOU what the pattern and the rule is. Then you will have turned them into thinkers as well – and they will understand and remember better” (UT LO 1). In another lesson, Amos was counselled to “introduce the concepts before the discussion – and [he would] find a better quality of discussion emerges” (UT LO 1). These suggestions were intended to provide Amos with a vision of how teaching could be restructured in such a way as to promote conceptual understanding.

These comments and suggestions imply that Amos was predominantly involved in *explaining* concepts to learners, through a transmission-mode teaching strategy, typical of Level 1 of this facet.

CLASSROOM MANAGEMENT: Explicitly enforces classroom routines (Facet 4, Level 3)

This university tutor’s comments say very little about Amos’ classroom management – focusing exclusively on the quality of his teaching and the learning experiences he is providing for his learners. Amos was able to teach his lessons while *“maintaining good eye contact”* with *“lively movements and facial expression that communicates interest”*, so he appears to be connecting with learners. His university tutor makes comments like *“It was a pleasure observing you in action”* and *“I really enjoyed your enthusiasm and your positive attitude”* (UT LO 1). Although these comments do not specifically address issues of classroom management, it appears that Amos is in control of the class and able to deliver the lesson he planned. Although it is not conclusive, indicators suggest that he managed his classroom at Level 3. However, I draw this conclusion by default, rather than on the firm foundation of concrete evidence.

MONITORING LEARNING: Assumes learning (Facet 5, Level 1)

There is little evidence that indicates if, or how, Amos was monitoring the quality of learner understanding. However, during one lesson, Amos' university tutor asked him to revise his explanation and instructions, step by step. He explains, *"The reason I made the suggestion I did was because the task was not clear to me"* (UT LO 1). The fact that intervention was necessary during this lesson suggests that Amos had assumed that learners understood, indicative of Level 1.

Amos' second year

KNOWLEDGE & UNDERSTANDING OF CONTENT: Investigated topic knowledge and understanding (Facet 1, Level 3)

During his second year, Amos investigated the content for his lessons more thoroughly. In one lesson, though, his university tutor commended him on his *"good information on the history of the Olympics"* but urged him to *"avoid using notes, because it hampers engagement with the learners"* (UT LO 2). His *"good use of general knowledge adds spice to details"* (UT LO 2). In another lesson, his university tutor wrote that he was *"developing his content knowledge well and has a good general knowledge to draw on"* (UT LO 2). Amos no longer uses generalised knowledge, this year showing considerably more substance and evidence of thorough investigation of his lesson topics. His teaching is based on investigated topic knowledge, at Level 3 of this facet.

PREPARATION: Devises disjointed lesson steps (Facet 2, Level 2)

Although Amos' lesson plans were *"well detailed"*, for many lessons he did not plan learner activities aside from participation in class discussions. Amos recalls how one of his second-year university tutors *"taught [him] a lot"* by helping him better understand the process of focusing outcomes, activities and assessment tasks (S 3 FGD). His university tutor believed that, *"with better structure and conceptualisation, this could be a good lesson!"* (UT LO 2). In one lesson observation report, she explicitly took him through a strategy for planning and conceptualising a lesson: *"In order to maximise your potential, you need to work*

on how to effectively conceptualise your lessons. Once you have selected the content you want to teach, you need to spend time considering how you will: i) Organise/sequence it; ii) Teach it; iii) Design tasks that get learners to engage with what you've taught and take it further; iv) Know what the learners will have learnt by the end of the lesson" (UT LO 2). Through this process, she attempted to help him think about how to construct coherent lessons in which his outcomes were related to his tasks. His preparation was at Level 2: his lesson plans were written in an acceptable format, but his lesson steps were not conceptually coherent.

TEACHING STRATEGIES: Strategies that give information (Facet 3, Level 1)

In the first TE session of his second year, Amos again dominated his lessons with *"lengthy and drawn out"* explanations and minimal levels of learner participation, prompting his university tutor to comment, *"Make sure you involve all the learners"* (UT LO 2). This approach continued to be typical of the Level 1 teaching strategies he used during his first year. In one of his lessons, for example, his university tutor attributed the lack of quality in the learning of learners to Amos' inappropriate teaching strategy, saying, *"Remember, you do not have to speak for a long time. Allow learners to speak. Your explanation was too long, that is why you could not get good responses from your learners"* (UT LO 2). In this comment, she attempted to encourage him to use teaching strategies not merely to give information, but also to maximise learner participation (at Facet 3, Level 3).

While his first year university tutor urged Amos to encourage learners to construct their own understandings, rather than transmit his understanding, his second-year university tutor was more concerned about motivating him to plan a written follow-up learner activity, saying, *"You did not have a worksheet, you should have asked learners to take some notes – like write out the definitions you were explaining"* (UT LO 2). These comments encouraged him to plan a task with the

intention of getting learners to participate in some activity during the lesson (Facet 3, Level 3).¹⁰⁶

With intervention from the university tutor regarding lesson preparation, a significant improvement occurred in the level of learner involvement in Amos' teaching. Amos' teaching strategy progressed from a lecturing strategy to a formula of teacher-led discussion, followed (sometimes) by individual tasks. Subsequent lesson observations noted *"Good learner participation during your introductory section and you continued to elicit learner interaction even during the body of your lesson – learners did not merely sit and listen to you – they were able to provide input of their own"* (UT LO 2). During his second year, Amos found a lesson format that he adhered to throughout the remainder of his studies. He moved to Level 2 of 'teaching strategies'

CLASSROOM MANAGEMENT: Explicitly enforces classroom routines (Facet 4, Level 3)

Amos took charge of his class and established *"very good classroom management"* (UT LO 2). He used routines, as commented on by his tutor: *"Learners co-operated willingly with your group calling procedure"* (UT LO 2). He challenged unacceptable behaviour, with his university tutor applauding the way he *"calmly but seriously reprimanded latecomers"* (UT LO 2). Although Amos' class management was largely unproblematic, there were certain routines he needed to enforce more emphatically. His tutor exhorted him to, *"Ensure learners are completely silent when groups are reporting back, although this was generally good"* (UT LO 2). Amos taught at Level 3 of 'classroom management', making consistent and explicit use of classroom routines.

¹⁰⁶ It is interesting to note that in his fourth year, Amos did precisely this, requiring his learners to copy down his definitions. However, this time, his university tutor was striving to help him consider the educational value of the tasks he devised (Facet 3, Level 4). She asked, *"Instead of copying, what could they do?"* (UT LO 4). This example illustrates how university tutors may contradict one another.

MONITORING LEARNING: Assumes learning (Facet 5, Level 1)

His university tutor expressed concern that because Amos was not giving learners tasks (Facet 3, Level 2), he was not assessing the quality of their learning. His lagging facet (Facet 3: 'teaching strategies') severely constrained his ability to monitor learning. His supervising teacher therefore urged him to address monitoring of learning through his use of teaching strategies, saying, "*Give learners some activities to do to see if the outcomes were achieved or not*" (ST 2). His university tutor asked him to think his assessment through more thoroughly. She invited him to engage in some reflection by asking, "*How can you tell that you have achieved your outcomes? Isn't it possible that a learner can fill in the bank deposit slip and yet not have personally achieved your outcomes? What other techniques could you use to find out their level of understanding?*" (UT LO 2) These comments prompted Amos to reflect on the evidence he used to determine whether learners understood. The university tutor gently encouraged him to seek evidence beyond learners' capacity to provide appropriate answers. His monitoring of learning seems to be at Level 1: Amos still assumed that learner understanding was occurring spontaneously during his lessons.

Amos' third year

In his third year, Amos conducted one of the TE sessions at a township school, without a university tutor observing his lessons.

KNOWLEDGE & UNDERSTANDING OF CONTENT: Investigated topic knowledge and understanding (Facet 1, Level 3)

In a general comment regarding his TE, Amos' supervising teacher described his lessons as "*well-researched*" (ST 3). He was evidently teaching with thoroughly investigated topic knowledge, grounded in insights into the learning areas in which he had specialised. His considerable degree of subject matter knowledge became a leading facet, which to some extent, compensated for lower levels of teaching in other facets.

PREPARATION: Devises disjointed lesson steps (Facet 2, Level 2)

Although his preparation was “*adequately detailed*”, his university tutor noticed an absence of assessment tasks in the planning and asked him to attend to this. In the second observed lesson, he asked, “*Still no assessment?*” (UT LO 3). Amos’ insistence on conducting teacher-led discussions as his teaching strategy of choice (Facet 3, Level 2) directly inhibited his planning of assessment-linked learner activities. His lesson planning did not coherently develop learner understanding in a purposeful manner. Although his plans were thorough and written out in an acceptable format, there was still a lack of internal coherence in the lesson as a whole, as his lessons did not consider and lead to activities for assessment. His teaching practice within this facet was hampered by the lagging facet (Facet 3: ‘teaching strategies’) and therefore remained at Level 2.

TEACHING STRATEGIES: Strategies that get through the work (Facet 3, Level 2)

During his elective, Amos again adhered closely to a Level 2 teaching strategy, dominated by “*teacher-led discussion, group discussions and report backs*” (ST 3). In the second TE session, his university tutor noted, “*You asked some good questions, however, many weren’t participating – get them involved*” (UT LO 3). Once again, his university tutor was seen to be urging him to move towards maximising learner participation (Facet 2, Level 3). His choice of teaching strategies, as his lagging facet, precluded him from devising tasks for learners to develop their conceptual understanding of the content.

CLASSROOM MANAGEMENT: Explicitly enforces classroom routines (Facet 4, Level 3)

Amos once again displayed skilful classroom management, enforcing routines consistently. His university tutor noted, “*Good control of class. You were strict on hands up, no shouting out. This is good*” (UT LO 3). Although Amos perceived discipline as problematic at the elective school, his supervising teacher observed two lessons and remarked that “*the class was very orderly*” while Amos was

teaching (ST 3). By all accounts, he maintained Level 3, with classroom routines creating an environment in which learning is possible.

MONITORING LEARNING: Infers class understanding from individual responses (Facet 5, Level 2)

Monitoring learning was problematic for Amos since his lessons were inherently transmission mode (Facet 3, Level 1). When monitoring learning was a problem for the second observed lesson, his university tutor gave him some explicit techniques to implement, suggesting, “*Ask more questions of learners to find out if they understand fully, even draw in the quiet ones*” (UT LO 3). The university tutor’s comment implies that Amos generalised the understanding evident from the answers of some of the learners, without checking the answers of those who did not volunteer. This suggests that he was monitoring learning at Level 2.

Amos’ fourth year

KNOWLEDGE & UNDERSTANDING OF CONTENT: Discipline-grounded topic knowledge and understanding (Facet 1, Level 4)

In his final year of study, Amos displayed his “*thirst for knowledge*” and was described as being “*informed and informative*” (UT LO 4). His supervising teacher commended him for his “*good general knowledge*” and for “*researching his topics thoroughly before presenting them to the learners*” (ST 4). His degree of subject knowledge was evidenced by comments like, “*Good use of correct terminology. Learners had access to the new vocabulary in context*” and “*his lessons demonstrate good conceptual understandings*” (UT LO 4). The data suggest that in Amos’ observed lessons he was teaching from a foundation of discipline-grounded topic knowledge (Level 4).

PREPARATION: Devises disjointed lesson steps (Facet 2, Level 2)

Amos’ supervising teacher repeated the concerns that his university tutors had articulated during his second and third year – that he “*needs to decide which tasks are going to be assessed, so he can make provision for this while planning*” (ST 4). In assisting Amos, the university tutor prompted him to consider the purpose

of his planning, asking “*What are you getting learners to do for themselves, other than pool existing knowledge?*” (UT LO 4). She then urged Amos to “*create initial activities for learners to analyse, explore, read, research*” (UT LO 4). It is clear that, once again, both his university tutor and his supervising teacher were challenging his use of teaching strategies in relation to their impact on his ability to prepare coherent and purposeful lessons. His lesson planning was once again hindered by his limited range of teaching strategies (Facet 3, Level 2) and the consequent absence of learner tasks that monitor learner understanding (Facet 5, Level 2). Evidence suggests that his lessons were still not coherently aligning his outcomes and assessment, so although detailed in parts, Amos’ preparation remained at a Level 2.

TEACHING STRATEGIES: Strategies that get through the work (Facet 3, Level 2)

Amos demonstrated passion for the subjects he taught. This passion, coupled with his “*enjoyment of engaging in discussions and explaining issues*” resulted once again in him conducting lessons with a standard teacher-led discussion as his chosen strategy (UT LO 4). His university tutor cautioned that although he “*manages discussion well,*” he should “*beware of being the ‘Leading Act’ of the lesson all the time*” (UT LO 4). She recorded that “*it was half way into the second period that [his] method changed from teacher-led discussion*” (UT LO 4).

Amos responded to his university tutor’s comments by shifting from teacher-led discussion to group discussions and report backs, which moved his teaching strategies from Level 1 to Level 2. He planned a lesson in this way, but the university tutor observed that, “*the learners worked in groups for a short time, which meant they had some information when asked for feedback, but [Amos] very quickly became the centre of a ‘question-and-answer’ session again*” (UT LO 4). His university tutor further clarified her concern, saying, “*The point is not that ‘learners discuss matters in groups’, but they are given resources to explore and opportunities to contribute to the learning, whether individually, in pairs, in groups or whatever is appropriate to the learning outcome*” (UT LO 4). Through

this comment, his university tutor was attempting to motivate him to consider appropriate teaching strategies that promote conceptual understanding, rather than those that simply give information, or keep learners busy. However, his use of teaching strategies (for the most part) remained at Level 2, with him concentrating on giving information to the learners and extracting it from them.

CLASSROOM MANAGEMENT: Explicitly enforces classroom routines (Facet 4, Level 3)

Amos was firm with learners and clear in his expectations of good behaviour. His supervising teacher noted that, “*his discipline was consistent*” (ST 4). His university tutor noted, “*I liked the fact that being finished didn’t mean ‘licence to talk’. Have you thought about reading time for learners who finish their work?*” (UT LO 4). His supervising teacher, too, advised him to “*ensure that all the other learners are occupied with something*” when he was busy with individual learners (ST 4). He was managing a class at Level 3, having established routines, but still needed to ensure that every learner was meaningfully occupied throughout his lessons.

With too much talking and very little learner activity, Amos found that learners became restless towards the end of his lessons. His university tutor recognised this slip in class control, but urged him to address this through his use of other teaching strategies, saying, “*From learners’ body language, there was not a lot of engagement. Don’t despair about discipline – work on other teaching strategies*” (UT LO 4). This comment revealed the university tutor’s perception that learner misbehaviour was not attributable to poor classroom management, but rather was due to problems related to his use of teaching strategies (Facet 3, Level 2). By paying attention to classroom management (Facet 4), Amos would have been addressing the symptom, but not the root cause of the problem, which was his lagging facet (Facet 3: ‘teaching strategies’).

MONITORING LEARNING: Infers class understanding from individual responses (Facet 5, Level 2)

Amos' supervising teacher noted that because of his transmission mode of teaching (Facet 3 Level 2), after three weeks of TE, "*the English books have two pages of work in them*" (ST 4) with very little attention paid to assessment of learner understanding. His university tutor encouraged him, when marking learners' work, to "*provide some relevant feedback; a brief encouraging comment on some insight; or something to work on*" as "*plain ticks don't do much*" to help learners develop their understanding (UT LO 4).

At the end of his first TE session, Amos' university tutor asserted that "*his teaching was not sufficiently learner centred*", with the result that "*learning did not take place as intended*" (UT LO 4). In another lesson, his university tutor again noted, "*This is another lesson where I find you the centre of discussion. Some learners participate, others sit quietly and listen*" (UT LO 4). Amos seemed satisfied to take answers and comments from those who volunteered, without actively monitoring learning of those who did not volunteer. His monitoring of learning was still at Level 2.

General comments about Amos

In spite of Amos' limited repertoire of teaching strategies, his two leading facets, namely 'knowledge and understanding of content' (Facet 1) and 'classroom management' (Facet 4) ensured that there was some conceptually sound content, although the levels of active *learning* were considerably lower. Some learners engaged with the content through his discussions, but many more were alienated by the teaching strategy he employed. In Amos' final summative TE report, his university tutor commented, "*It is regrettable that four years in the BEd has not been used to develop methodology for active learning through participative activities*" (UT LO 4). His leading facets partially compensated for lagging levels of practice in other facets. The implication is that Amos' problems associated with Facet 2 ('preparation') and Facet 5 ('monitoring learning') would be resolved to a large extent once he expanded his repertoire of teaching strategies.

A portrait of Zanele

Zanele is a black female student teacher, who completed her schooling in a township near Johannesburg. She chose teaching for altruistic reasons, explaining, *“seeing someone achieving gives me pleasure. Knowing that this person was once in my class really does a lot for me”* (S 3 FGD). During her schooling, she was subject to corporal punishment for misdemeanours, learnt by rote and dared not question her teachers. She describes the differences between her schooling and the schooling she observed in suburban schools: *“I came from a background of just listening to the teacher. In my day [as a learner] I was expected to sit passively and absorb as much as I could, where nowadays kids are given the freedom to question. We just learned from a textbook and wrote a test but soon forgot the facts”* (S 3 FGD). She describes how adjusting to such a different classroom environment was initially *“very challenging”* for her (S 3 FGD). One major difference was her experience of being *“too nervous and worried about being beaten”* to concentrate during her schooling (S 3 FGD). She has actively discarded this form of class control, saying, *“A person can’t learn when they are in fear of being beaten. I won’t even contemplate doing what was done to me!”* (S 3 FGD). Zanele deliberately rejected the conception of teaching she observed during her schooling and quickly embraced a new vision of what it means to teach.

Zanele proved quickly that she had the *“makings of a very good teacher”* and was deemed to be a suitable candidate for teaching. A number of university tutors complimented her teaching persona, with comments like, *“lovely presence in the classroom”* and *“pleasant and encouraging manner”* with her learners (UT LO 2 - 3).

While adjusting to multiracial classrooms in suburban schools was a challenge, Zanele quickly began experimenting with participative teaching strategies. She learnt quickly how to manage a classroom and discipline her learners effectively, in a firm, yet gentle, manner. She integrated feedback from university tutors very ably and developed many facets of her teaching practice, demonstrating her ability

to teach sound lessons in her subject specialisations, like Life Orientation and Geography. She drew on this strength and arranged for her university tutors to observe her teaching these subjects in the first three years of her BEd. However, her fourth-year university tutor observed her teaching in other learning areas, where she had a limited understanding of content and operated from lower levels of subject matter knowledge. She did not cope as ably.

Classroom Management (Facet 4) acted as the leading facet of the development of Zanele's teaching practice. Her classroom management developed quickly, creating conditions of possibility for her teaching practice, through supportive learning environments in which conceptual development could take place. Zanele's portrait highlights how a student teacher with exemplary classroom management skills can teach conceptually sound lessons effectively in her area of specialisation, with confidence. However, without conceptual understanding in unfamiliar learning areas, she struggled to formulate conceptually sound lessons and her skilful classroom management was not enough to sustain learner attention and motivation. She was awarded a mark of 65% for her final TE, in the bottom 10 student teachers of the group of 66.

Zanele's first year

KNOWLEDGE & UNDERSTANDING OF CONTENT: Memorised/generalised knowledge (Facet 1, Level 1)

Zanele's university tutor responded to her first observed lesson by telling her, *"Don't forget the real content"* (UT LO 1). This comment suggests that the content of the lesson was generalised, with little substance. In subsequent lessons, she paid greater attention to content, but her subject matter knowledge posed other problems, conveying some of her own misunderstandings to the learners. Her university tutor noted, for example, *"Electricity warms an element – it is not a chemical compound"* (UT LO 1). She was advised to *"work out the answers to the activity sheet"* to reduce the possibility of making other errors as the lesson progressed (UT LO 1). Initially, Zanele taught at Level 1 of this facet with a memorised or generalised knowledge base.

PREPARATION: Devises disjointed lesson steps (Facet 2, Level 2)

Zanele describes how she initially experienced *"problems writing [her] own lesson [plans]"* in her first year (S 3 FGD). Much of the advice and support given to her in her first TE session helped her to write lesson plans and formulate outcomes, as seen in comments like, *"If you look at your activity outcomes, is it what you did during the lesson? During our discussion, we will look at lesson planning"* and *"Remember everything you teach and do (or the learners must do), put it down on your lesson plan. It will help you tremendously"* (UT LO 1). She learned quickly how to write her preparation onto a lesson plan. By her second TE session, her lesson steps were *"detailed enough,"* but she was still experiencing difficulty in formulating outcomes and focusing her lesson on core issues (UT LO 1). *"The lesson lacks structure. Make a summary of all the concepts you want the learners to grasp from the lesson"* (UT LO 1). These comments indicate that Zanele was planning her lesson steps without being able to focus the lesson coherently. Her university tutor alluded to the link between a lesson's generalised content and her lack of focus in her preparation, saying, *"The lesson is losing a bit of its momentum – the lesson [plan] is too general – be specific: where do you want to go?"* (UT LO 1). Zanele's university tutor commended her for

questioning learners, but suggested that the questioning lacked direction, as she needed to “*have a bit more structure to [her] questions – [she] must be eliciting a specific train of thought*” (UT LO 1). Without a firm grounding in content (Facet 1, Level 1), Zanele did not yet formulate meaningful outcomes for her lesson. Her lesson plans were thoroughly written up, but did not yet show coherency. Her preparation is therefore at Level 2.

TEACHING STRATEGIES: Strategies that get through work (Facet 3: Level 2)

Zanele involved learners in standard questioning/teacher-led-discussion and worksheets from the outset. In one of her observed lessons, the university tutor seemed pleased that she “*asked quite a lot of questions!*” In another observed lesson, however, learner participation seems to have been quite limited, as her university tutor urged her to “*Move on in the lesson – the learners are getting bored. Keep the lesson dynamic*” (UT LO 1). She used questioning techniques and explanations as a teaching routine to get through the work. She is thus using teaching strategies at Level 2 of this facet.

CLASSROOM MANAGEMENT: Explicitly enforces classroom routines (Facet 4, Level 3)

At the start of her studies, Zanele recalls that she was not confident in her ability to teach. She relates, “*My English was not good. I had no confidence and I was anxious about what to say*” (S 3 FGD). However, her supervising teacher disagreed and even commended her “*good command of English*” (ST 1). Her ability to communicate in English, as the language of instruction, did not appear to be a factor in her ability to communicate with her learners. However, Zanele evidently felt nervous and it manifested initially in her speaking very softly. Her university tutor commented, “*If your voice is too soft, the learners at the back will not be able to hear – project your voice*” (UT LO 1). The combined data suggest that Zanele was initially nervous about being a teacher figure in an unfamiliar, English-medium classroom environment, rather than that her difficulties were associated with her command of the English language. Her supervising teacher

commented, “*She tried her best to control the learners*” (ST 1). This indicates that she experienced a discipline problem and strove to address it.

However, by her second TE session, Zanele had gained enough confidence in herself as a teacher, to take charge of her class. She no longer spoke softly and her voice was described as “*loud, confident, exciting, vibrant and commanding*” (UT LO 1). Her university tutor commended the way she used her voice “*effectively to control learners*” which, in nearly all cases, led to “*good discipline during the lesson*” (UT LO 1). During this TE session, Zanele progressed to Level 3 in ‘classroom management’, where she established and used classroom routines. Her classroom management developed into a leading facet for Zanele. In her first year, her classroom management initially started at Level 2, but soon developed to Level 3.

MONITORING LEARNING: Assumes learning (Facet 5, Level 1)

Zanele seems to have been asking questions to involve her learners, rather than actively to monitor their conceptual understanding. In another lesson, her university tutor advised her to “*Make a summary of all the concepts you want learners to grasp from this lesson – I am not sure that you have achieved this*” (UT LO 1). This comment implies that conceptual understanding was neither monitored nor achieved in this lesson. Zanele therefore started at Level 1 of this facet.

Zanele’s second year:

The lesson observation reports from Zanele’s second year of study are very brief and as such, it is difficult to form a complete picture of her teaching practice during this year. However, the available data provides certain glimpses of her levels of teaching in some of the facets.

KNOWLEDGE & UNDERSTANDING OF CONTENT: No data available

There are no references to Zanele’s degree of subject matter knowledge during this year

PREPARATION: Possibly plans for coherent lessons (Facet 2, Level 3)

Her lesson plans were satisfactory, and she used a “*variety of visual aids most effectively*” (UT LO 2). Her university tutor did not indicate whether her lessons were now coherent, and whether her outcomes now showed purposeful intention. However, in response to a Life Orientation lesson, her university tutor commented, “*The activity encouraged compassion and empathy*” (UT LO 2). This comment implies that she was planning more coherent lessons with meaningful outcomes, indicative of Level 3 of this facet.

TEACHING STRATEGIES: Strategies that maximise participation (Facet 3, Level 3)

By her second year, Zanele experimented with different teaching strategies; using “*a combination of group work and individual work*” in many of the observed lessons (UT LO 2). Although her choice of teaching strategies were regarded as appropriate, she needed to learn how to scaffold her tasks into manageable steps, instead of overwhelming learners with too large a task. Her university tutors advised her to “*Give them one objective to achieve, once they have achieved that objective, then give them the next one*” and “*Remember that teaching should guide learners in small steps – show them how to do it*” (UT LO 2). Zanele employed teaching strategies to maximise learner participation (Facet 3, Level 3).

CLASSROOM MANAGEMENT: Explicitly enforces classroom routines (Facet 4, Level 3)

A supervising teacher advised Zanele to “*show respect to learners but without too much laughter, being strict and friendly at the same time,*” a perspective which underpinned her class control from this point on (S 3 FGD). Subsequent lesson observation reports contained a number of comments showing that her classroom manner was “*confident and professional, firm yet friendly*” and that she was consistently giving “*clear instructions*” and she “*told them how much time they had to do the group work*” (UT LO 2). Zanele therefore began to establish

boundaries for her learners and routines in her classroom. During this year, she progressed to Level 3 of ‘classroom management’.

MONITORING LEARNING: Inadequate data available

There are not much data available in this facet, beyond a comment that “*Some of [the learners] are confused*” (UT LO 2). There is no indication whether Zanele noticed or responded adequately to this confusion.

Zanele’s third year

In her third year, Zanele’s observed lessons were in the learning areas that she had studied further at university, namely Life Orientation and Social Science (Geography).

KNOWLEDGE & UNDERSTANDING OF CONTENT: Investigated topic knowledge and understanding (Facet 1, Level 3)

The way in which Zanele worked with the content in the lessons she taught demonstrated that she understands the lesson topics. Her university tutor commented, “*Your knowledge of the topic is excellent. Your explanations are clear*”, and in another lesson, “*You have an excellent knowledge of the subject matter, and you explained the material well. The maps you used were clear and a useful basis for discussion on the population of various regions*” (UT LO 3). However, her university tutor thought that she could have made deeper links with the discipline and suggested, “*Your analysis of the graphs was good, but incomplete. You told them to remember that temperature is always a line graph, which is true, but why is that not the case for rainfall graphs? Why is this so? Learners need to know why we sometimes draw line graphs and sometimes draw bar graphs*” (UT LO 3).¹⁰⁷ In this way, her university tutor encouraged her to link the lesson topic with deeper geographical ways of knowing. In her third year of study, Zanele was teaching Facet 1 at Level 3, where her knowledge and

¹⁰⁷ Quote used previously on p. 198.

understanding of content is thoroughly investigated, but not always linked to deeper discipline knowledge structures.

PREPARATION: Plans for coherent lessons (Facet 2, Level 3)

Her university tutor praised Zanele's planning of an observed Geography lesson, saying, *"You approached this topic with confidence because you had prepared properly and you were on top of the content. Your worksheet is very pleasing – the graphs are clear, and the questions suitable"* (UT LO 3). The university tutor's comment alluded to the relationship between Zanele's ability to prepare insightful tasks with her thorough knowledge of the lesson topic (Facet 1, Level 3). At this stage, Zanele was at Level 3 of lesson planning, preparing thoroughly, and using her plan purposefully. She was not yet engaged in forward planning, but was still planning each lesson as a freestanding learning experience.

TEACHING STRATEGIES: Strategies that maximise participation (Facet 3, Level 3)

Zanele demonstrated an effort to involve learners in her lessons, making extensive use a range of participative teaching strategies. Her university tutors made a number of comments, such as, *"You encouraged a lot of learner participation and you limited the group discussion time-wise so that you could change their focus"* (UT LO 3). The tasks she devised were *"within [the learners] range of experience"* and her university tutors were satisfied that they provided suitable learning experiences (UT LO 3). University tutors mentioned that she *"asks good questions which helped to ensure that the learners remained interested in the lesson"*. These comments from lesson observation reports suggest that she was teaching at Level 3, using teaching strategies to maximise learner participation.

CLASSROOM MANAGEMENT: Explicitly enforces classroom routines (Facet 4, Level 3)

Zanele perceived her classroom management to be intimately linked to her degree of subject matter knowledge, combined with establishing classroom routines. In discussing her approach to class management, she relays how she asked herself,

“Do I have enough information? I knew I must present myself to the learners, lay down the rules and then I’d be okay” (S 3 FGD). Zanele’s comment conveys an almost prophetic understanding of how lack of subject matter knowledge can undermine class discipline. Zanele was keen to share her classroom management routines with other student teachers, suggesting, for example, *“A good way to differentiate between kids who are chit-chatting and kids who want to participate in a discussion is to always ask someone who is making a noise if they have something to say to the whole class. The ones that are just chatting will have nothing to add, the ones who are participating will speak up”* (S 3 FGD). Her ability to consistently enforce routines, together with her *“very pleasant, yet firm, manner”* enabled her effectively to manage her classroom (UT LO 3).

Her university tutor commented that, *“The learners listened well, mainly because they were interested”* (UT LO 3), and her *“class control is very good”* because of the way she *“keeps contact with the learners”* (UT LO 3). As a means of obtaining class co-operation, Zanele actively sought to make the topic of the lesson informative, relevant and interesting to her learners, and engage them in meaningful learning (Facet 1, Level 3). Her class management rested on a firm foundation of worthwhile content, supported by established and enforced rules and routines.

MONITORING LEARNING: Infers class understanding from individual responses (Facet 5, Level 2)

Zanele was described as a *“caring, compassionate and concerned teacher”* who interacted extremely well with learners, and was very responsive to them (UT LO 3). These qualities enabled her to pace her lessons well, and adjust where necessary. Zanele was aware of how important it was for her to *“give the class a regular opportunity to respond to what [she is] saying to see if they are absorbing the lesson”* (S 3 FGD). She monitored learner responses to her questions, but did not always probe when learners provide unusual answers. Her university tutor discussed one such incident, telling her, *“I would have liked you to have engaged more with the learner who said that you can have feelings of trust – you did not*

accept this [as an emotion], but I think when we trust someone we do have feelings” (UT LO 3). While learners were completing a task, Zanele “*walk[ed] around the room, supervising and helping [the learners] efficiently*” (UT LO 3). Her monitoring for comprehension, without active probing of understanding, indicates Level 2 of ‘monitoring learning’.

Zanele’s fourth year

KNOWLEDGE & UNDERSTANDING OF CONTENT: Need-to-know knowledge (Facet 1, Level 2)

Zanele’s fourth year presented a greater challenge for her, with the added pressure of teaching across all learning areas, in some of which she did not feel confident. She reflected that, “*learning areas I know best suffered because all the unfamiliar ones took most of my time*” to research and prepare (S 4 RTE).¹⁰⁸ In these unfamiliar learning areas (like history, and biology),¹⁰⁹ Zanele made some errors in content during her lessons, and consequently, “*some of her explanations lacked depth*” (UT LO 4). For example, her university tutor requested, “*Please double check on the meaning of ‘kratos’ – according to my interpretation, it means ‘power’ not ‘rule’*” (UT LO 4).

In addition to these content errors, Zanele did not always possess a conceptual framework for structuring the content so that it could facilitate learner comprehension. For example, her university tutor observed how she “*changed the topic for discussion from ‘The Constitution’ to ‘what the government does for us’*” and commented, “*It’s quite a difference. The class needed to understand the difference between national, provincial and local government. The linkages between the ideas and the activities in this lesson weren’t smooth*” (UT LO 4).¹¹⁰

¹⁰⁸ Quote already used. See p. 197.

¹⁰⁹ Within the learning areas of Social Sciences and Natural Sciences, respectively

¹¹⁰ Quote used previously, see p. 196.

Zanele's level of subject knowledge affected her ability to address learner questions. Her university tutor observed that, "*her class was quite knowledgeable, and there were learners who often asked pertinent questions that she sometimes did not respond to adequately*" (UT LO 4). Zanele concurred with her university tutor's comments, saying, "*With some of the learning areas, I managed to be effective in my teaching*" (S 4 RTE). Her university tutor summed up the problem as follows, "*While she researched her topics, she did not always internalise the knowledge and was not always able to make it accessible to her learners. I found that her explanations were not always clear, and there were sometimes problems with the lack of explanation of technical terms*" (UT LO 4). The frequent use of qualifiers (such as "*sometimes*" and "*not always*") indicates that there were discrepancies in how Zanele coped in some subjects compared to others. During observed lessons in unfamiliar learning areas, Zanele demonstrated 'Need-to-know' subject matter knowledge (Facet 1, Level 2). In her third year, her content knowledge (over a particular range of subjects) acted as a leading facet that informed her teaching practice. However, in her fourth year, her content knowledge (over a different range of subjects) acted as a lagging facet, and constrained her teaching practice.

PREPARATION: Plans for coherent lessons (Facet 2, Level 3)

Zanele concedes that in certain unfamiliar learning areas she had a "*limited (general) knowledge*" (Facet 1 Level 2), and was only able to teach "*with the support of [her] teacher*" (S 4 RTE). However, her university tutor was most satisfied with her lesson plans, commenting, "*The steps in your lesson plan were clear and the activities were well scaffolded*" (UT LO 4). Although in previous TE sessions Zanele had demonstrated her ability to make and use teaching resources effectively, this time she did not have ready access to computer facilities. She felt frustrated that the school's computers were not working, and that she had to rely on the university computer centre to type up worksheets for learners. Zanele relates how she often "*resorted to chalkboard writing*" (S 4 RTE). Her university tutor noticed this trend, and comments, "*While your writing is clear and well laid out on the board, remember that the major challenge for you*

on this TE is to make relevant teaching aids” (UT LO 4). In another case, her university tutor suggested that real objects would make the lesson more concrete.

Her university tutor was initially not satisfied with her forward planning. Zanele attributed the problems with planning in advance to her interactions with one of her supervising teachers, who gave little advance input regarding the topics of lessons that she needed to prepare. She described the situation as follows: “*My problem was that I could not get [lessons to] prepare with good time. Forward planning was a problem for me, because I was given lessons to prepare for each week at a time. The other teacher just gave me textbook, and told me to make preparation from where she ended and this was not given to me beforehand, which caused [me to] panic*” (S 4 RTE). Zanele meekly accepted lesson topics on a week-to-week basis. This could have had a negative effect on her ability to investigate topics adequately and engage in meaningful longer term planning. With limited subject matter knowledge (Facet 1, Level 2), Zanele struggled to form a vision independently for a unit of lessons. Zanele’s lesson preparation therefore remained at Level 3.

TEACHING STRATEGIES: Strategies that maximise participation (Facet 3, Level 3)

Zanele’s supervising teacher described how she “*tried and used different teaching strategies,*” including “*involving learners in group work*” (ST 4). Her university tutor noticed that she had a “*wonderful ability to spread questions*”, ensuring that all learners were involved, and “*redirecting questions in a wonderful way*” (UT LO 4). Zanele seems to have used teaching strategies that maximised learner participation, and kept them occupied. Zanele was using teaching strategies at Level 3, where she maximised learner participation.

CLASSROOM MANAGEMENT: Explicitly enforces classroom routines (Facet 4, Level 3)

By her fourth year, Zanele had become an “*excellent*” classroom manager (UT LO 4), and in Zanele’s own words, she “*did not have any major discipline problems*”

(S 4 RTE). On every occasion when her university tutor visited unexpectedly, the class was “*well under control*”; “*busy answering questions*” or “*hard at work, and quiet*” (UT LO 4). Zanele was quick to notice and challenge unacceptable behaviour as it arose. Her university tutor noted, “*I’m glad you insisted that the boy at the back stopped rocking before he answered [your question]*” (UT LO 4). The university tutor described how Zanele handled “*challenges to [her] authority very competently*” (UT LO 4). Her university tutor observed that the learners “*participated when [she] asked them, and kept still when [she was] talking*”, and the first person who did not comply was spoken to “*firmly*” (UT LO 4). Zanele gave “*good clear instructions to the class,*” facilitating good class management, as learners knew exactly what was expected of them (UT LO 4).

Her choices of teaching strategies (Facet 3, Level 3) also enabled her to manage her classroom, since all learners were occupied. Zanele had the ability to manage her class; both during active teaching time, and while learners were working on a task. However, in spite of having the class “*under excellent control*”, during those lessons in which she struggled with the topic knowledge, she was able to “*motivate her learners, but not always sustain their complete interest*”. The learners became “*restless at times*” (UT LO 4). In this example, restlessness of learners was not related to her classroom management skills, but rather was attributable to her inadequate knowledge of her lesson topics (Facet 1, Level 2). Zanele managed her class at Level 3, in control, and well-organised, addressing learner behaviour with consistently and firmly enforced routines.

MONITORING LEARNING: Infers class understanding from individual responses (Facet 5, Level 2)

Zanele demonstrated excellent ability to draw information from her learners, making “*good use of their prior knowledge*” (UT LO 4). Implementing the advice of a preceding university tutor, Zanele was now seen to be working “*extremely well with [her learners’] answers*” (UT LO 4). Her university tutor observed how she “*moved around and assisted learners very ably*” (UT LO 4). Zanele seems to

have been engaging with learner answers to questions; however, the effectiveness of such monitoring may have been constrained in those lessons where her knowledge and understanding of the topic was not thorough. For example, she did not always pick up inaccuracies, as her university tutor pointed out, “*Careful –the answer you accepted to [examples of] ‘simple life forms’ included humans – which is inaccurate*” (UT LO 4). Although Zanele was attempting to probe learners’ understanding, her own levels of knowledge and understanding of the topics did not support her attempts.

General comments about Zanele

While she was in her third year, Zanele’s thorough topic knowledge in certain learning areas acted as a leading facet, which drove her teaching practice. However, in her fourth year, her ‘need-to-know’ knowledge in other learning areas acted as a constraint to her teaching. Zanele’s portrait illustrates very clearly how, within the context of a well-managed classroom, her level of teaching practice over other facets depended on her degree of subject matter knowledge.

A portrait of Maggie

Maggie completed her schooling within a rural community in the province of Mpumalanga. She chose to study teaching in response to a perceived need in her community, explaining, “*The people from my area have an attitude that education is for rich people. There are very few teachers [from] my area. I wanted the learners to see that teaching is not just for people from outside*” (S FGD 3). After qualifying, she intended returning to teach in the rural school she attended as a learner.

In adjusting from her own schooling to teaching on TE, Maggie experienced a number of challenges. Firstly, she needed to adjust to being in an urban context. She explains how she struggled to cope initially because “*the small children in [her] area are taught to respect their elders*” and she “*did not expect [urban] kids to be different*” (S 3 FGD).

Secondly, Maggie had to teach in her third language, English, in which she could express herself “*adequately*”, but not fluently (UT LO 1 – 4). Maggie managed to complete her BEd in four years, despite her difficulties with the language of instruction. In certain TE sessions, her language did pose some problems. A university tutor pointed out, for example, “*Some of your instructions do not make sense*” (UT LO 1). However, Maggie reports how certain learners in her class “*helped [her] by respectfully correcting [her] language*” whereas others “*would joke and laugh at [her] language mistakes*” (S FGD 3).

Thirdly, Maggie needed to adjust to differences in discipline methods used in classrooms. In her own schooling, her teachers used corporal punishment, although she personally “*wasn’t beaten often because [she] was good*” (S FGD 3). However, during one extremely stressful time, she admits that she reverted to a coping strategy she learnt during her apprenticeship of observation by “*laying my hand [on a learner] and really, I know I was not supposed to do that (sic)*” (S 4 RTE).

Fourthly, Maggie had to adjust to participative teaching strategies associated with OBE. Her learning at school, by contrast, was characterised by “*cramming [information] into [her] mind and then putting it on paper*” (S 3 FGD).

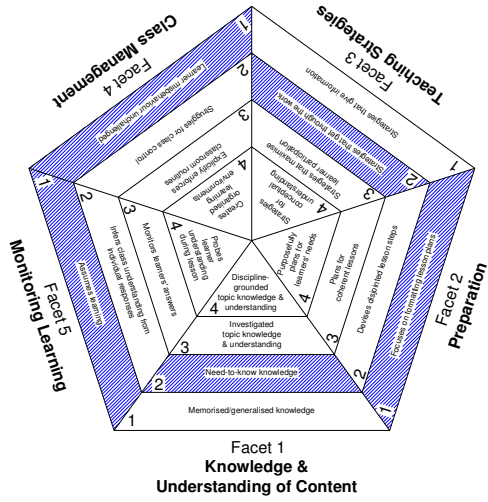
It is clear from the lesson observation reports that Maggie was heavily dependent initially on her supervising teacher. Her university tutor in first year reminded Maggie to “*thank [her supervising] teacher for assisting so much – especially with class control and preparation*” (UT LO 1). Although she became more autonomous, she was “*still needing supportive teachers*” (UT LO 4) during the first half of her fourth year. She gave “*thanks to the teachers who helped [her] plan*” (S 4 RTE).

In spite of her struggles with adapting to the urban context and with her command of English, Maggie had “*confidence and a presence*” (UT LO 1) in the classroom. Her university tutors consistently described her as a “*conscientious*” and “*responsible*” student teacher (UT LO 2), who possessed “*determination and commitment*” to become an effective teacher (UT LO 3). A number of university tutors commented on how her positive attitude, determination and hard work “*gained the respect of those who worked with her*” (UT LO 3).

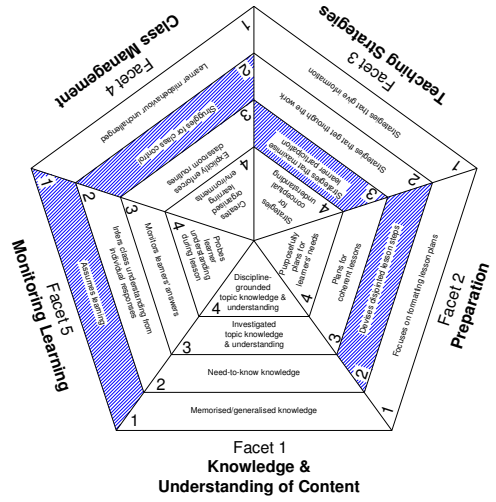
Although university tutors were generally satisfied that Maggie had internalised the lesson topic knowledge, she was not always able to present it in a way that was understandable to learners. Although she did not possess the terminology, she acknowledged that this problem was related to a limited grasp of PCK, saying, “*Maybe the problem can be that somebody don’t understand the way I tried to explain to the learners (sic)*” (S 4 RTE). However, Maggie abandoned the rote teaching strategies she experienced as a learner, and embraced opportunities for active learning, striving to use meaningful, participative teaching strategies. She believes that learners should “*first experience [a concept] and see the things they are learning about, and then put them onto paper*” (S 3 FGD). Her attempts to employ teaching strategies that involved learners acted as a leading facet for the

development of her teaching practice, and partially compensated for other lagging facets and the challenges of using her third language as a language of instruction. During times when she had support in helping her to manage the class, she was able to prepare, and strove to provide experiential learning opportunities for her learners, although this was not always supported by her own deep understandings of the topic. However, she sometimes struggled with classroom management, which acted as a lagging facet. As her struggle for control intensified, she eventually abandoned her attempts to teach for learner participation, resorting to tightly framed lessons and transmission-mode teaching strategies as a coping mechanism. Her struggle with classroom management may partially be attributed to her fluency in English, and partially to her own struggles to make sense of certain lesson topics, although her university tutor suggests that it was also partially related to the challenging context of a difficult class.

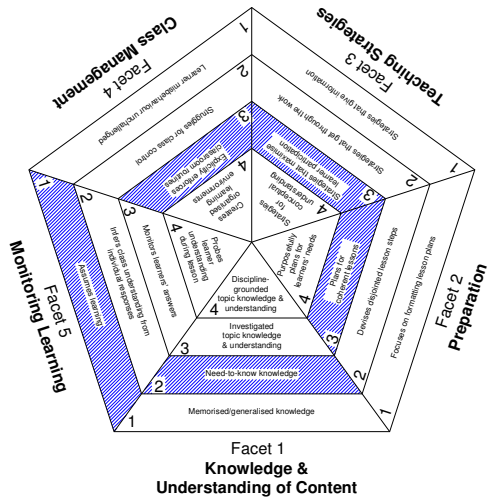
First Year



Second Year



Third Year



Fourth Year

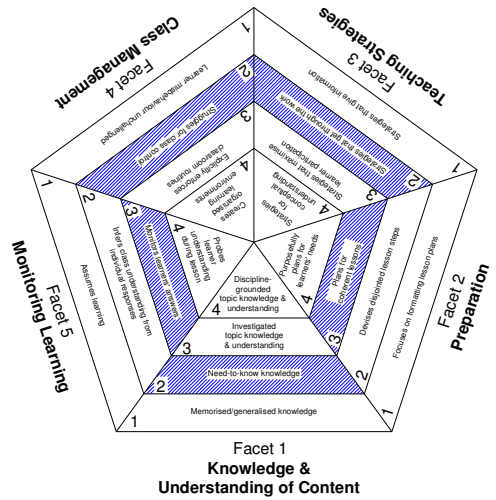


Figure 7.5: The development of Maggie's teaching practice over four years of study

Maggie's first year

KNOWLEDGE & UNDERSTANDING OF CONTENT: Need-to-know Knowledge (Facet 1, Level 2)

During her first TE session, Maggie's university tutor commented that her *"knowledge of the subject coped with most issues raised - You had someone mention xylem, and you touched on natural sugar"* (UT LO 1). These comments imply that she was in possession of the knowledge that she needed in order to teach the particular topic. However, while she coped with the basic knowledge, her university tutor's comment suggests she didn't cope with all the issues raised. This indicates that she was teaching from Level 2 knowledge of the content.

PREPARATION: Focuses on formatting of lesson plan (Facet 2, Level 1)

Initially, Maggie struggled to formulate her lesson plans, teaching initially without one, *"I could not find the lesson plan"* (UT LO 1). The absence of considered preparation undermined her ability to manage the classroom effectively on another occasion, with her university tutor commenting, *"Don't leave long gaps while you are thinking – be prepared!"* (UT LO 1). During her first year, university tutors gave guidance regarding her lesson plans, advising, for example, *"Lesson plan must be detailed"* and *"Add activity outcomes"* (UT LO 1). By her second TE session, Maggie had learnt to set out her plans *"fairly clearly"* though she *"need[ed] to set out much more specifically what [she would] do with learners"* (UT LO 1). With the assistance from her supervising teacher, she formulated *"worthwhile lesson outcomes"*. The data suggest that Maggie began preparing at Level 1. By the end of her first year, the format of her lesson plans was acceptable, but she still needed to attend to the detail and coherence of the lessons.

TEACHING STRATEGIES: Strategies that get through work (Facet 3, Level 2)

From the start, Maggie seemed keen to experiment with various teaching strategies, however, in the absence of established classroom management routines (Facet 4, Level 1), she did not facilitate the learning process smoothly. Her university tutor remarked, *"Group report back: disorganised. Not everyone in the*

class is focusing on you. The purpose of this exercise is that they learn from each other” (UT LO 1). From the start, Maggie attempted to organise practical tasks for her learners. In one lesson, her tutor *“liked the focus on the carrot as an example of useful root foods. Bringing the carrots to class was good – this meant that learners could do science”* and in another lesson, her university tutor noticed how *“acting out or demonstrating the prepositions gave learners concrete examples to work with, and the idea of place was clear”* (UT LO 1). Her attempts to use such teaching strategies acted as a leading facet that drove the development of her teaching practice.

Whereas she managed to obtain *“good learner participation at times”*, there were other times when Maggie still needed to think of ways to *“keep everybody constructively busy throughout the lesson”* (UT LO 1). She tended to use one teaching strategy for extended periods, prompting her university tutors to advise, *“For an hour lesson, plan more variation”* (UT LO 1). Her university tutor praised her when she *“allocated sentences to learners – it moved things on”* (UT LO 1). Maggie was not yet considering how to maximise learner participation throughout her lesson, but seems to have been using strategies that got through the work efficiently. The evidence suggests that her teaching practice was at Level 2 (of Facet 3).

CLASSROOM MANAGEMENT: Learner misbehaviour unchallenged (Facet 4, Level 1)

Class control issues overwhelmed some of Maggie’s lessons in her first year. She attempted to teach, irrespective of the inattentiveness of the learners. A university tutor advised her to *“try more effective classroom management skills”* (UT LO 1). Maggie later describes how frustrated she felt, knowing there was a problem, but not having suggestions about what to try. She described the university tutor’s comment as a *“valid criticism”*, but *“[the university tutor] should have told [her] how to do it right, with more guidance”* (S 3 FGD). In the second TE session, another university tutor gave her more specific guidelines, suggesting that she *“Speak louder and firmly - control the noise levels”* and in another lesson, *“Do*

not give a class instruction when they are talking...Be careful not to shout over everybody...Do NOT allow the children to shout out” (UT LO 1). After one disruptive lesson, her university tutor summed up, saying, *“You really struggled to settle them down perhaps because you took time to focus them on the lesson. I did not see you take control of this class. You needed to introduce the lesson, give clear instructions of what they will be doing. You never set the procedures for them, hence they are moving up and about”* (UT LO 1).¹¹¹ It is clear that Maggie had not yet begun to establish classroom routines. She initially attempted to teaching regardless of the learners’ behaviour or attention. In her first year it therefore seems that Maggie was delivering lessons regardless of whether learners were attentive or not, at Level 1 (of Facet 4). Without successful classroom management, her attempts to organise practical tasks did not work out as she intended, unless her university tutor or supervising teacher assisted her in settling the class during her lessons.

MONITORING LEARNING: Assumes learning (Facet 5, Level 1)

Maggie initially assumed that learners understood the work that was expected of them. This was clearly not the case, since her university tutor advised, *“When you give a task, you must facilitate its completion. Walk around, interact with groups and individuals more actively to pace them and rectify any errors”* (UT LO 1). Another tutor commented, *“If I was in your class, I would have an understanding of the basics of prepositions – but I would also have a lot of noise in my head. Reinforce correct answers by repeating them aloud for all”* (UT LO 1). In assuming understanding, Maggie did not actively monitor her learners, operating at a Level 1 in this facet.

Maggie’s second year:

In her second year, Maggie’s university tutors wrote very brief lesson observation reports, and there were less than the required number of visits. Consequently, there are gaps in the available data. This hampers attempts to provide a detailed

¹¹¹ This quote was used previously on p. 248.

portrait of her teaching practice during the second year. Nevertheless, the available data will be explored.

KNOWLEDGE & UNDERSTANDING OF CONTENT: No data available

There are no references available to Maggie's level of subject matter knowledge. However, by her own admission, Maggie acknowledged that in her second year, she sometimes struggled to "*make sense out of [the content] before [she could] present it*" (S 4 RTE).

PREPARATION: Devises disjointed lesson steps (Facet 2, Level 2)

Although Maggie's lesson plans were adequately written, her university tutor commented that her outcomes and activities were inappropriate for the particular learning area, saying "*This lesson was more a Life Orientation lesson than an English lesson*" (UT LO 2).¹¹² At times, then, Maggie's lessons were not always purposefully aligned with the outcomes of the learning area, suggesting teaching practice at Level 2 of this facet.

TEACHING STRATEGIES: Strategies that maximise learner participation (Facet 3, Level 3)

Maggie strove involve learners in her lesson introductions. Her university tutor commended her "*interesting introduction [which was] relevant to learners*" (UT LO 2). Maggie used group work as a means of promoting learner participation in her lesson, but her university tutor suggested that learners "*work in pairs rather than groups – so each child can participate in measuring the piece of wool*" (UT LO 2). While commending her use of an authentic learning experience, her university tutor attempted to show her how to increase ways to maximise learner participation even more, without losing the essence of the task. Her follow-up worksheets were "*clear*" and "*easy to follow*" (UT LO 2). Although she strove for meaningful learning, the effectiveness of her teaching strategies was undermined by her need-to-know knowledge of the lesson topics (Facet 1, Level 2) and her

¹¹² Quote used previously on p. 216.

continued struggle to establish class control (Facet 4, Level 2). However, her university tutors continued to commend her use of teaching strategies, perceiving them as compensating for other lagging facets of teaching practice.

CLASSROOM MANAGEMENT: Struggles for class control (Facet 4, Level 2)

By her second year, Maggie spoke “*clearly and loudly*” and had established a presence in the classroom. She was able to settle learners and begin her lesson. However, her university tutor advised her to “*be more assertive in moving learners to the next part of the lesson*” (UT LO 2). Although Maggie could settle learners at the beginning of her lessons, she still struggled to maintain control of her learners until the end of her lessons, indicative of her teaching at Level 2 in this facet.

MONITORING LEARNING: Assumes learning (Facet 5, Level 1)

In one lesson, “*some learners were getting bored*”, which her university tutor attributed to the slow pace that resulted because Maggie was not monitoring learning. The tutor advised, “*Don’t dwell for too long on explaining if learners have understood – keep the pace moving*” (UT LO 2). When learners worked on a task, Maggie “*moved around the room, and dealt with questions as they arose*” (UT LO 2). However, she was not actively checking to see how they are coping with the work. Maggie seems to have been operating at Level 1 of this facet.

Maggie’s third year

KNOWLEDGE & UNDERSTANDING OF CONTENT: Need-to-know Knowledge (Facet 1, Level 2)

Maggie coped with presenting lessons to her learners, and sometimes used appropriate examples to illustrate certain concepts. For example, her university tutor noted how she “*asked learners to think of their own business – [her] example of the bakery went reasonably well*” (UT LO 3). However, she did not always teach concepts grounded in an appropriate context. For example, “*[her] writing of ‘and’ as a conjunction needed to be shown within a sentence – don’t*

talk in a vacuum!” Her university tutor advised her to “*always discuss parts of speech in context – in sentences or paragraphs, but not alone*” (UT LO 3). Maggie endeavoured to teach this topic mechanically rather than conceptually, as her own knowledge was not grounded in insights into the pedagogy of this particular learning area. Her university tutor challenged her to take learners beyond what they already knew, asking on two occasions, “*Your learners seem to have dealt with this topic before. What is new learning?*” (UT LO 3). These comments suggest that Maggie was not extending herself or the learners beyond what they needed to know, and therefore was operating at Level 2 within this facet.

PREPARATION: Plans for coherent lessons (Facet 2, Level 3)

Maggie demonstrated the ability to formulate suitable lesson plans, with a number of comments indicating that her lesson plans were “*clearly set out and comprehensive*” (UT LO 3). Her university tutor was satisfied that her lessons were largely purposeful and coherent, although there is always a qualifier in the comments, indicating a cautious commendation. For example, the university tutor described one lesson as “*generally clear and worthwhile*” and a worksheet as containing “*mostly interesting and useful examples*” (UT LO 3).¹¹³ The data suggest that Maggie was planning her lessons thoroughly, and giving thought to her purpose. She attempted to devise suitable examples for her learners, but her efforts were impeded by her ‘need-to-know’ knowledge of the lesson topic at Level 2.

TEACHING STRATEGIES: Strategies that maximize learner participation (Facet 3, Level 3)

The data regarding Maggie’s teaching practice within this facet are limited to remarks that reveal that she “*planned some interesting tasks*”, “*used pair work to practice a skill*”, and at times, had the “*learners working with her*” (UT LO 3). However, specific details are not recorded on the lesson observation reports. She

¹¹³ Underlined words here is my emphasis.

seems to have been involving the learners in active learning experiences, where she endeavoured to maximise their participation, at Level 3.

CLASSROOM MANAGEMENT: Explicitly enforces classroom routines (Facet 4, Level 3)

During her third year, Maggie was seen to assert herself quite firmly as a teacher. Her university tutor observed this, and commented, “*Good to see you taking firm control of class discipline*” (UT LO 3). However, she had not fully established complete control, and still needed advice, such as, “*When you get feedback, make sure you have everyone listening*”, and “*don’t give too much time*” for pair discussion (UT LO 3). The evidence suggests that Maggie was starting to establish class routines and enforce them consistently at times. She managed her classroom at Facet 4, Level 3.

MONITORING LEARNING: Possibly assumes learning (Facet 5, Level 1)

There are no data about Maggie’s monitoring of learner understanding, aside from a university tutor’s comment that “*learners were giving [her] a list [of suitable conjunctions] – many correct, but others not*” (UT LO 3). This university tutor’s observations imply that Maggie did not always challenge the problematic answers. This, again, may be attributed to her need-to-know knowledge of the topic (Facet 1, Level 2) and her command of English as the language of instruction.

Maggie’s fourth year

In Maggie’s first TE session, she was plagued by a number of problems, including personal illness, a difficult class of learners and a late change of school, which effectively meant less available time to prepare thoroughly. She coped better during her second TE session, in which she did not have to address all of these issues.

KNOWLEDGE & UNDERSTANDING OF CONTENT: Need-to-know knowledge (Facet 1, Levels 2)

In her first TE session, Maggie believed that she *“had the [required levels of] knowledge because I went the extra mile for each and every lesson I taught, but it was not an easy task”* (S 4 RTE). However, her supervising teacher disagreed, stating that Maggie *“could have researched some topics in more detail - The educator needs to know more than simply the content she is teaching at the time”* (ST 4). Her university tutor concurred with the supervising teacher, stating, *“Her knowledge of the learning areas was adequate. There are some detailed and worthwhile lessons, but generally, she needs to work at achieving greater depth in her teaching. Rich aids, penetrating activities and probing discussion is needed”* (UT LO 4). In her first TE session, she was still operating from a need-to-know knowledge base at Level 2.

However, during her second TE session, Maggie put more effort into investigating her topics thoroughly, and reflected that her *“preparation, planning and integration were the best compared to the previous TE that I had before. I tried my best to consult with other resources as much as I can to prepare lessons (sic)”* (S 4 RTE). Her supervising teacher confirmed that she made use of *“other sources beside the textbooks provided”* (ST 4).

During one observed lesson, she made *“good use of mathematical language”* (UT LO 4). Her lessons showed more content depth, but she still did not always teach concepts within a meaningful context. For example, in one mathematics lesson, her university tutor told her, *“Your explanations started off okay, with good use of the board – but eventually, learners were confused: The number 497,832 is an abstract number to them – they were struggling to give it meaning”* (UT LO 4).

PREPARATION: Plans for coherent lessons (Facet 2, Level 3)

In her first TE session, Maggie did not plan forward sufficiently, although some of her lessons were *“worthwhile”* (UT LO 4). Her university tutor was disappointed that there was *“no file and lesson plan available on this third day of*

TE” (UT LO 4). She questioned Maggie’s ability to cope with the unexpected, stating, *“You need to anticipate areas of confusion – what are your plans to avoid it?”* (UT LO 4). Her supervising teacher, too, commented, *“She needs to ensure that she does lesson plans further in advance than the day before”* (ST 4). On one occasion, the photocopier broke on the day of the lesson – and Maggie was unable to show learners a vital resource, resulting in a *“weak lesson because of a failure to adapt to a failure in technology”* (UT LO 4). Her university tutor reflected, *“Now you see why the teachers wanted to have preparation done well in advance – if your transparency isn’t made, you need to have an alternative idea up your sleeve and change your lesson!”* In this case, her lack of preparation contributed to a loss of class control. Her university tutor explained, *“Don’t blame learners when there’s nothing much for them to engage with”* (UT LO 4).

In the second TE session, Maggie demonstrated that she was capable of forward planning with purpose, and made *“good use of mind maps to conceptualise units of work”* (UT LO 4). Her university tutor remarked that her *“lessons had purpose and were well controlled”* (UT LO 4). While her purpose, explanation and activities were closely aligned, she needed to structure and scaffold her lessons more thoughtfully. Her university tutor advised, *“In planning, provide opportunity to reinforce past learning and start with simpler examples – you started with quite a hard example for learners to work out with you”* (UT LO 4). Maggie understood this, and reflected on how *“sometimes [she] started with what was supposed to be at the middle or at the end of a lesson”* (S 4 RTE). Other lessons were *“clearly structured”* and made use of *“appropriate apparatus”* (UT LO 4). By her second TE session, Maggie planned more coherent units of lessons (Facet 2, Level 3).

TEACHING STRATEGIES: Strategies that get through the work (Facet 3, Level 2)

Maggie continued to strive for meaningful learning, and there were certainly times when the learners were engaged and working well. Her university tutor confirmed that *“the concepts were clarified and reinforced, and the opportunity was created*

for real understanding"; *"Good to see you involving the children in answering questions"* and *"Learners sat quietly and there was a good attempt by some to work out the calculation"* UT LO 4).

However, at other times her university tutor was *"little disturbed"* to see *"the lack of interest of some learners"* (UT LO 4). Maggie experienced a subsequent loss of class control and a subsequent struggle to establish her authority as a teacher (Facet 4, Level 2). She coped by switching to more strongly framed teaching strategies that got through the work with minimal learner disruption. Her university tutor commented, *"I would have liked to see more life and real interest in lessons, but think that discipline was the uppermost issue for Maggie"* (UT LO 4). Maggie reflected how *"when [she] tries to do discussion, it ended up by [learners] making jokes – that's when [she] stops the discussion and give them activities to do... [She] thought that using group work will be a disaster"* (S 4 RTE). Although Maggie was essentially experiencing a problem within Facet 1: 'knowledge and understanding of content' and Facet 4: 'classroom management', she responded by adjusting her use of teaching strategies (Facet 3). This resulted in her using a recipe lesson format, typical of Level 2. Her supervising teacher described this, saying, *"She always tried her best, but needs to vary the 'design' of her lessons more"* (ST 4). However, in the lessons that her university tutor observed, there was *"some variety in teaching strategies used – whole class discussion, individual work"* (UT LO 4). In spite of this, her motivation for selecting teaching strategies seems to have been to get through the work with the least chance of disruption, rather than maximise learner participation. In her fourth year, Maggie therefore reverts to using teaching strategies at Level 2 which enable her to get through the work, as a coping mechanism.

CLASSROOM MANAGEMENT: Struggle for control (Facet 4, Level 2)

Maggie certainly demonstrated the ability to conduct well-managed lessons. Her university tutor observed her *"keeping a firm hand on the learners"* and noticed her enforcing classroom routines, stating, *"Good that they aren't allowed to shout out"* (UT LO 4). However, the supervising teacher noted that Maggie was

“sometimes too soft in the classroom, which resulted in the learners taking advantage of her” (ST 4). Maggie acknowledged, “Discipline was a problem. Most of the time, [certain learners] were not listening to me, and when I ask questions, they don’t respond because they are not where we are” (S 4 RTE). Maggie seems to have gone into lessons on the defensive, and her university tutor suggested that she “start the lesson on a more positive note – the children are not rowdy or unco-operative, so look pleased to be working with them and give them praise for what they do know. Use affirmation – a lot!” (UT LO 4).

Within this context, Maggie’s classroom management was once again characterised by a struggle for control, at Level 2.

MONITORING LEARNING: Monitoring learning when marking (Facet 5, Level 3)

Maggie demonstrated the ability to assess learner understanding by checking their answers to written work, after the lesson. However, her supervising teacher stressed, *“She needs to try and assess while she is teaching. This will give her an idea if she needs to repeat an aspect or not” (ST 4).* Reflecting on an observed lesson, the university tutor advised, *“I think you were needing to go back to the point of confusion, and make sure everybody understands” (UT LO 4).* Learner boredom and restlessness might have been a symptom of not adequately monitoring learning during lessons, as learners may have already understood fully, or conversely were confused. Her supervising teacher noted that Maggie still *“needs to learn to adapt her teaching in the middle of a lesson if she sees the learners getting bored or losing concentration” (ST 4).*

Maggie reflected how she noticed that some learners did not understand *“by what they wrote in their books” (S 4 RTE).* However, Maggie was careful to design some assessment tasks for learners and her university tutor and supervising teacher agreed, *“The learners did develop from her lessons” (UT LO 4; ST 4).* Maggie was not actively monitoring learning during her lessons, but was noticing

problems when marking learner work. This data suggest that she was monitoring learning when marking, at Level 3.

General comments about Maggie

Maggie's portrait shows how teaching practice driven by the use of teaching strategies needs to be supported by an enabling classroom management and depth of subject matter knowledge. Without these supports, the learning opportunities, no matter how appropriate, do not reach their potential. It seems that one major factor in Maggie's struggle for class control was the difficulty she experienced in having to teach in her third language. This obstacle would be removed if she fulfils her dream of returning to her community and becoming a role model for learners there. In her fourth year, Maggie's university tutor explicitly noted the challenges of the context in which she was conducting her TE session. Maggie found it difficult to obtain class co-operation, and responded by reverting to transmission-mode teaching strategies. She coped with a problem that manifested in Facet 4 by adjusting her use of teaching strategies (Facet 3) to a lower level.

A portrait of Joseph:

Joseph is a white male student, who matriculated from a well-resourced co-educational high school in Johannesburg. He became a teacher because he “*worked well with children*” as a youth leader at holiday programmes (S 3 FGD). Joseph began his teacher education programme with “*an idea of what to expect*” as he believed he was “*used to motivating a group of kids to do an activity*” (S 3 FGD). Joseph tried to “*take the style [of ‘motivation’ as done in holiday programme] into the classroom.*” This intention pervaded his teaching, manifesting both in the creative ways in which he tried to motivate learners at the beginning of his lessons, and his seeming inability to recognise the value of carefully thought out preparation.

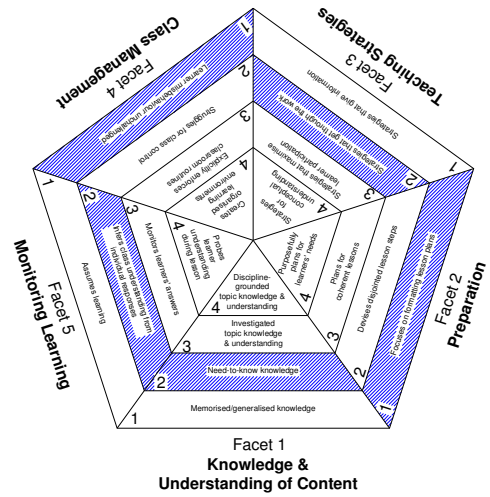
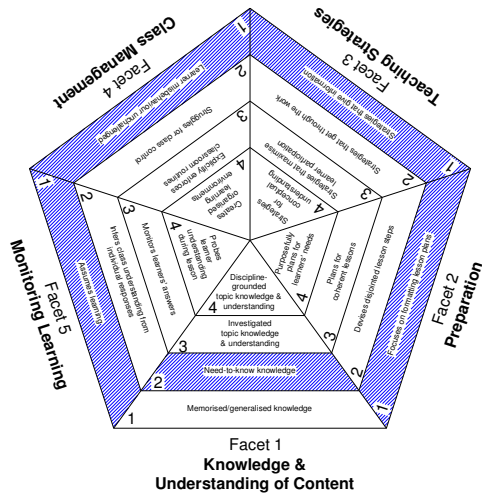
A number of university tutors commended him for the innovative ways in which he motivated learners at the start of a lesson. However, conducting holiday programmes does not have the formal preparation requirements that classroom teaching demands, and for a long time, he regarded lesson planning as “*paperwork*” without much value. Many university tutors who observed Joseph acknowledged his potential. He displayed some conceptual understanding of the topics he was teaching. However, different university tutors noticed problems stemming from inadequate lesson preparation and unresponsiveness towards learners. Initially, this manifested in slow pacing, resulting in a loss of learner interest towards the end of his lessons. In his fourth year, it ultimately gave rise to a struggle for control in which he coped by selecting teaching strategies that control learners, rather than those that promote conceptual understanding. Without a clearly identifiable *leading facet* driving his development, it appears that at times Joseph did not cope in the challenging school environment.

A university tutor in his first year described Joseph as a “*naturally talented [teacher], who has a very good sense of humour, that [he] uses effectively. [He is] confident, speaks well, and interacts well with the learners*” (UT LO 1). By all accounts, Joseph showed great potential. However, during subsequent TE

sessions, Joseph's superficial planning ultimately saw him experiencing a loss of class control in his fourth year 'continuous' TE session. It is interesting that Joseph's passion is the dramatic arts, the discipline in which he specialised. Joseph's approach to teaching was sometimes reminiscent of an actor, expecting his 'audience' of learners to be attentive during his teaching 'performance', without explicitly and consistently establishing expectations for their behaviour.

Joseph did progress during his four years of the BEd, from starting at Level 1 in four of five facets of teaching under consideration. Joseph experienced difficulty in integrating feedback into his teaching practice, and while some aspects of his teaching practice developed, classroom management remained rather rudimentary. It will be shown how his limited responsiveness and adapt to learners during his lessons meant that he did not fulfil the potential that many of his university tutors recognised, and landed up passing TE with 60%, the second lowest mark out of the group of 66 BEd (Inter/Sen) student teachers in this study. Joseph's developmental trajectory shows how student teachers (who have creative ideas for motivating learners and are knowledgeable) can have their lessons undermined by discipline problems when they do not prepare thoroughly, and do not manage their classes skilfully by consistently enforcing classroom routines or by monitoring and responding to learners.

Second Year



Fourth Year

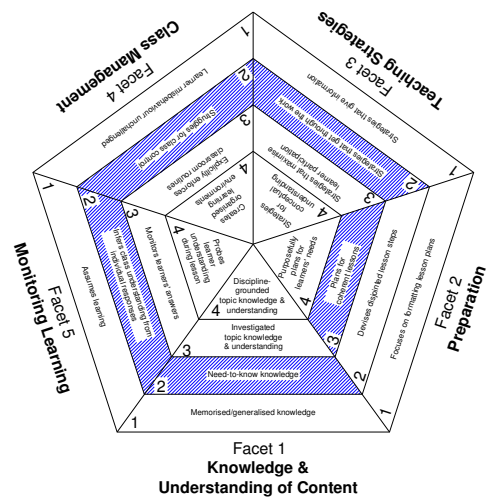
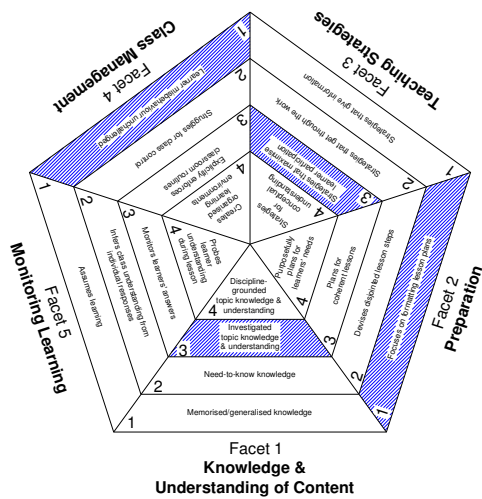


Figure 7.6: The development of Joseph's teaching practice over four years of study

Joseph's First Year

KNOWLEDGE & UNDERSTANDING OF CONTENT: Need-to-know knowledge (Facet 1, Level 2)

Although Joseph's university tutor described the content of his lessons as "*adequate*", Joseph recalls how he sometimes "*faked*" his subject knowledge with intermediate phase learners during his first year. He admitted that when the learners asked him if something was true, he would "*just say 'yes' because it sounded like the right thing to say*", not because of his knowledge of the topic (S 3 FGD). An 'adequate' knowledge of the content, but an inability to deal confidently with learner questions, suggests that he operated using a 'need-to-know' knowledge of the lesson content, at Level 2.

PREPARATION: Focuses on formatting lesson plans (Facet 2, Level 1)

From the beginning, Joseph seemed quite capable of writing up a lesson plan, but perceived lesson preparation as "*paperwork*" (S 3 FGD). In his very first TE, his university tutor noted that this might be a problematic area, saying, "*Lesson plans...???? Not many in your file, but adequately done when they are there*" and later "*I have no doubt you will prove to be an excellent teacher...as long as you put effort into your preparation!*" (UT LO 1). The observations of this university tutor are consistent with Joseph's recollections of how he "*prepared backwards*" by "*doing the lesson first with just a few points jotted down and the 'paperwork' afterwards*" (S 3 FGD).¹¹⁴ In the second TE session in first year, his university tutor commented that his lesson plan for the observed lesson was "*clear and detailed*", but did not make note of any other lesson plans (UT LO 1). It is not clear whether Joseph was planning consistently at this time, or merely completing lesson plans for his observed lessons. Evidence suggests that, on the whole, Joseph wrote lesson plans to comply with his university tutor requirements rather than because he recognised their intrinsic value. This implies that he regarded preparation as the act of 'correctly' formatting a lesson plan, indicating a Level 1 of 'preparation' (Facet 2).

¹¹⁴ This is not to be confused with Wiggins and McTighe's (1998) strategy of 'backward design' where a consideration of the purpose informs the structure and activities in a lesson.

TEACHING STRATEGIES: Strategies that give information (Facet 3, Level 1)

Like many beginner student teachers, Joseph employed transmission mode teaching strategies. His university tutor observed in one lesson that his “*input lasted far too long – after 25 minutes of [him] talking, the learners were starting to get very restless*” (UT LO 1). She urged him to “*get learners to PARTICIPATE¹¹⁵ – get the learners working on their task*” (UT LO 1). Such transmission strategies led to a loss of learner interest. In his first year, Joseph was using teaching strategies that give information (Facet 3, Level 1).

CLASSROOM MANAGEMENT: Learner misbehaviour unchallenged (Facet 4, Level 1)

Joseph had some difficulty in keeping the class interested, which was directly attributable to his use of teaching strategies that give information (Facet 3, Level 1). Evidence shows that learners were restless while he was ‘explaining’ and that he spoke over the learners’ chatter. Another time, the university tutor advised, “*When giving instructions, make sure all learners are silent and focused on you*” (UT LO 1). At the end of his first year, his university tutor commended him for “*putting a stop to bad behaviour (messing and throwing pasta)*” (UT LO 1). This was the first time that he was observed responding to the learners’ misbehaviour when it arose. Up until this point, however, Joseph’s lessons had been delivered ‘at’ the class of learners, regardless of their attention, co-operation or behaviour. For the greater part of his first year, Joseph was not challenging learner misbehaviour as it arose, implying Level 1 of ‘classroom management’.

MONITORING LEARNING: Assumes learning (Facet 5, Level 1)

Joseph needed to be told to “*pay attention to the use of the apostrophe and small letter ‘o’ as in 5 o’ clock - many learners were unsure*” (UT LO 1). This comment implies that, at least during this lesson, Joseph was unaware of the difficulty that learners were experiencing, and assumed their understanding, (Facet 5, Level 1).

¹¹⁵ Capitals in the lesson observation report

Joseph's second year:

KNOWLEDGE & UNDERSTANDING OF CONTENT: Need-to-know knowledge (Facet 1, Level 2)

There was no explicit reference to Joseph's subject matter knowledge during his second year, however, his university tutor observed that, "*Everything was clearly explained to the learners*" (UT LO 2). Joseph may have been teaching at Level 2, with 'need-to-know' knowledge, as his university tutor commented on how learners filled in their pre-existing worksheets "*without any difficulty*" (UT LO 2).¹¹⁶ I infer from this that he did not adequately extend his learners or provide additional challenge beyond the content that the worksheet required.

PREPARATION: Focuses on formatting lesson plans (Facet 2, Level 1)

In his second year, it seems as if Joseph's lesson planning was still *ad hoc*. However, his university tutor in the April TE session focused more on presentation than the learning experience. She asks, "*In future, please write your introduction [to your lesson plan] with a pen, not a pencil... Is it not possible to type your lesson plans in future? If it is possible, please do it*" (UT LO 2). Joseph later reflects how, during this TE session, he "*started doing [his] lesson plans on a computer instead of by hand, and was taking great pride in neatness and presentation*" (S 3 FGD). It therefore seems that his level of preparation remained at Level 1, because he perceived lesson preparation to be about the filling out of forms. His attention to format, not purpose, in planning may have been reinforced by the university tutor's emphasis on presentation. Preparation became a *lagging facet* for Joseph, as he did not consider the purpose of what he wanted to do during his lessons.

TEACHING STRATEGIES: Strategies that get through the work (Facet 3, Level 2)

By his second year, Joseph no longer lectured at learners, but conducted teacher-led discussions, followed by a worksheet in which learners answered questions

¹¹⁶ Quote used previously on p. 231.

based on the class discussion. This is evident in comments like, “*Learners were shown different kinds of books. They listened and answered questions correctly*” (UT LO 2). Joseph was using strongly framed teaching strategies to ensure that he got through the work in a routine type of lesson. This is indicative of use of teaching strategies at Level 2.

CLASSROOM MANAGEMENT: Learner misbehaviour unchallenged (Facet 4, Level 1)

It is clear that Joseph started teaching to settled learners in the beginning of his lessons, but was not able to maintain the interest until the end of the lesson. In his August TE, a university tutor described the visible changes in class behaviour as the lesson progressed: “*You are confident and in control... At times, you need to be a little firmer... The learners are in need of some ‘centering’... Gosh, but some of these kids are restless*” (UT LO 2).¹¹⁷ The university tutor indicated that this gradual decline of learner behaviour was (at least partially) attributable to Joseph’s continuous delivery of the lesson notwithstanding unacceptable learner behaviour. Once again, Joseph needed to be told, “*Insist on silence before giving your instructions*” (UT LO 2). It therefore seems that in terms of his classroom management, Joseph continued to deliver his lesson irrespective of the attention and behaviour of learners (Facet 4, Level 1). This facet became another *lagging facet* for Joseph, and eventually constrained the development of his teaching practice.

MONITORING LEARNING: Infers class understanding from individual responses (Facet 5, Level 2)

It has been shown how Joseph’s lessons typically involved a class discussion and answering of questions based on the discussion. Joseph appears to have used answers to questions as a way of assessing comprehension, and on the basis of such evidence, was satisfied that his outcomes had been achieved. The university tutor reinforced this perception, mentioning that, “*Learners listened and answered*

¹¹⁷ Quote used previously on p. 248.

questions correctly. You gave clear instructions. Outcomes were achieved because learners were able to fill in their worksheets” (UT LO 2). Indications are that Joseph was monitoring learner comprehension at Level 2 of this facet.

Joseph’s third year

In his third year of study, Joseph used both TE sessions to teach in diverse contexts. In the first session, he taught his academic specialisation subjects, English and Geography, in a high school in the township of Soweto, where he was observed by a university tutor. In the second session, he taught at a farm school in KwaZulu-Natal, without a university tutor. There is therefore only one set of lesson observation reports for his third year, although some of his perceptions and experiences were discussed during a focus group discussion during his third year of study.

KNOWLEDGE and UNDERSTANDING OF CONTENT: Investigated topic knowledge (Facet 1, Level 3)

Joseph taught two subjects in which he was most knowledgeable, having studied them to second-year level at university. Joseph spoke of how differently he researched when teaching in a high school as compared to a primary school, saying, *“I find with the juniors I can get away with [a lack of research], but with the high scholars I needed to be ready for any questions fired at me”* (S 3 FGD). In the lesson observation reports, the university tutor did not specifically address issues related to the content he was teaching his learners, however, as a subject specialist in English herself, she commented, *“You are a ‘natural’ – the teaching profession will benefit from you entering it – you will be an asset to any school. We need teachers of your calibre”* (UT LO 3). She seemed impressed with his teaching, and would certainly have been able to pick up content problems if they arose. Joseph’s comments suggest that he was operating from investigated topic knowledge. This became a *leading facet* that enabled his practice during this TE session: He experimented with an unusual teaching strategy, which *“didn’t work so well, but you compensated well with the explanation”* (UT LO 3). In this

situation, his level of knowledge and understanding of the topic (Facet 1, Level 3) enabled his lesson, in spite of problems associated with the teaching strategy (Facet 3).

PREPARATION: Focuses on formatting lesson plans (Facet 2, Level 1)

Although there is no direct evidence about his levels of preparation from the lesson observation reports, Joseph reflects how he felt pressure to “*put on a good show*” in the lessons his university tutor observed because his “*crits are on the line*” (S FGD 3). He, again, made sure that his observed lessons were well planned, and complied with requirements.

TEACHING STRATEGIES: Strategies that maximise participation (Facet 3, Level 3)

In his third year, Joseph experimented with innovative ways to capture learner attention at the beginning of his lessons. His university tutor commented that he had been “*very imaginative with [his] lessons and teaching resources*” (UT LO 3). His lessons started well, as his university tutors observed, with comments like, “*Good, authoritative start. An interesting beginning*” and “*Good intriguing beginning – certainly you got the Grade 8’s attention*” (UT LO 3). This evidence suggests that Joseph was using TE as a time for experimenting with creative ideas to capture the interest of his learners at the beginning of his lessons. However, as it has been seen already, Joseph’s lessons did not always progress as intended. Based on these experiences, Joseph reflects that TE is “*a learning time, [when] mistakes will be made*” (S FGD 3). He felt secure that if he experimented, and his attempts “*[fell] flat,*” he would be able to “*safely turn to [his] university tutor for help*” (S FGD 3). Indications are that Joseph now selected strategies that would motivate his learners, and captured their attention with interesting and unusual introductions. This has characteristics in line with Facet 3, Level 3, where the student teacher focuses on motivating learners and maximising participation, more than on the use of strategies that promote the development of conceptual understanding.

CLASSROOM MANAGEMENT: Learner misbehaviour not challenged (Facet 4, Level 1)

Once again, Joseph began teaching to a settled class, but was not always able to maintain learner interest to the end of the lesson. For example, he did not respond when some learners did not comply with his instructions. His university tutor pointed out, *“You didn’t follow up when learners had to put their books away. Anticipate that there’ll be some who simply ignore you. In fact, a couple continued with work throughout. Keep eyes in the back of your head”* (UT LO 3). The evidence suggests he was still delivering his lessons in spite of learner uncooperation, indicative of a Level 1 of classroom management.

MONITORING LEARNING: No data available

There is no evidence from university tutor comments about his assessment, formative or otherwise.

Joseph’s fourth year

In his final year, Joseph felt that his *“knowledge and insight into relevant learning areas is far better because of the courses [he had] been exposed to”* (S 4 RJ). He felt *“well equipped with ideas and concepts”* that would help him teach during his TE (S 4 RJ). However, Joseph had a *“particularly difficult class of Grade 7 learners”* (UT LO 4). He hardly coped during his first TE session in fourth year, saying, *“I was consistently fighting for co-operation. I felt that I was the one that needed to survive, and needed to prove that I would not be walked over. My TE was a power struggle, and the curriculum took a back seat”* (S 4 RTE). The ‘difficult’ context affected both the levels of his teaching practice and the coping mechanisms he employed.

KNOWLEDGE & UNDERSTANDING OF CONTENT: Need-to-know knowledge (Facet 1, Level 2)

Joseph's subject matter knowledge was found to be fairly sound, with his university tutor stating, *"There is no doubt that he is able. He knows his work, is very imaginative and gets on with the learners"* (UT LO 4). However, by his own admission, there was a discrepancy in his enthusiasm for the various learning areas in which he taught. He described how his *"strengths and interests enhanced some lessons, but other lessons suffered because [he] had no interest in that learning area"* (S 4 RTE). The data suggest that Joseph operated at a need-to-know knowledge (Level 2), especially when he was not really interested in the topic. Instead of using interesting content to captivate learners, Joseph sticks closely to the content contained in the textbooks he is using, as a way of controlling learners. When he struggled for class control, he *"would just give the learners a task in their textbook"* (S 4 RTE). He does not seem to be extending himself or his learners beyond "need-to-know" knowledge of the content. Therefore he teaches at Level 2 of this facet.

PREPARATION: Eventually plans for coherent lessons (Facet 2, Level 3)

In the first TE session of his fourth year, Joseph was admonished for having *"sections with no lesson plans, and incomplete lesson plans"* (UT LO 4). His university tutor said that he *"sometimes gives the impression that [he is] not sure what to do next"* (UT LO 4). Joseph prepared, not so much to develop conceptual understanding, but rather as a reaction to a loss of class control, explaining, *"My motivation for planning was to prepare the boys for individual work, because in this way, I was able to contain them, keeping them busy working so they do not become mischievous"* (S 4 RTE). His university tutor described the interrelationship between these two facets as follows, *"There are specific aspects and areas in his work that need attention if he is to fulfil his potential. The key area is careful planning and preparation... On this firm basis, he will grow in confidence, which in turn will impact on classroom control"* (UT LO 4). These comments reveal a perception that Joseph's preparation was still at Level 2 and acted as a *lagging facet*, which constrained his classroom management (Facet 4).

However, in his final TE session, Joseph finally began preparing his lessons with more purpose. His university tutor commended this development, saying, “*There has been a pleasing improvement in your planning and preparation. On the whole, your good ideas have been integrated into the lesson plans showing logical development from teacher input to learner application. Your file is in much better order. I am so pleased to see your lesson plans have been written out*” (UT LO 4). Whether this preparation was to comply with university requirements, or represented genuine progress is speculation. However, the university tutor’s comment indicates that his levels of preparation finally shifted to Level 3 during his final TE session.

TEACHING STRATEGIES: Strategies that get through the work (Facet 3, Level 2)

Experiencing a struggle for class control (Facet 4, Level 2), Joseph’s motivation for his use of teaching strategies was to get through the work with the least disruption, rather than the educational value they offered (Facet 3, Level 2). He gave account of his coping strategies, reflecting, “*I found that it was better to keep the boys working by giving them exercise after exercise. It just felt safer not making the lessons participative*” (S 4 RTE). Joseph realised that up to now, his teaching had been based on an assumption that learners would be wholly attentive and co-operative while he taught. He coped by selecting teaching strategies that got through the work, in a way that maximised his class control.

CLASSROOM MANAGEMENT: Struggle for control (Facet 4, Level 2)

In some lessons, Joseph was still delivering his lessons ‘at’ learners. Once again, he was told, “*Make sure all learners are attending when you give instruction*” (UT LO 4). His university tutor commented, “*The demonstration was a good idea, but you needed to ensure all learners were attending*” (UT LO 4). His class management, as a lagging facet, undermined an introduction intended to capture learner attention. He reflects, “*I realise that while I was teaching, I was expecting the learners to be sweet angels, co-operating with my every move*” (S 4 RTE).

While he might not always have responded to learner misbehaviour directly during his lessons, he was highly aware that he was not in control of the class, and attempted to regain some measure of control through establishing an intricate set of classroom routines. He describes his system as follows, “*For desired behaviour, points were given to the row of learners, and a treat was up for grabs at the end of the week. For the non-desired behaviour, the learners would receive a mark against their name. For five marks against their name, then a phone call to their parents was made. It was very difficult to maintain consistency and keep track of everything. At times, I was flooded with paper: giving points for desired behaviour; marks for non-desired behaviour; lessons plans; worksheets. It was crazy!*” (S 4 RTE). It was Joseph’s attempt to acknowledge and address the class control issues that elevated his classroom management from Level 1 to Level 2.¹¹⁸

As a *lagging facet*, Joseph’s classroom management constrained his ability to establish a conducive learning environment in his classroom. He says, “*Whilst this [loss of class control] was happening, I had the curriculum scratching at my heels. Some days I would fight for silence, and when I got it, I felt rushed to introduce a concept and a task*” (S 4 RTE). His classroom management (Facet 3) impacted on the establishment of a learning environment, which in turn, constrained the manifestation of subject content in his lessons (Facet 1). Joseph eventually used assessment, not as a means of monitoring learning, but rather as a means of obtaining class control. He discovers, “*showing the [learners] rubrics encouraged them to work at the tasks given to them. I am not sure if they worked because they realise the task was for marks, or if they understood the requirement in how they needed to behave. But it helped*” (S 4 FGD).

MONITORING LEARNING: Infers class understanding from individual responses (Facet 5, Level 2)

Joseph’s university tutor noticed that he did not monitor learning during the course of the lesson itself. She commented, “*You started to elicit ‘push’ and ‘pull’*

¹¹⁸ He did not reach Facet 4, Level 3 (Explicitly enforces classroom routines) because his rules and routines were not accepted by the learners, or enforced consistently.

but then you stopped – I know you are in a rush to get through the introduction, but getting answers from them, especially those who don't participate is very important" (UT LO 4). She went on to suggest possible tasks that would move beyond assessing comprehension to assessing understanding.

It has been shown how his classroom management (Facet 4, Level 2) led Joseph to a struggle for class control. Joseph coped by using teaching strategies and tasks linked to assessment as a means of control, rather than a means of monitoring learning (Facet 3, Level 2), with the consequence that the assessment tasks learners were given were neither authentic nor meaningful. Joseph acknowledges that he was able to see *"learner responses to [his] lessons, worksheets and tasks"* while marking books (S 4 RTE). He noticed how *"some [learners] got on beautifully, and others had no clue at all"* (S 4 RTE). He reflects, *"Sometimes I feel that learner development did not take place at all"* (S 4 FGD).

General comments about Joseph

Out of all the student teachers, Joseph struggled the most visibly with his teaching practice. This can partly be attributed to the difficult context in which he was teaching. His university tutor, however, alluded to his preparation (Facet 2, Level 1) initially acting as a lagging facet, constraining other aspects of his teaching practice. He embarked on a struggle for control (Facet 4, Level 2), which saw him coping by selecting teaching strategies and using assessment tasks as tools of control rather than as tools to develop conceptual understanding.

During a focus group discussion Joseph spoke of how easily he tends *"to forget about methodology"* when out of the university campus environment (S 3 FGD). Joseph's teaching only started to demonstrate some aspects of pedagogically reasoned action very late into his fourth year.

After graduating, Joseph decided to pursue a career in drama education, rather than classroom-based teaching.

Summary of levels of teaching reached by each student teacher

The summary table on the following page provides a review of each student teacher's levels of teaching practice, as demonstrated in their fourth year of study.

Table 7.2: A comparison of levels achieved by student teachers by the end of their fourth year of study.

	Brenda	Amos	Zanele	Maggie	Joseph
Facet 1: Understanding of content	Level 4 Deeply researches lesson topics. Good insight into learning areas	Level 4 Good general knowledge, researches well, Passionate about teaching of his subjects; Links well to learners' lives	Inconsistent: Level 2 in some Learning Areas; Level 3 in others	Level 2: Operates at a "need-to-know" knowledge – researches to reach this level and overcome her deficient general knowledge	Level 2 in some Learning Areas; Level 3 in others.
Facet 2: Preparation	Level 4 Lesson steps planned in minute detail, but purposeful and coherent. Attention to using appropriate teaching resource materials effectively	Level 2 Detailed, but lacks coherence and purpose	Level 3 Coherent and detailed planning, but only purposeful when understanding of content is adequate.	Level 3 Detailed planning Sometimes struggles to scaffold lesson in a structured way	Eventually achieves Level 3 Tendency to teach without adequate thought to preparation
Facet 3: Teaching strategies	Level 4 Attempts participative strategies. Maximises learner participation in worthwhile activities.	Level 2 Sticks closely to teacher-led discussion, or group discussions and report backs.	Level 3 Keeps learners actively busy and engaged during lesson, mostly with worthwhile tasks.	Level 2 Organises interesting activities for learners – but her efforts are undermined by understanding of content and classroom management	Level 2 Uses tightly framed teaching strategies to minimise potential for disruption
Facet 4: Classroom management	Level 3 Uses classroom routines explicitly. Does not always monitor interest levels, concentration span of learners	Level 3 Excellent classroom management, with established and accepted routines. Consistent expectations of good behaviour	Level 3 Established and accepted routines. Consistent expectations of good behaviour	Level 2 Can be firm, but not consistently. Her language errors may exacerbate disrespect from learners.	Level 2 Does not consistently or effectively enforce routines.
Facet 5: Monitoring learning	Level 3 Focuses more on her planned lesson steps than on responding to the understanding of learners	Level 2 His teaching strategy does not generate learner work that enables effective monitoring of learner understanding.	Level 2 Actively monitors learners' working during the lesson. May not pick up on problematic answers in lessons when own knowledge is limited.	Level 3 Provides assessment activities and monitors understanding after the lessons.	Level 2 Uses assessment as an agent of class control.

Non-linear developmental patterns in ‘learning to teach’

The portraits show that across 5 facets, student teachers demonstrate different combinations of levels, culminating in particular profiles of teaching at a given point in time and a picture of development across the student teachers. The student teachers studied did not progress through a linear sequence of universally applicable stages as suggested by existing models of ‘learning to teach’. The portraits reveal that the process of ‘learning to teach’ is highly complex and non-linear.

Certain factors emerged that account for the non-linear nature of the process of ‘learning to teach’. These factors are the diversity of student teachers themselves; differences in the school contexts in which they teach; and variations in their levels of subject matter knowledge across different learning areas. This section will now consider in more detail the impact of these three factors on the process of ‘learning to teach’. In this discussion, I will draw on evidence from the portraits as well as the evidence used in describing each level of the five facets.

(i) Diversity of student teachers

Diversity amongst student teachers is especially visible in the South African context, where vast inequalities continue to exist between different communities, despite over a decade of democracy. Student teachers enter university with differing social, cultural and linguistic capital. A highly diverse group of student teachers entered the BEd teaching programme at Wits School of Education in 2003. Whereas Brenda was able to investigate knowledge for her lesson topic, prepare and teach in her first language, Maggie was doing this in her third language. Whereas in her first year of study, Brenda had to adjust to university life, and develop an identity of being a teacher, Maggie had to adjust to moving into Johannesburg from a rural area and living in a university residence in addition to the transitions Brenda had to make. Such differences may contribute to why Brenda was more able to adjust easily and had “*no problems slotting in*” whereas Maggie found her first TE session a struggle (S 3 FGD). A degree of the

non-linearity associated with ‘learning to teach’ can be attributed to the challenges that learning and teaching in English poses for some student teachers.

A number of student teachers indicated that their schooling was dominated by the use of corporal punishment and ‘learning’ involved mostly listening or copying down notes.¹¹⁹ This data supports the observations of Mattson and Harley (2002) that in many South African schools, learning is more frequently “muscular than it is cognitive” with very little “active processing of information” (p. 293). Zanele and Maggie both found that the rote learning that characterised their own schooling had not provided a conceptual knowledge base on which they could easily build. University tutors recognised that gaps exist in their background knowledge. Amos, Joseph and Brenda were more easily able to draw on a substantial degree of general background knowledge in helping them comprehend and internalise their investigated topic knowledge (Facet 1, Level 3).¹²⁰

Given the prevalence of transmission-mode teaching and rote learning in South African classrooms, it is not surprising that some student teachers have acquired highly persistent and problematic conceptions of teaching during their schooling. Amos, for example, consistently viewed teaching as facilitating learner discussion. For a number of student teachers (including Amos), their lesson observation reports contain feedback, showing that such perceptions were challenged from one year to the next year, but their underlying misconceptions remained steadfast. As such, these perceptions were seen to hinder their development in ‘learning to teach’ as their development in certain facets lagged behind their teaching in other facets. Feiman-Nemser (1983) argues that it is unrealistic to expect that pre-service programmes prepare students for teaching as “informal influences are too strong and the time is short” (p. 157).¹²¹ However, the data shows clearly that not all student teachers have their development

¹¹⁹ See portraits of Amos p. 304; Zanele p. 319 and Maggie p. 334.

¹²⁰ See pp. 195 - 199.

¹²¹ Feiman-Nemser (1983) specifically refers to four-year teacher education programmes (p.154). This quote has been used previously on p. 22.

constrained by the perceptions they bring with them into teacher education programmes. Certain student teachers (for example, Brenda) enter the BEd programme with conceptions of teaching similar to the conceptions of university tutors and supervising teachers. Such student teachers adjust more easily, and demonstrated teaching across a number of facets at Level 2 from the outset. Other student teachers (for example, Zanele) soon abandon their initial conceptions about teaching, and more readily adopt a vision of teaching aligned with the perceptions of university tutors and supervising teachers.

Socio-economic, cultural and linguistic differences do not account entirely for conceptions of teaching that student teachers form during their own schooling. Brenda and Joseph matriculated from the same high school. Although as learners, they had been exposed to the same type of teaching, Joseph and Brenda formed vastly differing conceptions of what it means to teach and learn, which in turn affected their 'learning to teach'. Joseph's conceptions were influenced by his experiences as a youth leader on holiday camps, whereas Brenda's conceptions of teaching were obtained largely from her experiences at school. Although Amos and Zanele were both schooled in township schools, they too took very different paths in learning to teach. Amos' teaching was strongly influenced by a resilient perception that a teacher's job is to provide 'correct' information to learners, whereas Zanele more readily abandoned the type of transmission-mode teaching she was exposed to during her schooling. The analysis of these portraits suggests that the type of schooling that a student teacher has received influences, but does not account entirely for, the conceptions of teaching and learning that are formed. A comparison of portraits shows that student teachers with similar backgrounds can still take widely differing paths in 'learning to teach'.

The conceptions of teaching that student teachers hold shape the way in which student teachers teach during TE. This varies dramatically from Maggie's conception of teaching as the construction of experiential learning opportunities to Amos' conception of teaching as the transmission of accurate information. These

differing conceptions impact on the teaching practice in ways that do not allow for a common linear developmental trajectory of 'learning to teach'.

University tutors notice differences in the students' dispositions and confidence levels, describing how, for example, "*a lot of the students start out quite scared. Some are quite keen but many are timid*" (UT FGD). This contrasts starkly with the findings of Maynard and Furlong (1995) in Wales, where student teachers are initially quite assertive, having "clear, if idealistic, ideals about the sort of teachers they wanted to be" (p. 74). Initially, Zanele and Brenda were both keen, although timid in the classroom. Joseph and Amos, on the other hand, were more self-assured from the start. The data show that a few exceptionally able first year student teachers displayed fairly sophisticated teaching practice quickly, learning readily from observations and experience and proving most adept at integrating feedback into their teaching practice. To some extent, Brenda was one of these. Similarly, there were a small number of fourth-year student teachers where aspects of their teaching was sometimes rather rudimentary, necessitating rather basic suggestions and the kind of support more commonly given to beginner student teachers. Amos and Joseph, for example, demonstrated rudimentary teaching with respect to their teaching strategies (Facet 3) and classroom management (Facet 4) respectively.

In summary, the diversity between student teachers stems from differences between the students themselves, the conceptions they have acquired from their own schooling and previous experiences, and the differing challenges they face in adjusting to becoming a teacher, being at university, being in Johannesburg and learning and teaching in English. These differences account for how some student teachers begin teaching at higher levels than others; some student teachers having more resilient misconceptions than others, and some student teachers adjusting more easily than others.

(ii) Impact of context on ‘learning to teach’

During TE student teachers ideally are placed in a school context where supervising teachers support the student teachers by introducing them into a professional community and school life; modelling good practice; and providing frequent opportunities for them to practise their teaching and feedback on those attempts (McNally et al., 1997). However, the data show vast differences in the classroom contexts that student teachers experience during TE. In this section I will discuss contexts in which the students are actively supported; contexts where the model of teaching provided is problematic; contexts where student teachers are left to their own devices and contexts where they are not provided with opportunities to teach. I will consider the impact of these contexts on how they ‘learn to teach’.

Many student teachers who live in the university residences choose to do their TE sessions at poorly resourced inner city schools that are accessible and incur minimal transport costs. Although there are instances of excellent teaching in these schools, some classrooms are characterised by teachers involved in transmission-mode teaching and rote learning. Even Amos, who used predominantly transmission mode strategies, expressed amazement in seeing how learners sit as if they were “*listening to an elected official delivering a speech*”, with the supervising teacher making no effort to “*actively slot the learners in the lesson*” (S 3 RTE). In these cases, supervising teachers’ conceptions of teaching may severely limit their ability to effectively support and challenge student teachers. University tutors report that when student teachers are assigned to such teachers, they will “*gain no benefit from even mimicking them*”. Others have “*seen some student teachers who can outthink their [supervising] teacher*” (UT FGD). This perception on the part of university tutors was reiterated by a number of student teachers, who described the challenges they faced in attempting to teach “*OBE lessons to classes that are not used to group-work and are only used to ‘question and answer’ type of lessons*” (S 2 RTE). Furthermore, certain schools are plagued with educational, managerial and discipline problems, where teachers themselves “*come to school unprepared, drunk and have improper relationships*

with learners” (S 3 RTE). Such school contexts do not provide a model of professional practice for student teachers.

Whereas student teachers (in their third and fourth year) expressed frustration in attempting co-operative learning strategies in classes where rote learning is the norm, for other student teachers observing such classes have their notions of teaching as the transmission of information further cemented. The continuing prevalence of rote learning makes it particularly challenging to provide student teachers with a vision of teaching that differs significantly from the teaching they were subjected to as learners. These experiences confirm the concern expressed by Robinson (2000, p. 216) that the legacy left by Fundamental Pedagogics undermines the potential of many practising teachers to provide student teachers with “depth of inquiry” into their teaching practices, let alone with a model of teaching practice and guidance that aligns with the university’s vision of a professional teacher.

In some school contexts, the supervision of student teachers during TE is regarded as an opportunity for free periods (in which case, no modelling or teacher observation of lessons takes place). Student teachers find such supervising teachers *“ill disciplined and stayed absent”* (S 3 FGD), perceiving mentoring student teachers an invitation to *“take their purses and go and sit in the staff room”* (S 3 FGD). These contexts make it extremely difficult for student teachers to cope, as the following description shows: *“The teachers themselves were not professional – there was always 4 or 5 teachers absent every day since my arrival. I did not like the absentees (sic) of the teachers because it resulted in me being the babysitter of their classes. The other teachers would come in and tell the learners to be quiet, but how could they keep quiet when they have nothing to do? I hated that babysitting. It nearly spoiled my Teaching Experience”* (S 3 RTE). When student teachers are continually used as a substitute for absent teachers, they are prevented from teaching the lessons they have prepared. This means they

do not receive frequent feedback on their teaching, and are at greater risk of “foster[ing] bad habits and narrow vision” (Feimen-Nemser, 1983, p. 156).¹²²

Amos, Zanele and Maggie report that they learnt most about teaching when placed in schools where they received co-operation from learners, and guidance from supervising teachers who had a long tradition of supervising student teachers from the university (and formerly JCE). Many student teachers in this study report the immense effort made by their supervising teachers to support, encourage and help them develop. A student teacher, for example, comments, “*My teacher was fantastic and involved with me 100%. She was always around to watch me teach and constantly gave me feedback*” (S 4 RTE). Within such supportive environments, student teachers may be appropriately scaffolded, allowing them to teach within their zones of proximal development (Vygotsky, 1978).

In some schools, student teachers are regarded as an additional and unnecessary responsibility, adding to the burden of heavy teaching loads, large classes, few resources and no incentives or recognition for the extra work. In such contexts, student teachers are largely left to their own devices, finding supervising teachers “*unhelpful*” and that they “*gave no guidelines as to what to teach*” (S 4 RJ). Other student teachers found their supervising teachers disinclined to allow them opportunities to teach, saying, “*Some teachers were reluctant to let us teach – they felt there was a large body of work to get through and this would not be effectively handled by the student*” (S 2 RTE). Another university tutor, for example, recalls times when TE is frustrating for creative student teachers who land in a context where “*there is a prepared file of worksheets for a whole year and some students will have no choice but to stick to it*” (UT FGD). The prevalence of this problem was confirmed in lesson observation reports, with university tutors making comments like, “*The required use of a mathematics workbook led to the repetition of the same format of a lesson over an extended*

¹²² Previously quoted on p. 15.

period” (UT LO 4). In these contexts, student teachers are prevented from taking initiative in formulating their own lessons or resource materials.

This study shows that student teachers’ progress during TE can be enabled or constrained by the context of the school or class in which they are placed. More specifically, the support, or lack thereof, provided by the supervising teacher plays a large role in determining whether the student teachers are able to operate within their zone of proximal development, or revert to the safety net of routine delivery of lessons. Student teachers, including Maggie and Joseph, regressed in certain areas in their fourth year, as they struggled to cope with especially challenging contexts, explicitly acknowledged by their university tutors. To cope, they both reverted to more routine and less challenging teaching strategies than they had employed on previous TE sessions. A university tutor echoed this finding, observing how *“development tends to be ‘untidy’ – there is such a variety of teachers and schools and relationships [that student teachers have] with both entities out there”* (UT FGD). These findings suggest that the context fundamentally enables or constrains student teachers’ levels of teaching and their potential for development. In particular, the support and guidance of supervising teacher is crucial in helping student teachers with investigated topic knowledge (Facet 1, Level 3); preparation of purposeful and coherent lessons, as well as setting up an initial learning environment in which student teachers can deliver their lessons. Student teachers who may cope well in one context may teach very differently in another.

(iii) Variations in the subject matter knowledge across learning areas

The BEd programme is structured so that student teachers’ subject matter knowledge develops alongside pedagogical knowledge. The Inter/Sen student teachers in this study prepare lessons over a number of learning areas, only some of which they have studied at university. The subject matter knowledge of Inter/Sen student teachers is, therefore, not uniform over the learning areas they are required to teach. Some student teachers are acutely aware of how differently they cope in teaching in learning areas where they have broad subject matter

knowledge in comparison to unfamiliar learning areas. For example, a student teacher reflects how, *“I do have the knowledge and insight in the learning areas that I am specialised in, but for other learning areas, I wouldn’t say I have the knowledge that is required, but I try my best”* (S 4 RTE).

Zanele’s portrait, in particular, shows clearly how levels of subject matter knowledge can actually enhance or hinder student teaching in other facets. In her third year of study, Zanele was observed teaching in subjects that she had studied during her BEd. She designed conceptually strong lessons, with worthwhile learning experiences. However, during her fourth year, Zanele was observed teaching lessons in subjects she had not studied further. Her teaching was seen as problematic, with lessons less structured, and her explanations lacked depth. She was also unable to identify problems presented by her learners’ answers. In the absence of content understanding, her “excellent” classroom management was simply not enough to ensure effective teaching (UT LO 3, 4). Zanele’s teaching was perceived as being highly competent when teaching within her areas of specialisation, but far less competent when teaching outside her specialisation.

The discrepancies in the quality of teaching, as a function of subject matter knowledge, are only visible to university tutors who observe a student teaching over a particular range of subject areas. In another example, a university tutor noticed how her student teacher *“was stressed by having to handle so many learning areas. The first observed lesson was poorly conceptualised – a topic with which she was not very familiar. The second was better, being thorough, conceptually sound and making use of some good learning support material”* (UT LO 4). These data suggest that a student teacher’s teaching practice is neither uniform over topics nor learning areas. Effective teaching depends on conceptually sound subject matter, which is well understood by the student teacher, and suitably structured for the learners.

Summary

The portraits that have been presented in this chapter show changes in the level of teaching for five student teachers over time. However, the changes observable do not comprise a set sequence of stable universally applicable stages, with periods of unstable transition in-between. In this chapter, I show that the five facets interact with one another to give rise to particular profiles of teaching. Student teachers had facets that enabled their development and others that constrained it, within the context in which they taught. The manner in which their levels of teaching across facets interact with each other produces a particular profile of teaching. However, these profiles were different for each student teacher studied. The first finding is that there are developmental levels that can be identified in each facet; however the overall developmental trajectories that student teachers take are highly varied. It can be seen from the portraits that across any particular year of study, there are vast differences in the levels that student teachers are teaching at, in spite of them all having passed through the same teacher education course. The process of 'learning to teach' is developmental in that hierarchical changes are observable over time. However, the development is non-linear, as student teachers develop in different facets at different rates, and at different times. The second finding is that the development of student teaching is not uniform across years of study. The portraits demonstrate that the level of a student's teaching changes according to the learning area in which they teach, and the context in which they teach. The third finding is then that a particular student's teaching changes over different learning areas. The development is therefore not entirely random. In the following chapter, I will argue that the development of teaching as pedagogically reasoned action is logically dependent on student teachers' knowledge and understanding of the content they teach. This finding will be explored further in the following chapter.

CHAPTER 8: RELATIONSHIPS BETWEEN FACETS

Two types of comments can be distinguished in lesson observation reports written by university tutors. Firstly, there are comments that describe a student teacher's teaching within a particular facet. For example, the comment, "*Keep checking that the learners are 'learning' what you are saying!*" (UT LO 1) relates exclusively to 'monitoring learning' (Facet 5), and is indicative of assumed learning (Level 1). These comments were used extensively in Chapter 6 to describe the different levels within each facet.

The second type of comment indicates a *relationship* between two or more of the facets. For example, the observation, "*You control the class very well by keeping learners actively involved – learners were captivated, fully involved and learnt!*" (UT LO 3) alludes to a relationship between 'teaching strategies' (Facet 3) and 'classroom management' (Facet 4). In Chapter 6, some of these comments were used to highlight the manifestation of a problem associated with a particular level of a facet. However, the ways in which facets interact with one another have not yet been fully explored. This chapter will develop the *relational nature* of the model, by exploring the relationships that emerge between the facets, within the teaching practices of student teachers 'learning to teach'.

Organisation of this chapter

In this chapter, the relationships that emerge between particular facets will be considered in turn. Relationships that involve Facet 1 will be considered first, followed by relationships that involve Facet 2, and so on. I will later argue that there is a hierarchy associated with this sequence, in particular where Facet 1 creates logical conditions of possibility for teaching as pedagogically reasoned practice. In some cases, there are reciprocal relationships between the two facets under discussion, where the level of teaching in one facet affects teaching in another facet, and vice versa. However, there are interactions where no reciprocal relationship was evident from the data. At the end of this chapter, I will argue that

not all relationships are equally important in the process of ‘learning to teach’ and there is a logical hierarchy to this arrangement. More specifically, I will argue that the relationships that Facet 1 (Knowledge and understanding of content) has with the other facets are crucial in developing teaching as pedagogically reasoned action.

Relationships between facets will therefore be discussed in an order that reflects the priority of Facet 1:

- Knowledge and understanding of content (Facet 1) and Preparation (Facet 2)
- Knowledge and understanding of content (Facet 1) and Teaching strategies (Facet 3)
- Knowledge and understanding of content (Facet 1) and Classroom management (Facet 4)
- Knowledge and understanding of content (Facet 1) and Monitoring learning (Facet 5)
- Preparation (Facet 2) and Teaching strategies (Facet 3)
- Preparation (Facet 2) and Classroom management (Facet 4)
- Preparation (Facet 2) and Monitoring learning (Facet 5)
- Teaching strategies (Facet 3) and Classroom management (Facet 4)
- Teaching strategies (Facet 3) and Monitoring learning (Facet 5)
- Classroom management (Facet 4) and Monitoring learning (Facet 5)

In each case, discussion will take into account the influence of one facet on the other. Examples to illustrate such relationships will again be drawn from remarks contained in lesson observation reports, focus group discussion and reflective essays. I will draw on some pertinent quotes already presented in the preceding chapters, however, the focus will now be on the way they highlight relationships between facets. I use footnotes to acknowledge where I used such quotes previously. This chapter will end with a consideration of the role of subject matter knowledge in the development of teaching as pedagogically reasoned action.

Relationship between Knowledge and understanding of content (Facet 1) and Preparation (Facet 2):

I have already shown how higher levels of subject matter knowledge facilitate more efficient planning by enabling student teachers to select key content, identify worthwhile resources and formulate purposeful outcomes for their lessons.¹²³ Preparation stemming from a vision of the larger disciplinary ideas, concepts and ways of thinking requires student teachers to know and understand the lesson content at Level 4. A student teacher who actively used her subject matter knowledge to inform her preparation reflects how, *“The knowledge and insights into the relevant learning areas are uppermost in my mind when preparing a lesson”* (S 4 RTE). When a student teacher applies this level of subject matter knowledge, a university tutor indicates appreciation for the depth of thought underpinning the preparation, saying, *“It’s good to watch you teaching a learning area about which you are knowledgeable. The unit is clearly set out, the content is thorough and informed, and the attitudes you are addressing are worthwhile”* (UT LO 4).¹²⁴ With increasing levels of subject matter knowledge, understanding of teaching and learning, and insight into subject-appropriate skills, student teachers are able to prepare lessons with greater purpose and cohesion, as authentic learning experiences.

With knowledge and understanding of the lesson topic limited to what is in the textbook, student teachers tend to simply teach the activity provided, rather than teach the concept. This is evident in comments like, *“Avoid planning your lesson around a handout – YOU must develop the activities to ensure the purpose of the lesson is achieved: purpose leads to activities!”* (UT LO 3). University tutors encourage student teachers to use a process similar to Wiggins and McTighe’s process of ‘backward design’ (1998),¹²⁵ in conceptualising lessons that are

¹²³ See pp. 219 – 221.

¹²⁴ Quoted already in Facet 2, Level 4 (see p. 220).

¹²⁵ Backward design: planning strategy where the overall purpose is determined first, followed by what acceptable evidence of understanding may look like and thirdly, a structuring of the learning experience to achieve the evidence.

coherent and focused (Facet 2, Levels 3 and 4). However, the data suggest that student teachers can only make independent use of planning by backward design once they possess a discipline-grounded knowledge of the lesson topic (Facet 1, Level 4). Their knowledge and understanding of the lesson topic (Facet 1) then enables (but does not necessarily guarantee) coherent and well conceptualised planning (Facet 2).

It is indeed possible, however, for student teachers with investigated topic knowledge (Facet 1, Level 3) to employ methods of backward design, provided they receive guidelines from their supervising teacher regarding the topic, scope and purpose of the lesson. A student teacher refers to this knowledge gap, saying, *“I don’t find it helpful when I am given vague instructions on what to teach – just the subject for example. [Supervising teachers] should not just give me everything – I need to do my own research – but I need to know how much and how far to go”* (S 3 FGD). With such support, student teachers are able to plan focused and coherent lessons (Facet 2, Level 3). However, without this support in focusing, student teachers tend to become overwhelmed by their topic information, leading to lessons that often try to cover too much content, at the expense of depth. A university tutor addressed this, advising her student teacher, *“Don’t try to teach too much – teach less, and do so more effectively”* (UT LO 3). In other cases, student teachers taught lessons in which the outcomes were not aligned with the goals of the learning area. In Chapter 7, it was shown, for example, how Maggie attempted to teach a language lesson that did not develop literacy, but focused on outcomes in line with the goals of Life Orientation.¹²⁶

The process of preparation involves transforming the content into a form and level suitable for learners. University tutor comments such as *“Make sure the content of your lesson is appropriate to the learner – not too difficult, not too easy”* (UT LO 2) require that student teachers adapt the content to suit the needs and level of learners. This process requires *knowledge of the content*, as well as *knowledge of*

¹²⁶ See page 216.

learners. Student teachers who are teaching at Level 4 explicitly consider the needs of learners when planning. This is evident in university tutor comments like, “*She was able to adapt her knowledge and lessons to the learners’ level, and so she challenged them at every opportunity*” (UT LO 4). An ability of a student teacher to adapt lesson content to the specific needs and level of learners enacts a degree of PCK. The relationship between these two facets is an important one in the development of pedagogically reasoned action.

Relationship between Knowledge and understanding of content (Facet 1) and Teaching strategies (Facet 3)

The tendency for student teachers to use transmission-mode teaching strategies may result from the misconceptions they formed about the nature of teaching during their own schooling (Elliott & Calderhead, 1993). The portrait of Amos supports this claim particularly clearly. His conceptions of what teaching entails are reactions against deficiencies he perceived during his own schooling. He speaks repeatedly of the frustrations he felt as a learner when his teachers told him “*old information*” (S 3 FGD). This leads to him developing a perception that effective teachers provide learners with “*correct information*” (S 3 FGD). Amos strives to ensure he is knowledgeable about the topics he teaches. His university tutors describe him as “*informed and informative*,” yet he persistently employs “*alienating and boring*” transmission teaching strategies.¹²⁷ He battles to sustain learner interest towards the ends of his lessons as a direct result of his choice of teaching strategy. His supervising teacher noted, “*He tends to deliver a lot of teacher-centred lessons, leading to boredom and talking in the classroom*” (ST 4). From university tutor comments, Amos was delivering conceptually sound content to learners. Certain learners were engaging and learning during his lessons, but “*others sit quietly and listen*” (UT LO 4). However, there seemed to be more teaching than learning taking place, as he exclusively employed transmission-mode teaching strategies.

¹²⁷ See pp. 304 - 317.

However, not all manifestations of transmission teaching could be correlated with misconceptions obtained from student teachers' schooling. For example, when faced with lesson topics that student teachers were not familiar with, and were unable to make meaning of from their readings, student teachers cope by memorising and reciting information (Facet 1, Level 1).¹²⁸ A student teacher, for example, remembers how she coped in her first year, saying, *"I was given the books on the programmes and I planned at home. I would memorise things. It was okay, because I was able to stand in front of the kids and teach from memory"* (S 3 FGD). This finding supports an alternative explanation for the use of transmission teaching strategies offered by Gess-Newsome (1999b). She suggests that poor conception of content of their lessons may contribute to student teachers equating learning with memorising information – because this is the extent of their own 'understanding' of the content.

When student teachers operate at Levels 1 - 2 of Knowledge and understanding of content (Facet 1) and Teaching strategies (Facet 3), teaching tends to be both superficial and mechanical. One such example is described by a university tutor as follows: *"...the teaching of 'figures of speech' is a wonderful opportunity to get learners to engage with language and meaning in a creative way, but I think you missed this opportunity. To give the poems as a mechanical exercise in finding figures of speech is such a pity"* (UT LO 3).

A different relationship between these two facets emerges when student teachers have lower levels of knowledge and understanding of lesson topics (Facet 1, Levels 1 – 2), combined with higher levels of teaching strategies (e.g. Strategies to maximise learner participation: Facet 3, Level 3). Student teachers then tend to keep learners busy, rather than engaging them in meaningful learning experiences. A university tutor probes this relationship, asking her student teacher, *"Identify for me more clearly what aspects of floods and what skills this lesson is clarifying. I*

¹²⁸ See pp. 187 - 191 .

have major reservations about the activity. What deep knowledge is there to be gained? How can you contextualise this information in South Africa?” (UT LO 4). Examples such as this empirically support Darling-Hammond’s claim that ‘active learning aimed at genuine understanding begins with the disciplines, not with whimsical activities detached from core subject matter concepts... Just creating interesting tasks for learners is not enough’ (Darling-Hammond, 1997, p. 107). The prevalence of these incidents, where student teachers employ participative teaching strategies without substantial content, contests Maynard’s (1996) finding that student teachers who have a shallow subject matter knowledge necessarily use “more closed and didactic teaching methods” (p. 7). These student teachers are employing participative teaching strategies without a clear purpose for learning. Such teaching action enacts what Shulman calls *general pedagogical knowledge*, without accompanied construction of PCK.¹²⁹

This study does show how the facilitation of authentic learning experiences requires discipline-grounded topic knowledge (Facet 1, Level 4) coupled with teaching strategies for conceptual development (Facet 3, Level 4). One such example was seen in a lesson on wheat farming where the student teacher was *“able to turn a potentially dull section, unrelated to learner interests, into a dynamic lesson where the approach transforms this content into a fascinating topic”* (UT LO 4).¹³⁰ Brenda, too, used a game, not merely as a way of entertaining learners and maximising participation, but also as a way of getting learners to engage meaningfully with the content.¹³¹ In these cases, the student teacher enacted a degree of PCK, as evident in the pedagogical consideration of purpose; the choice of appropriate strategies for achieving this purpose; and the adaptation of the learning experience to the needs of the learners.

The relationships that exist between Facet 1 and Facet 3 can therefore interplay resulting in four ways: Low levels of knowledge and understanding coupled with

¹²⁹ See pp. 99 – 100 for Shulman’s categories of teacher knowledge.

¹³⁰ Quoted in Facet 3, Level 4: Strategies for conceptual understanding (see p. 241)

¹³¹ See p. 301.

low levels of teaching strategies lead to lessons that are mechanical and rote. Higher levels of knowledge and understanding of content coupled with low levels of teaching strategies result in lessons which can be informative, but inaccessible for learners. Lower levels of knowledge and understanding of content, coupled with higher levels of teaching strategies can lead to busyness without purpose. High levels of knowledge and understanding of content, coupled with high levels of teaching strategies show student teachers engaging learners in meaningful learning experiences. The relationship between these two facets is key in the process of 'learning to teach'.

Relationship between Knowledge and understanding of content (Facet 1) and Classroom management (Facet 4)

University tutors make numerous references to how they observe student teachers' knowledge and understanding of the content affecting their ability to manage their learners. One university tutor explains, *"If their knowledge is weak, they will not keep learners engaged for an entire lesson"* (UT FGD). A university tutor observed a first year student whose 'prepared' lesson *"ran out after two minutes!"* (UT FGD). When describing her worst experience when teaching a lesson, a student teacher alludes to such a relationship saying, *"the kids were impossible to control [when] I was teaching something I did not know"* (S 3 FGD). Brenda has not realised that the teacher's insecurities are highly visible to learners. She is amazed that, *"when you don't know your content the learners can sense it; and they give you obscure questions - almost to trip you up. I don't know how they know it; they just do"* (S 3 FGD).¹³² Another student teacher, however, is aware that her degree of knowledge and understanding of the lesson topic is directly related to her confidence levels, saying, *"When learners asked questions and if I didn't know the answers, I felt insecure. It seems that in this TE, I lacked confidence, and I think it showed in my lessons"* (S 4 RTE). These student teachers are aware that their subject matter knowledge undermines their

¹³² Quote used previously on p. 194.

confidence in managing their classes. It is this aspect of the relationship between subject matter knowledge and classroom management that Gess-Newsome (1999b) alludes to when she suggests novice teachers only be assigned lessons within their fields of specialisation, to reduce their stress and allow for a “quicker transition from survival concerns to consideration of instructional practice” (p. 86).

For learners to interact with the concepts and content of a lesson, a supportive learning environment needs to be created. A student teacher reflected how *“learner development all depended on the discipline. Lessons were more productive when I didn’t have to be sorting out discipline problems, and I was able to concentrate on the work”* (S 4 RTE).¹³³ For some student teachers, this environment is initially constructed by the physical presence of the supervising teacher or university tutor in the classroom as they teach. Maggie’s university tutor explicitly reminded her to *“thank [her supervising] teacher for assisting [her] so much – especially with class control and preparation”* (UT LO 1).¹³⁴ However, when student teachers are ‘struggling for control’ (Facet 4, Level 2), and do not have this support,¹³⁵ they tend to become so focused on teaching as classroom control, with the content of the lesson diminishing in importance. Joram and Gabriele (1998) refer to this as a manifestation of a common misconception in ‘learning to teach’ which they call “The Learning Part is Easy – It’s Managing the Class that I’m Worried About” (p. 180). The danger of this combination occurs when student teachers like this have learnt to *manage their learners* effectively, without necessarily having learnt to *teach their subjects* effectively. Student teachers respond by keeping learners busy to maintain order, rather than as a means towards an educational purpose (Feiman-Nemser, 1983, p. 156). Joseph’s struggles in his fourth year are prime examples of this tension. He reflects on this dynamic saying, *“I found each day a battle. I was consistently*

¹³³ Quote used previously on p. 334.

¹³⁴ As described on pp. 250 - 256.

¹³⁵ For example, when completing a summative TE session (like Joseph), or when supervising teachers absent themselves from the classroom

fighting for co-operation. Whilst this was happening, I had the curriculum scratching at my heels. Some days I would fight for silence, and when I got it, I felt rushed to introduce a concept and a task” (S 4 FGD).¹³⁶ This coping mechanism undermined rather than promoted his ability to teach effectively. In other cases, student teachers seem to assess the effectiveness of their teaching by how well they were able to manage the classroom. A number of student teachers believe that their lesson was a success because *“the learners behaved and co-operated”* (S 2 RTE). A university tutor challenged a student teacher to *“demonstrate the ability to do more than act as a good babysitter for the teacher”*, adding that, *“he has the personality and resources to ‘get by’ without too much difficulty, but that would be a pity”* (UT LO 4). In this example, the university tutor suggests that although the student teacher’s classroom management was adequate, learners were not involved in meaningful learning.

Other student teachers keep class control by engaging motivated and interested learners in meaningful learning activities. For example, a university tutor observed, *“Your introduction piqued the learners’ interest, and set the tone for a focused lesson. Your examples were well conceptualised and helped the learners see what you wanted them to produce. You maintained good control over the class in a potentially rowdy lesson - learners behave well when they are intrigued in a topic and want to produce good work”* (UT LO 3). In this case, the class control stems from the creation of a learning environment, with meaningful engagement of substantial content knowledge. The relationship is evident by a university tutor’s guidance, *“During preparation, your focus must be on what is to be taught, and how best to impart this knowledge by organising the learning environment properly”* (UT LO 3). In one example, a university tutor described how the creation of a good working environment allowed learners to engage with the learning activities, saying, *“She sees to it that learners settle down and become involved in activities promptly and with little fuss. As such, the need to discipline her class was seldom necessary. She maintains a sound working environment in*

¹³⁶ Quote used in Joseph’s portrait. See p. 361.

that her learners were always busy and productive” (UT LO 4). Established classroom routines (‘classroom management’ Facet 4, Level 3) create conditions of possibility that allow for learner engagement with the lesson content to be the main focus of the lesson.

The relationships that exist between Facet 1 (Knowledge and understanding of content) and Facet 4 (Classroom management) reveal that the establishment of a learning environment are most likely to happen when learners are meaningfully engaged in authentic enquiry. This would suggest that classroom management is intrinsically tied to other facets, and is not (as suggested by Fuller, 1969; Fuller & Brown, 1975) an independent concern that must be resolved before a student teacher can focus on issues of teaching and learning. Some student teachers initially build on a foundation of classroom management to create conditions of possibilities for working with the subject matter knowledge, and then in latter years to build on their foundation of subject matter knowledge to teach purposefully and manage their classes effectively. While classroom management does not in itself result in effective teaching, the data show empirically how classroom management leads to the creation of a learning environment that is both a prerequisite for, and a result of, worthwhile learning.

Relationship between Knowledge and understanding of content (Facet 1) and Monitoring learning (Facet 5):

In order to teach for understanding, teachers “need to have a sense of what understanding looks like in a particular subject knowledge domain” (Grossman et al., 2005, p. 215). They argue that this may require the use of “subject specific tools” for monitoring and assessing understanding (p. 223), as assessment tasks are an embodiment of the purposes of the learning experience, as expressed in student teachers’ learning goals or outcomes (as discussed in Facet 2).

Monitoring learning relies on student teachers’ subject matter knowledge to recognise learner misconceptions. A student teacher did not possess the subject

matter knowledge needed to recognise that “*learners gave [her] types of energy*”, which she “*accepted as sources of energy*” (UT LO 3).¹³⁷ Her ‘need-to-know’ subject matter knowledge (Facet 1, Level 2) did not enable her to identify and respond to the learners’ misinterpretation of her question. In contrast, a student teacher relied heavily on her understanding of the use of mathematical terminology and the concept of fractions to teach a lesson. Her university tutor responded, “*You took your learners through each stage of the fraction activity, step-by-step, hands-on and using mathematical language. Well done on monitoring the processes of understanding and going back when your learners were lost*” (UT LO 4). In this instance, the student teacher both actively monitored learning – and was able to recognise when misunderstanding occurred.

Student teachers’ knowledge and understanding of the content (Facet 1) enables them to monitor their learners’ understanding (Facet 5), although monitoring of learners’ understanding does not further the student teachers’ own subject matter knowledge. However, the monitoring of learning may contribute to the development of PCK, which enables them to anticipate the misconceptions learners may possess associated with the learning of a particular topic. A hierarchical relationship therefore exists between these two facets, in which the student teachers’ knowledge and understanding of the content (Facet 1) creates conditions of possibility that allow them to recognise learner misunderstanding when monitoring learning (Facet 5).

Relationship between Preparation (Facet 2) and Teaching strategies (Facet 3):

Some student teachers begin the process of preparing by considering the teaching strategies that would most appeal to their learners. A student teacher, for example, latches onto a particular teaching strategy, saying, “*I noticed that my class enjoyed group presentation, and hence tried to incorporate them as often as I could,*

¹³⁷ Quote used previously on p. 192.

creating a fun-filled learning environment” (S 4 RTE). This is also reflected in reflective comments made after lessons where student teachers judge their lesson to have been successful on the grounds that “*learners enjoyed the lesson*” (S 2 RTE). Such preparation is generally associated with teaching strategies for maximising learner participation (Facet 3, Level 3). In such cases, the selection of a learner activity or a teaching strategy (Facet 3) affects preparation (Facet 2). Through the interaction of these facets, such student teachers focus on teaching strategies as a “concrete means for portraying content, with little consideration for larger issues of disciplinary structure or the nature of the discipline” (Gess-Newsome, 1999b, p. 84).

Shulman (1987b) claims that “some sort of teaching material is almost always involved” in the initiation of a teaching activity (p. 100). In this study, however, the data show that there appear to be different ‘starting points’ that student teachers use when preparing a lesson. For many students teaching at Level 1 and 2, a pre-existing worksheet or textbook activity provides the starting point for their preparation. A number of university tutors allude to this interaction between Facets 2 and 3, with comments like, “*simply photostatting notes from a textbook is not teaching*” (UT LO 1). Such comments indicate that this is not the way university tutors perceive the process of teaching. Comments like “*Although this particular lesson went well, it was clear that it was one of those pre-prepared lessons where much of the hard work had already been done, and little new input was being provided. As such, the lesson had a rather unrealistic feel to it – real teaching is not like this*” (UT LO 3) urge student teachers to move beyond this type of preparation. This type of teaching is typically associated with need-to-know knowledge (Facet 1, Level 2) and teaching strategies that get through the work (Facet 3, Level 2).

At Level 4, student teachers approach lessons differently, considering the learning process first, which in turn informs selection of authentic resources and teaching strategies. A student teacher, for example, described her approach of providing an experiential learning experience from which learning could proceed, saying, “*I*

feel that kids learn better by seeing the things they are learning about and then putting them onto paper. The old way was to learn by cramming it into your mind. The new way is to first experience it – for example riding on a train. How can you write about it if you have never been on a train?” (S 3 FGD). Consideration of the learning process depends on student teachers using their knowledge and understanding of content (Facet 1) to drive the formulation of worthwhile outcomes in the preparation (Facet 2). This in turn informs the selection of teaching strategies (Facet 3). Preparation therefore acts as a bridge between their knowledge and understanding of content (Facet 1) and the teaching strategies (Facet 3) they chose to employ.

Relationship between Preparation (Facet 2) and Classroom management (Facet 4):

Although student teachers “cannot predict everything that will happen during a lesson,” planning helps them “think more thoroughly [about] the predictable elements” so that it becomes easier “to cope with the unexpected” (Hayes, 2003, p. 146). Thorough lesson preparation often helps to make the execution of the lesson somewhat smoother, optimises learning time, preventing “disruptions and delays” (LePage et al., 2005, p. 340). However, the data show that preparation in itself does not necessarily result in a well-managed class. For example, a student teacher whose lesson plan was focused and coherent (Facet 2, Level 3) was not able to deliver a lesson because her classroom management (Facet 4, Level 2) acted as a lagging facet. Her university tutor commented, “*At times, very well-prepared lessons (with clear learning outcomes and sound educational intentions) came to little*¹³⁸, *because effective control could not be maintained*” (UT LO 4). Well thought out preparation alone does not ensure a well managed classroom.

¹³⁸ I interpret the expression “well-prepared lessons ‘came to little’” to mean that the university tutor believes that the potential of these lessons did not materialise because of the way the lesson was executed in terms of classroom management.

Preparation that is simply perceived as writing up lesson steps in a particular format (Facet 2, Level 1), or preparation in which the coherence of the learning experience is not considered (Facet 2, level 2), do not promote consideration of class management issues before the lesson. A university tutor observed such a relationship when pointing out that *“without thorough planning and preparation, [the student teacher] found herself insecure in the classroom, for she was thinking of what to say and what to do next. In the class situation, there is no time to think about appropriate teaching strategies and classroom management issues”* (UT LO 4). Preparation, not carefully thought out, may act to constrain student teachers’ ability to manage their classroom.

In contrast, another university tutor noticed how classroom management acted as a leading facet that enabled another student teacher’s lesson, saying, *“Classroom management is very good, so your lesson outcomes are that much more achievable”* (UT LO 3). The data from this study suggest that preparation and classroom management act together to *enable* effective teaching, but are not, in themselves, the *essence* of it.

Relationship between Preparation (Facet 2) and Monitoring Learning (Facet 5):

It is during the preparation stage of teaching that student teachers are required to think about the evidence they plan to use to assess whether they have achieved their outcomes. Amos was repeatedly asked to reflect on how he intended to assess learners and monitor their learning, with comments like *“Amos needs to decide which tasks are going to be assessed so that he can make provision for this while planning”* (ST 4). His university tutor similarly required that he set *“clear goals about what should be covered and done by learners each day”* and provide examples of work that he had set. However, Amos’ monitoring of learning was not explicitly made a priority in his teaching, which sometimes meant that *“learning did not take place as intended”* (UT LO 4). University tutors convey a

perception that considering how learning will be monitored helps student teachers clarify direction and purpose whilst preparing lessons.

Another aspect of the relationship between these two facets relates to the *flexibility* of student teachers during their lessons. The ability of student teachers to diverge from their lesson plan is strongly linked to their deliberate monitoring of learning (Facet 5) - and responsiveness to the dynamics within the classroom. Without monitoring learners, and instead assuming learning (Facet 5, Level 1), student teachers do not see the need to diverge from a series of what they perceive to be well-thought-out lesson steps. Many of Brenda's lesson observation reports testify that she focused on her own performance, rather than on monitoring the understanding of her learners. Her lessons were characterised by inflexibility. She coped well in lessons where learners were able to grasp the concepts, but in others, she stuck rigidly to her lesson plans, "*trying hard to make the lesson float*" (UT LO 3). On two occasions, the observing university tutor helped her to adjust her lesson to changing circumstances during the lesson. She acknowledges the inflexibility of her teaching, saying, "*I like structure and planning, and when it does not pan out, it throws me off*" (S 3 FGD). She was unable to capitalise on learner feedback, only discovering where learner's difficulties lay when marking their work after the lesson. The way in which these two facets interact influences student teachers' flexibility during the lesson.

The monitoring of learning seems to start with responsiveness to restless learner behaviour as the most visible manifestation of problems associated with learning and understanding. The responsiveness to the changing dynamics within a lesson indicates that the student teacher is thinking about the learning that is taking place as the lesson progresses. A university tutor refers to this flexibility, saying, "*What I get excited about is when I see a lesson plan that is not going well and mid-lesson, the student [teacher] puts it aside and changes tack*" (UT FGD). Schön (1987) refers to this as reflection-in-action, which he asserts is a characteristic of professional thinking.

Relationship between Facet 3 (Teaching Strategies) and Facet 4 (Classroom Management)

There is a complex relationship between classroom management and teaching strategies. It has been argued that learning experiences are maximised when conducted within a well-managed classroom. Certain student teachers struggled visibly in trying to create a learning environment in their classrooms. Instead of ensuring that lessons were conceptually stronger, many student teachers attempted to address the problems by acquiring class control through a selection of authoritarian teaching strategies and assessments and by keeping learners 'busy'. A student teacher admits how she *"just lectured them to keep control"* (S 2 RTE). Joseph's portrait illustrates this dynamic especially well, as classroom management rather than conceptual understanding motivated his selection of teaching strategy. He reflects further, *"My motivation for planning was to prepare the boys for individual work, because in this way, I was able to contain them, keeping them busy working so they do not become mischievous. For myself (sic) to cope better in the classroom, it was wise to keep boys busy"* (S 4 RTE). Maggie, too, responded to a loss of class control by selecting teaching strategies on the basis of the increased levels of class control that they offered, irrespective of how appropriate they were in facilitating learner understanding of the lesson's concepts. She recalls that, *"when she attempted group work and whole class activities, [she] found the learners became disruptive, hence [her] teaching strategy stayed the same"* (S 4 RTE). Such a situation manifests as a relationship between Struggle for class control (Facet 4, Level 2) and two levels of Facet 3, namely, Strategies that give information (Facet 3, Level 1) and Strategies that get through the work (Facet 3, Level 2). These findings support LePage et al. (2005), who suggest, "Tasks required for problem solving are more difficult to manage than the routine tasks associated with rote learning. Meaningful learning experiences very often require "a sophisticated level of classroom management" (LePage et al., 2005, p. 331). Without knowledge of how to manage an inquiry-orientated classroom, teachers turn to "passive tactics that dumb down the curriculum" (LePage et al., 2005, p. 331).

Another relationship between these two facets occurs when student teachers attempt to employ teaching strategies that require classroom management skills beyond their capability. Such dynamics prompted university tutor comments like, “*Your use of group work is not working well at present – some learners take it as a free period. Cut down for now, and rather give very short, focused activities with tight time limits and clear end products*” (UT LO 1). The portraits of Brenda and Maggie show them attempting to use rather sophisticated teaching strategies (Facet 3, Levels 3 – 4), without the enabling framework of established classroom management routines (Facet 4, Levels 1 – 2). It was seen, for example, how in her first year, Brenda attempted to teach a lesson that “*needed a lot of organisation*”, and that she needed to “*structure more carefully*” (UT LO 1). There is clearly a mismatch between what these student teachers wanted their learners to do during a lesson, and the level of classroom management they were able to facilitate. Their conceptions around the complexity of teaching are directly challenged, and they realise that teaching is more complex than it may appear to be.

Maynard and Furlong define certain stages of development can be understood more fully as relationships that exist between specific levels across these two facets:

- Their Stage 2, *Personal Survival*, is dominated by a struggle for class control (corresponding to Facet 4, Level 2), together with a coping mechanism of using transmission-mode teaching strategies (associated with Facet 3, Level 1 of this study).
- Maynard and Furlong’s Stages 3 and 4 (*Dealing with difficulties* and *Hitting a plateau*), are both characterised by student teachers attempting to enforce certain classroom routines, (Facet 4, Level 3), and an over-reliance on worksheets and the use of teaching strategies that minimise potential for disruption (corresponding with Facet 3, Level 2: Strategies that get through the work).

- *Moving on* (Stage 5) is characterised by established classroom routines (Facet 4, Level 3), and a shift towards experimenting with teaching strategies (Facet 3, Level 3).

In their study, Maynard and Furlong noticed that a few student teachers “appeared to hold a greater understanding of the complexity of teaching and learning,” but were unable to “achieve sufficient control over the teaching situation to be able to put their beliefs into practice” (Maynard and Furlong, 1995, p. 91). Their stage model does not accommodate this manifestation of student teaching, which they deem to be an anomaly in their model. The theoretical framework of this study understands this type of teaching as the relationship between student teachers’ use of teaching strategies (Facet 3) and their classroom management (Facet 4). In this example, student teachers select sophisticated teaching strategies that maximise learner participation, or develop conceptual understanding (such as Facet 3, Level 3 or 4), but their level of classroom management (Facet 4, Level 2) does not yet support this kind of teaching. Effective classroom management therefore is needed to support the execution of enquiry-based teaching strategies.

Relationship between Teaching Strategies (Facet 3) and Monitoring Learning (Facet 5):

There are a number of dimensions to the relationship between these two facets. University tutors see discipline problems manifest when student teachers continue with their teaching, unaware that learners understand the work. A university tutor noticed, for example, how “*Good intentions were destroyed when she allowed the pacing of her lesson to slip and with that, the discipline slipped too. She must work at maintaining the interest of her learners by avoiding lengthy explanations*” (UT LO 4). At times, Maggie stuck with her teaching strategy regardless of learner understanding. She was told, “*Don’t dwell for too long on explaining if learners have understood – keep the pace moving*” (UT LO 2). Monitoring of learning therefore enables student teachers to use their teaching strategies responsively and pace their lessons appropriately. Learner restlessness may superficially appear to

student teachers as being a class management issue (Facet 4) but the data suggests learner restlessness may stem from insufficient monitoring of learning (Facet 5), as learners become either bored or confused during the lesson.

The findings of this study show that while learners can be settled at the beginning of a lesson, sustaining a learning environment until the end of a lesson requires learners to be engaged in authentic learning activities. Student teachers' ability to create a safe, organised learning environment is enhanced when their knowledge and understanding of content (Facet 1) is at Levels 3 or 4. This level of classroom management goes hand in hand with the student teachers' ability to devise authentic learning experiences of worthwhile content. At Level 4, student teachers create a classroom environment that best serves their educational purposes, and are able to organise their classrooms accordingly. This relationship is exemplified in the following university tutor's response to an observed lesson: *"Your game is a creative way of ensuring that learners read the handout/information sheet and kept up the pace of the questioning to maintain the learners' interest and co-operation. A healthy and stimulating learning environment!"* (UT LO 4). In cases like these, authentic engagement leads to learner interest being sustained throughout the lesson.

While student teachers use questioning as a teaching strategy for involving learners in their lesson, many university tutors encourage them to use their questioning as a means of monitoring learning. For example, university tutors made suggestions like, *"When the learners respond to questions, make a point of also asking those whose hands don't go up – This can also be your assessment of their comprehension of the subject matter. If you detect a lack of understanding, you can then correct it."* (UT LO 2).

Student teachers who are able to teach at Level 4 in both of these facets are seen monitoring learning actively, through appropriate means. A university tutor, for example, told a student teacher, *"You kept the learners on their toes the whole time. You varied activities and methods and were extremely sharp in picking up*

problems (even minimal) in what was a very fluent lesson.” (UT LO 4). In such cases, the student teacher has an understanding of the learning that is happening in the class, and is able to respond immediately when misunderstanding is detected.

Relationship between Classroom Management (Facet 4) and Monitoring Learning (Facet 5)

Some student teachers monitor learning of individual learners and work intensively with them to address their misunderstandings. This can lead to problems associated with classroom management, as the other learners are left to their own devices. It was shown, for example, how a student teacher’s “*great concern for those learners who do not always reach the stated outcomes sometimes leave those who have completed their work sitting idle*” (UT LO 4). Amos, in particular, was told by his supervising teacher, “*If you are busy with one learner, you must always ensure that all other learners are occupied with something*” (ST 4). In another case, a university tutor told her student teacher “*You’re moving confidently around the class and assisting the learners very ably. But be careful of being too focused on helping a learner – you need to keep an eye on the rest of the class*” (UT LO 4). In such cases, the student teacher is responding to misunderstandings (Facet 5, Level 4), at the expense of classroom management (Facet 4).

In contrast, other student teachers were observed responding to misunderstandings while also attending to classroom management. For example, a student teacher was observed helping “*a small group of learners quickly and quietly at the front of the class, while the rest of the class who did understand the concept carried on working on their own*” (UT LO 4). The use of extension activities for learners who understand and finish the work quickly is widely recommended by university tutors as a means of allowing student teachers more time to attend to those who need extra assistance. Classroom management is thus maintained through meaningful engagement of learners (Facet 4, Level 4).

Although the data show how classroom management can support monitoring of learning, the relationship between these two facets enhances the effectiveness of teaching and learning, rather than accounts for it.

Summary

The discussion thus far has shown that the facets of teaching do not operate in isolation from one another. Some relationships are more important for the process of ‘learning to teach’ than others, and the role of the facets within a particular relationship is not always equal. In some cases, relationships between two or more facets create conditions of possibilities for each other.¹³⁹ In other cases, a dependency relationship is revealed, where a student teacher’s level of teaching in one facet affects their teaching in other facets. This discussion reveals that there is not an *ad hoc* manifestation of relationships between the facets. In other words, in spite of the processes of teaching occurring simultaneously, a logical hierarchy exists whereby certain facets create pedagogical conditions of possibilities for others. The hierarchy that emerges from the findings revolves particularly around the role that subject matter knowledge (Facet 1) plays in ‘learning to teach’. The pedagogical role of subject matter knowledge therefore requires further discussion, both in terms of the findings of this study, and the literature.

The role of subject matter knowledge in ‘learning to teach’

A student teacher’s subject matter knowledge has a particularly important role in ‘learning to teach’: Their knowledge and understanding of the lesson’s content is a facet of the teaching process, and its relationships with the other facets are instrumental in the development of teaching as pedagogically reasoned action. The role that subject matter knowledge plays in ‘learning to teach’ can only be fully understood when considered in relation to the other facets identified in this study.

¹³⁹ As in the relationship between Facet 1: Knowledge and understanding of content and Facet 4: Classroom management. See p. 398.

Subject matter knowledge enables a teacher to: plan purposefully; select, critique and adapt teaching resource materials; select appropriate teaching strategies, and address learner misunderstandings of content. In every facet, teaching practice at Level 4, including classroom management, was linked with the level of subject matter knowledge. However, subject matter knowledge alone does not ensure the development of teaching as pedagogically reasoned action. Amos' portrait demonstrates clearly that in spite of discipline-grounded topic knowledge (Facet 1, Level 4), he did not draw on this knowledge to inform his preparation; select appropriate teaching strategies or to monitor learning. The data suggest that with investigated topic knowledge and support from a supervising teacher, a student teacher's teaching practice can develop to Level 3. Some student teachers' teaching progresses to Level 4 when they actively begin to draw on their subject matter knowledge to consider the purposes of their lessons and appropriate ways of achieving these purposes. This signals the emergence of pedagogically reasoned action, as student teachers' begin to construct PCK to inform their teaching in other facets. At this level, subject matter knowledge acts as a goal of teaching, and also creates conditions of possibility for further development of teaching.

How deep should subject matter knowledge be to teach Inter/Sen learners?

The degree of subject matter knowledge needed by Inter/Sen student teachers (who typically teach over a range of learning areas) may well be different from the degree needed for FET student teachers (who specialise in one or two subjects only). While acknowledging that each subject area has very specific needs, certain generic indications of the depth of subject matter knowledge required by Inter/Sen student teachers emerge from this study. This study shows clearly that the depth of subject matter knowledge for Inter/Sen student teachers is 'enough' when student teachers are able to select key issues and core concepts efficiently while preparing for their lessons. Furthermore, the subject matter knowledge should be 'deep enough' to enable them to question learners meaningfully, address the questions learners ask, locate authentic resources, and critically evaluate teaching resource materials. 'Enough' subject matter knowledge enables student teachers to

formulate appropriate outcomes for lessons independently, in the spirit of the disciplinary goals of the subject / learning area. Their subject matter knowledge should be deep enough to inform their choice of teaching strategies for conceptual understanding; and enable them to assess whether a line of questioning would be worth exploring, or simply derail the lesson. They possess ‘enough’ subject matter knowledge when they are able to identify and address misunderstandings of their learners.

These findings directly oppose the assumptions of a student teacher who believes, *“Teaching in a Grade 4 class, the level and content of knowledge is not that deep, therefore the degree of knowledge that I have was sufficient to educate the learners”* (S 4 RTE). Simply knowing what the learners need to know is not ‘enough’. Hayes (2003) asserts that weak content knowledge can be rectified by “some serious study” on the part of the student teacher (p. 190). This dissertation shows that the effectiveness of such “serious study” depends on the student teacher’s ability to engage with and internalise the content studied, and locate it within deeper disciplinary structures.

The development of teaching as pedagogically reasoned action

This study adopts Shulman’s notion of teaching as pedagogically reasoned action as the goal of ‘learning to teach’. Whereas Shulman describes the pedagogically reasoned action of veteran expert teachers at Level 4 and beyond, this study explores the development and emergence of pedagogically reasoned action in student teachers as they ‘learn to teach’. Development in this study is considered to be a shift from *ad hoc* classroom action to thoughtful, informed and responsive teaching that considers how to enable learning. In this sense, my study analyses the teaching that precedes Shulman’s model of the pedagogical reasoning and action demonstrated by expert teachers.

In discussing the processes associated with pedagogical reasoning and action, Shulman (1987b) argues that irrespective of the sequence in which a lesson is

conceived, comprehension of the content is the foundation upon which the process of teaching rests.¹⁴⁰ My study builds on the work of Shulman by clarifying the particular ways in which a teacher's comprehension of the content contributes to the development of pedagogically reasoned action. It does this by detailing the relationships that Facet 1 (Knowledge and understanding of content) has with other facets. The discussion has shown that student teacher development is not *ad hoc*, but that there are hierarchical relationships between the facets, as some facets create conditions of possibility for others. In particular, Facet 1 (Knowledge and understanding of content) plays a significant role in the non-linear pattern of the ways student teachers 'learn to teach'. Teaching at Level 4 can be regarded as the emergence of pedagogically reasoned action, where student teachers draw on their subject matter knowledge to ensure their teaching is informative, accurate and worthwhile. In this way, there is an intrinsic logic to the developmental patterns of student teachers: Although student teachers may learn to teach up to Level 3 in the absence of deep and broad subject matter knowledge, teaching at Level 4 is dependent on them teaching at Level 4 in Facet 1. There is therefore a *logical sequence* in the pattern of 'learning to teach' that is often different to the *temporal sequence* of the challenges they appear to face. The emergence of teaching as pedagogically reasoned action occurs when student teachers' knowledge and understanding of the content is at Level 4, and this knowledge actively interacts with their teaching processes in the other facets. The model that I present in this study is developmental not only because it describes the possible changes that occur over time, but it also identifies the conditions from which developmental changes may proceed.

Shulman's conception of teaching as pedagogically reasoned action suggests that expert teachers draw on PCK, which allows them to facilitate the learning of others. In this study, I studied the progression of student teachers in demonstrating teaching as pedagogically reasoned action. Calderhead and Shorrock (1997) found that "rather than formulating any deep understanding of the subject and its

¹⁴⁰ See p. 109.

pedagogy, student [teachers] appeared instead to develop a general orientation to the subject and to learn activity structures...which provided a framework for lesson planning and teaching” (pp. 163 - 164). They argue, then, that the teaching cycle of student teachers often begins with finding learner activities, rather than deep subject matter knowledge as suggested by Shulman. The findings of this study resolve this apparent contradiction. Using the terminology of my study, Calderhead and Shorrock are referring to a *temporal* sequence, whereas Shulman is referring to the *logical* hierarchy underpinning the process. This study contributes to this debate in arguing that although student teachers can proceed with ‘learning to teach’ with any facet leading their initial development, there will be a ceiling to the level of teaching they can achieve independent of external guidance. Their ability to develop towards teaching that constitutes pedagogically reasoned action depends on their level of subject matter knowledge, and how it informs and is informed by the other facets of their teaching.

Summary

This study set out to investigate the developmental patterns associated with ‘learning to teach’. It found that the classroom action of different student teachers varied considerably, although common patterns of practice were identified across five facets of teaching action. The different combinations of the levels of practice interacted with one another to pose a unique profile of teaching for the different student teachers. In this sense, it can be said that student teachers take unique and individual trajectories in ‘learning to teach’. If one considers the vastly different perceptions of teaching with which the group of student teachers in this study started, it is not surprising that their trajectories are highly variable. Some of these preconceptions (like Amos’) were particularly persistent, manifesting mainly in certain facets of their teaching practice. Others (like Zanele’s) were more easily abandoned. In this chapter, two further developmental patterns of ‘learning to teach’ have been identified. Firstly, there are hierarchical relationships between facets. Secondly, the relationships that exist between Facet 1: Knowledge and understanding of content and other facets, are especially significant in the developmental trajectory that student teachers take in ‘learning to teach’.

SECTION E: CONCLUSION

CHAPTER 9: CONTRIBUTION OF THIS STUDY

This chapter will consider the contribution this study makes to teacher education internationally, nationally and to the BEd programme specifically. Firstly, I will return to the research question and respond to it in light of my central findings. Secondly, I will return to the five criteria developed from the ‘learning to teach’ literature, against which existing developmental models of student teaching were critiqued.¹⁴¹ I will consider the extent to which my findings address each of these criteria. Embedded in this discussion, I will position the findings of this study in relation to existing models that describe the process of ‘learning to teach’. In particular, I will respond to the models of Tomlinson (1995); Berliner (1994); Fuller and Brown (1975), and Maynard and Furlong (1993, 1995). Thirdly, I will consider the implications of this study for teacher education in South Africa. Here I revisit the problem that led to this study, namely, the confusion I felt in trying to understand what it means to assess student teaching at different NQF levels. I will argue that the imposition of NQF levels on student teaching does not consider the complexity of the processes involved in ‘learning to teach’. Fourthly, I will consider the implications of this study for the BEd programme. Finally, I will suggest further avenues of research, in light of questions raised by this study.

Developmental patterns of student teaching

In this study, I set out to answer the research question: What developmental patterns are involved in the process of ‘learning to teach’? In order to answer this, I analysed 893 lesson observation reports, written by university tutors as they observed a cohort of 66 student teachers teach over the four years spanning their undergraduate teacher education programme.¹⁴² The analysis of this empirical data reveals 11 significant themes that university tutors comment on when

¹⁴¹ Refer to pp. 35 - 46.

¹⁴² For a full discussion of the methodology, see Chapter 4.

responding to the observed lessons.¹⁴³ Linking these 11 themes with Shulman's (1987b) Model of Pedagogical Reasoning and Action, I categorised them into five facets related to the process of teaching.¹⁴⁴ Based on the literature on current understandings of 'learning to teach', four developmental levels were conceptually defined.¹⁴⁵ The emerging pedagogical actions of student teachers, as extracted from lesson observation reports, were categorised into the five facets and sequenced according to the four developmental levels.

This study finds that student teachers do not develop through a linear sequence of universally applicable developmental stages. 'Learning to teach' is a complex, non-linear process, in which numerous possible developmental trajectories exist. Nevertheless, the model that I have presented is still developmental. The model documents the hierarchical changes that are evident as student teachers 'learn to teach' over time. Although these developmental changes do not manifest in a set series of stages, they are not random. The non-linearity of the process can be explained in terms of the differences between individual student teachers; their previous educational experiences; the contexts in which they undertake their TE and their differing levels of subject matter knowledge across the learning areas in which they teach. The portraits of five student teachers all demonstrated students teaching at higher levels of teaching in some facets and lower levels in others. The different facets of their teaching interact to result in a particular profile of teaching. The nature of student teaching observed is thus a consequence both of a student teacher's level of teaching in each facet, and the way in which the five facets interact with each other. Development in any one facet affects the composite teaching profile, as each facet has relationships with the others. I have also shown that these relationships are associated with a logical hierarchy, so that some make more of a contribution to the development of pedagogically reasoned action than others. In particular, the knowledge and understanding student teachers possess about the topics they teach (Facet 1) does not necessarily lead to

¹⁴³ See pp. 138 – 143.

¹⁴⁴ See p. 146.

¹⁴⁵ See pp. 150 – 155.

pedagogically reasoned action, but it does create conditions of possibility from which pedagogical reasoning and action can proceed. The role that subject matter knowledge plays in ‘learning to teach’ is therefore embedded in a complex set of relationships with other facets of the teaching process.

Implications for teacher education

In Chapter 1, I drew on current issues in the ‘learning to teach’ literature to propose five criteria that a model of ‘learning to teach’ should address.¹⁴⁶ I am now going to discuss the model of ‘learning to teach’ from this study in light of those criteria and position my findings in relation to the literature reviewed.

(i) Consider the development of teaching over time

This study considers the process of ‘learning to teach’ as the development of pedagogically reasoned action, emphasising the degree to which teachers draw on and use their teacher knowledge in the “forging of wise pedagogical decisions” that enable learning (Shulman, 1987b, p. 234). This conception of development of ‘learning to teach’ differs substantially from that used by existing developmental models.

Tomlinson’s model (1995) regards teaching as a “complex and ‘open’ skill” (p. 14).¹⁴⁷ He presents the process of ‘learning to teach’ as the acquisition and mastery of a set of teaching skills. In his model, development in ‘learning to teach’ is characterised by increasing flexibility, competency and efficiency in executing these skills. The conceptual framework of this study argues that ‘learning to teach’ involves more than just the acquisition and mastery of skills. It involves being able to acquire and enact this knowledge, using it as a basis for making informed choices and judgements. The data from this study show that teaching at Levels 2 and 3 may be viewed as an application of generic teaching routines, devoid of consideration of factors that include the disposition of the

¹⁴⁶ These expectations were based on a review of the literature on student teaching. See pp. 35.

¹⁴⁷ ‘Open’: meaning that it needs to be applied to new contexts

student teachers; the tenacity of their preconceptions of teaching; the context in which they teach, and their levels of knowledge and understanding of the content being taught.

Tomlinson's stage of *unconscious competence*, corresponds to what Bradford et al. (2005) refer as *routine expertise*, in which teachers become highly efficient in executing their old routines within a static context. In my study, this would correspond to fluid teaching at Level 3. Tomlinson's model does not extend to a consideration of teaching at Level 4, where informed, considered and responsive teaching is grounded on a firm foundation of subject matter knowledge. This ability to reflect-in-action and adjust to changing circumstances, as Bradford et al. (2005) suggest, is characteristic of a new ideal for student teachers – to develop into *adaptive experts*.¹⁴⁸

In the models proposed by Fuller (1969) and Fuller & Brown (1975), 'learning to teach' is characterised by a *shift in the concerns* of student teachers. Fuller and Brown argue that student teachers are initially consumed by classroom management concerns (corresponding with my Facet 4: Classroom Management). They suggest that it is only after resolving their struggle to be in control of the class that student teachers switch their concerns to the mastery of teaching strategies (which in this study corresponds with Facet 3). Later, concerns shift again to learning and the impact of teaching on learning, (corresponding to Facet 5: Monitoring Learning). The implications of Fuller's model suggest that awareness of teaching and learning does not happen until student teachers have established classroom routines (Facet 4, Level 3) and mastered teaching strategies (Facet 3, Level 3 or 4). However, the findings of this study do not support the claim that student teachers are exclusively concerned about one facet at a time. It has been shown that student teachers were concerned with a number of facets simultaneously. Maggie's portrait, for example, shows that she strived to provide experiential learning experiences for learners long before she was able to manage

¹⁴⁸ See pp. 27 - 28.

her classroom or establish class control (Facet 4). This study therefore lends support to Grossman's (1992) assertion that student teachers have the potential to be "pedagogically critical thinkers", grappling with how to teach their topics effectively alongside their acquisition of classroom management skills (p. 177). Much of the data in this study show that student teachers were concerned about a number of different issues simultaneously.¹⁴⁹ This study therefore supports Kennedy's (2006) view of teaching as a "multifaceted activity" (p 205). Kennedy is at variance with Fuller, suggesting that teachers grapple with a number of concerns concurrently, although some of these concerns take immediate priority in a given situation.

Teacher development as 'shifting concerns' (following Fuller, 1969 and Fuller and Brown, 1975) continues to manifest in the PCK-related literature. Gess-Newsome (1999a) and Morine-Deshimer and Kent (1999), for example, claim that attention to subject matter knowledge only increases in later TE sessions, once student teachers have resolved their immediate concerns for survival and class management. In the language of this study, they suggest that student teachers shift their concern from class management (Facet 4) to knowledge and understanding of content (Facet 1).¹⁵⁰ However, this study reveals a complex dialectic relationship between these two facets, rather than a linear shift of concerns from the one to the other. Temporally, it may appear that student teachers initially face challenges related to classroom management, rather than challenges related to their level of subject matter knowledge. However, the findings of this study show that student teachers are able to mediate other facets of the teaching process, including their classroom management, more effectively when they have thorough knowledge and understanding of the content they are teaching. In this way, Facet 1 (Knowledge and understanding of the content) logically, but not necessarily

¹⁴⁹ For example, see Zanele's simultaneous concerns about her lessons' content and her class control, p. 327.

¹⁵⁰ This is in contrast to Fuller and Brown's work (1995), which suggests that student concerns shift from Classroom Management (Facet 4) to Teaching Strategies (Facet 3) and then on to Monitoring learning (Facet 5).

temporally, enables the development of teaching as pedagogically reasoned action.

Maynard and Furlong's (1995) conception of development in 'learning to teach' is the "formation of ever more sophisticated concepts or ways of seeing" (p. 73). They argue that these changing conceptions enable student teachers to gain control over their teaching. Maynard and Furlong identify broad *stages of development* that student teachers pass through as they 'learn to teach'. In the portraits I examined, certain student teachers demonstrated a 'stage' that Maynard and Furlong describe in their model. For example:

- Brenda entered teacher education with idealised ideas of how she would relate to learners (Stage 1: Early idealism).
- In their fourth year, Joseph and Maggie both experienced a visible 'personal struggle' (Stage 2: Struggle for survival).
- Amos' development stagnated as he used one teaching strategy repeatedly, convinced that he was teaching effectively (Stage 4: Hitting a plateau).
- Zanele, Maggie and Brenda experimented with participative teaching strategies (Stage 5: Moving on).

Although I could identify isolated examples of the stages suggested by Maynard and Furlong, none of the 66 student teachers in this study progressed through all the stages they describe. My study suggests that Maynard and Furlong's model describes one possible developmental trajectory out of numerous possibilities.

For each 'stage of development', Maynard and Furlong describe two facets of student teachers' classroom action, namely their use of teaching strategies and their ability to manage classrooms.¹⁵¹ This study accounts for the classroom teaching they describe in terms of the different ways in which Facet 3 (Teaching strategies) and Facet 4 (Classroom management) interact.¹⁵² Using my framework, I can account for a type of teaching that they deem to be an anomaly

¹⁵¹ See pp. 30 – 34.

¹⁵² See pp. 391 – 393.

in their data.¹⁵³ Although Maynard and Furlong recognise that their stages are broad stages of non-linear development, my study shows, in far more specific ways, how a non-linear model of development can account for the many more profiles of teaching that student teachers demonstrate as they ‘learn to teach’.

Linear stage models (such as models offered by Fuller, 1969; Fuller & Brown, 1975; Berliner, 1994; and Maynard & Furlong, 1993, 1995) generally offer a series of universally applicable stages, allowing the next ‘stage of development’ to be anticipated. However, this study finds that ‘learning to teach’ is a non-linear process. I have demonstrated that the particular challenges that student teachers encounter as they ‘learn to teach’ is determined by the way in which the various facets of their teaching interact with one another across different levels.

(ii) Consider the diversity of student teachers and their prior educational experiences

I have argued that ‘learning to teach’ is neither a uniform nor a linear process. The comparison between different teaching portraits of student teachers allows some insight into how diversity between student teachers affects how they ‘learn to teach’. I have used data to argue that the non-uniformity of student teaching across levels can be attributed, in part, to the individual differences between student teachers.¹⁵⁴ In the context of a post-apartheid South Africa, student teachers form a highly diverse group, socio-economically, culturally, racially and linguistically. Moreover, student teachers bring with them diverse previous educational experiences, ranging from exclusive private school education with state-of-the-art facilities, to rural schools, some of which do not have access to even basic resources such as electricity. It has been shown how personal factors affect the process of ‘learning to teach’ to varying degrees and in different ways, leading to the non-uniformity of a student teacher’s development.¹⁵⁵

¹⁵³ See p. 393.

¹⁵⁴ The teaching of different student teachers is fully compared and contrasted in Chapter 7, p. 365 – 374.

¹⁵⁵ See p. 365 – 368.

Berliner's (1994) model describes a linear, uniform progression from 'novice' to 'expert' teaching, as student teachers become more intuitive in recognising and responding to the classroom patterns they encounter whilst teaching. While his terminology is useful, his model describes the development of a generic model of teaching, independent of individual factors that may influence the student's teaching. This study finds that student teaching does not exist independently from these factors. For example, Brenda's teaching in her first year spanned three different levels, over the five facets. Berliner's model of expertise reflects uniformity in the development of student teachers, and does not make provision for student teachers to be more advanced in certain facets of their teaching while having a more rudimentary level of teaching in others. The results of this study contest the uniformity of development implied in Berliner's model, clearly showing student teachers teaching at different levels of expertise across the facets.

In contrast, Elliot and Calderhead (1993) suggest that given the diverse nature and backgrounds of student teachers "it is unlikely that there would be a uniform linear progression in all domains of development as suggested by the stage models. Rather, what is more likely is development across a range of dimensions at different times for different students" (p. 173).¹⁵⁶ My study builds significantly on Elliot and Calderhead's claim. Whereas they do not suggest what these "different dimensions" could be, this study identifies five facets of 'learning to teach'. While Elliot and Calderhead suggest that development takes place at different rates, the findings of this study suggest that the development is not *ad hoc*. The data show that student teachers possess differences in the perceptions regarding teaching that they have acquired from their own schooling; in the extent of their background knowledge; and their ability to communicate in English. These differences contribute to the different ways and rates at which student teachers 'learn to teach'. The developmental model generated by this study

¹⁵⁶ Refer to p. 39. Their suggestion is reminiscent of the way that Piaget uses horizontal décalage to describe uneven cognitive development that manifests simultaneously across different domains of knowledge (See p. 20).

accommodates the different trajectories and different rates at which student teachers 'learn to teach'.

(iii) Consider how the context of the school / class affects student teaching

The impact of different contexts on a student teacher's ability to teach may manifest as changes in the teaching of student teachers through differing successive contexts. The portraits provide two examples (Maggie and Joseph), where the level of teaching of the student teacher regressed in the fourth year, in spite of supposedly greater degrees of teacher knowledge.¹⁵⁷ The university tutors of these student teachers both attributed some of the difficulties they encountered to the challenging contexts in which they were teaching.

In schools where there is a poor learning environment, some student teachers cement their perceptions of teaching as involving learners in rote learning of content. Others struggle to teach in ways that university tutors expect, but that their class of learners is not used to. They shy away from the teaching strategies they would prefer to use, as mediating an unfamiliar type of learning is more challenging.¹⁵⁸ Some, however, regard such school contexts as an opportunity to teach creatively with meagre resources.¹⁵⁹

My data show that the degree of support given to student teachers from their supervising teacher plays a significant role in determining how well the student teachers are able to prepare and deliver their lessons. This confirms studies that cite the support and guidance provided by the supervising teacher as being an important factor in enabling student teacher development during TE sessions (Haigh, 2005; Marais & Meyer, 2004). I build on these studies by identifying the specific type of support with which supervising teachers can provide student teachers in order to promote the development of their pedagogically reasoned action. My findings show that guidance provided by the supervising teacher is

¹⁵⁷ See pp. 343 - 348 and pp. 358 - 362 for Maggie and Joseph respectively.

¹⁵⁸ See p. 370.

¹⁵⁹ See p. 159.

crucial in helping student teachers to focus the scope of their lessons; select core content; plan activities that address worthwhile learning goals; and assist them in maintaining class control.¹⁶⁰ This support and guidance is particularly important for beginning BEd student teachers, whose subject knowledge develops alongside their pedagogical knowledge.

(iv) Portray the complexities involved with teaching

The study has generated a non-linear framework for understanding student teaching, in which each facet of teaching has a complex web of relationships with the other facets.¹⁶¹ The profile of student teaching is a culmination of the level of the teaching in every facet, and the ways in which the facets interact with one another. Development in one facet affects teaching in other facets too, changing the overall composite nature of the student's teaching. In particular, student teachers' knowledge and understanding of content creates conditions of possibility for other facets of the teaching process.

In order to overcome a simplistic, linear view of the nature of teacher learning, Hoban (2002) advocates the use of a "worldview based on complexity theory and systems thinking ... focusing on interrelationships that help us to understand the dynamics of complexity" when analysing educational change (p. 22). While Hoban (2002) regards 'learning to teach' as complex and non-linear, he does not identify what makes up this complexity. This study clarifies what those complexities are: it identifies particular facets involved in 'learning to teach' and analyses the interrelationships that exist between various facets of the teaching process. The discussion argues that of the facets and relationships identified, some have more significance than others in 'learning to teach'. In this way, my study clarifies the nature of the complexities associated with teaching and 'learning to teach'.

¹⁶⁰ See pp. 369 - 372.

¹⁶¹ For example, see the relationship between Facet 1 (Knowledge and understanding of content) and Facet 3 (Teaching Strategies), see pp. 379 - 382.

The theoretical framework of this study shows that student teachers commonly have misconceptions about the complexities of teaching, which need to be challenged as they ‘learn to teach’. I have argued that certain misconceptions affect the way in which student teachers perceive teaching, and that this may translate into student teaching at Levels 1 and 2.¹⁶² Hammerness et al. (2005a) describe the ‘problem of complexity’¹⁶³ as misconceptions held by student teachers that prevent them from perceiving the complexities associated with teaching. Brenda, for example, entered teacher education believing that teaching involves straightforward routines for giving learners information and getting them to do their work.¹⁶⁴ Her teaching in her first year shows how this perception was enacted by her use of textbook-based knowledge (Facet 1, Level 2) and teaching strategies that get through the work in a mechanical manner (Facet 3, Level 2).¹⁶⁵ The model generated by this study provides a tool for considering how the common misconceptions of student teachers affect their classroom teaching with respect to five facets of the teaching process.

(v) Consider how increasing teacher knowledge underpins teaching action.

The theoretical framework of this study regards ‘learning to teach’ as the development of increasingly thoughtful teaching action, informed by professional teacher knowledge. This corresponds to what Shulman (1987b) calls *pedagogically reasoned action*. The theoretical framework of this study has argued that ‘learning to teach’ involves a shift from teaching according to perceptions acquired during one’s schooling, to teaching informed by general pedagogical knowledge, and ultimately some learn to teach thoughtfully by using subject matter knowledge and PCK to inform pedagogical action and thinking. The student teachers who reached this level taught lesson topics with conceptual

¹⁶² See the discussion in Chapter 7, p. 367.

¹⁶³ See p. 97.

¹⁶⁴ See p. 292.

¹⁶⁵ A different manifestation of the ‘problem of complexity’ is described on p. 392, in which student teachers try to use sophisticated teaching strategies, but do not have supporting classroom management strategies in place.

depth, in ways that took cognisance of the level, nature and interests of the learners.

Although the group of student teachers in this study all went through the same teacher education programme, they did not enter the university with a uniform knowledge base; they did not all specialise in the same subjects, and they did not all achieve the same successes in their academic studies. There was therefore variation in the depth of content knowledge, both between different student teachers, and across different learning areas.¹⁶⁶ Data from this study show that student teachers' knowledge and understanding of the lesson content (Facet 1) affects every other facet, including the time it takes them to select key content for their lessons; their ability to devise learning activities that address the goals of the learning area; their use of teaching strategies that facilitate conceptual understanding; their ability to create a conducive learning environment in the class, and maintain learner interest throughout the lesson, and their ability to identify learner misconceptions revealed during the lesson.¹⁶⁷ The data show student teachers teaching at higher level in learning areas in which they had studied further, compared to the way they taught unfamiliar topics.¹⁶⁸ The relationships that Facet 1 has to the other facets contribute directly to the development of teaching as pedagogically reasoned action.

The discussion of this study argues that subject matter knowledge (Facet 1) is not an isolated, independent variable in 'learning to teach', but rather a facet nested within a web of relationships. Subject matter knowledge is not singularly the most important driving force of the process of 'learning to teach'; however it is still a pre-condition to the development of pedagogically reasoned action. To fully understand the role that subject matter knowledge plays in 'learning to teach', it should be understood in terms of the relationship it has with other facets of the teaching process. Until a deeper disciplinary insight is developed, student teachers

¹⁶⁶ Inter/Sen student teachers are expected to prepare and deliver lessons across a range of learning areas.

¹⁶⁷ See pp. 396 - 398 for a fuller discussion on the role of subject matter knowledge in learning to teach.

¹⁶⁸ See p. 397 and Zanele's portrait, pp. 318 – 332.

are able to teach lessons with investigated subject matter knowledge (Facet 1, Level 3), provided they have put effort into investigating the topic; are able to adequately internalise what they read, and receive guidance from a supervising teacher regarding the scope and focus of the lesson.

Maynard and Furlong (1993, 1995) argue that student teachers' stage of development determine how they use subject matter knowledge and are affected by context of their TE placement. The findings of this study lead me to argue the converse: Their levels of subject matter knowledge and the school context are central factors affecting the non-linearity of the development of teaching practice. Moreover, student teachers' level of subject matter knowledge, together with the way they use that knowledge to inform other facet of their teaching, determines their particular profile of teaching.

The stages of development described by Maynard and Furlong's model correspond to the development of a generic teaching practice, independent of contextual factors and subject matter knowledge. While this is probably consistent with the highest level of teaching practice seen in the one-year PGCE considered by Maynard and Furlong, many student teachers from the BEd programme in this study were found to teach beyond Maynard and Furlong's Stage 5: 'Moving on'. Maynard and Furlong's model therefore only considers student development up to Level 3 as defined by this study. Maynard and Furlong's definition of 'Autonomous teaching', as the stage where student teachers "take more responsibility for their own professional development, broaden their repertoire of teaching strategies; deepen their understanding of the complexities of teaching and learning; and consider the social, moral and political dimensions of educational practice" (Maynard & Furlong, 1995, p. 191), corresponds with some aspects of what I have called Level 4, but does not consider the central role of context and subject matter knowledge in the enactment of PCK. Whereas their study focuses primarily on the changing conceptions of student teachers, this study clarifies the specific ways in which deepening subject matter knowledge contributes to 'learning to teach'. In addition, my study shows why the deepening

of subject matter knowledge alone is insufficient in developing teaching as pedagogically reasoned action.

Summary

The empirically derived model of 'learning to teach' that emerged from this study is substantially different to existing models of 'learning to teach' in a number of ways. Firstly, whereas some models (like those of Tomlinson, 1995 and Berliner, 1994) focus on how classroom action becomes increasingly intuitive with experience, others (like those of Fuller, 1969; Maynard & Furlong, 1993, 1995) focus on changes in the conceptions or concerns of student teachers. In the model developed in this study, however, I have used Shulman's construct of *pedagogically reasoned action* to consider 'learning to teach' as the development of enacted teacher knowledge. This conception of teaching provides a bridge between theory and practice, as it deals with the knowledge and conceptions student teachers have about teaching and learning, and how this understanding translates into their classroom action. Secondly, whereas other developmental models (e.g. Fuller, 1969; Berliner, 1994; Maynard & Furlong, 1993, 1995) describe a range of characteristics associated with each stage, this model describes how four developmental levels manifest across five facets of the teaching process. This model offers a framework in which a student teacher's 'stage of development' is not a predefined sequence of stages, but depends on his/her level of teaching in each facet, and the interactions between these facets. Thirdly, whereas the other models consider the development of a generic ability to teach, the model generated by this study suggests that student teachers' *knowledge and understanding of the lesson content* is central to their ability to engage in pedagogically reasoned action when teaching.

The findings of this study attribute the non-linear and non-uniform nature of student teaching to the diversity of student teachers in the study; variations in the contexts in which they teach; their levels of subject matter knowledge, and the interactions between the different facets of their teaching. Of particular interest is

the way their levels of subject matter knowledge acts to establish conditions of possibility that impact on their teaching in the other facets.

Contributions to teacher education in South Africa

It is widely accepted that severe problems exist with teaching and learning in many South African classrooms.¹⁶⁹ Much debate abounds in South Africa about how to improve the educational system. The findings of this study add another perspective to this debate.

Taylor and Vinjevold (1999) argue that “improving the conceptual knowledge of teachers *alone* gives them the confidence and resources to engage children at more challenging levels and undertake more adventurous learning tasks” (p. 161).¹⁷⁰ The data of this study show that subject matter knowledge (embodied in Facet 1: Knowing and understanding of content) at Level 4, in itself, is insufficient for competent teaching. When student teachers, like Amos, merely transmitted or discussed content without facilitating learner enquiry, learner development was deemed to be limited, as the attention and interest of learners could not be sustained through lessons. Subject matter knowledge is not an independent variable in the process of teaching, but one essential component that interacts in complex ways with other facets. This finding highlights the importance of general pedagogical knowledge for intermediate/senior phase student teachers. The results of this study predict that the type of intervention proposed by Taylor and Vinjevold would lead to an increase in informed transmission-mode teaching accompanied by continued rote learning. The findings of this study, in contrast, align with Adler et al.’s (2002) assertion that addressing the challenges in the South African education system simply by upgrading teachers’ subject matter knowledge will “not yield its promise of better learner attainment” (p. 138). The findings of my study suggest that upgrading

¹⁶⁹ See p. 78.

¹⁷⁰ Italics are mine.

teachers' subject matter knowledge together with empowering teachers to use this knowledge in informing other facets of their teaching would promote the development of their pedagogically reasoned action.

Clarifying the NQF Levels in assessing 'learning to teach'

The initial problem that led to this study was my dissatisfaction with the vague and conceptually confusing way in which criteria stipulate that student teachers are to be assessed at NQF 5 during TE during their first and second years of BEd, and at NQF 6 during TE in their third and fourth years of study. Attempts to distinguish between NQF levels 5 and 6 have led to vaguely articulated descriptors¹⁷¹ that are largely ignored by university tutors.¹⁷² This study has shown that university tutors hold expectations of student teachers at different years of study that are fundamentally different from those the published guidelines suggest. The imposition of NQF levels onto student teaching is highly superficial.

Student teaching changes according to a variety of contextual factors, including the dispositions of the student teachers; the classrooms in which they find themselves; the guidance they receive from supervising teachers; the persistency of misconceptions they bring with them into the teacher education programme; and their degree of knowledge of the lesson topic they are teaching. In this study, not one student teacher taught uniformly across one level at a time and progressed uniformly from one level to the next in a neat linear fashion. It is highly improbable that first and second year students will be observed teaching across all facets at a uniform level. Nor can it be expected that all third and fourth year student teachers will be teaching exclusively and uniformly at a higher level. The imposition of NQF levels on student teaching is both misaligned with the empirical evidence and unhelpful in promoting an understanding of the processes

¹⁷¹ See Table 5.2, p. 163.

¹⁷² See pp. 172 - 178. These findings are similar to the findings of Hawe (2002) who found that university tutors in New Zealand continued assessing student teachers during TE by relying on their professional judgement, rather than on poorly articulated criteria. See p. 56.

involved in ‘learning to teach’. The imposition of such rigid requirements on the levels of student teaching is likely to have a detrimental effect on how they ‘learn to teach’, as it may lead university tutors to have unrealistic expectations, or to ignore the impact of contextual factors that may affect students’ teaching.

Changing a student teacher’s long held perceptions about teaching and learning does not happen quickly or easily. Whereas some student teachers quickly reconsider their notions of what it means to teach, others take considerable time. The requirement that student teachers should comply with certain levels of teaching in certain years of study does not take into account the nature of processes involved in ‘learning to teach’. This finding reiterates the argument of Steele (2003), that to be effective, policies governing teacher education should be informed by an understanding of the nature of teacher education, rather than be driven by political reform agendas, and budgetary constraints.¹⁷³

The influence of contextual factors on teaching makes it inappropriate for university tutors to assess the competence of student teaching by imposing decontextualised level descriptors from the qualifications framework. These findings underpin the assertion by Steele (2003) that “teachers are not simply produced on command by policies, no matter how elegant or progressive these may be” (p. 108). The government’s strategy¹⁷⁴ to improve the quality of initial teacher education by raising the NQF level expected of fourth year BEd students from NQF 6 to NQF 7 is therefore unlikely to have any impact in improving levels of student teaching.

¹⁷³ See p. 83.

¹⁷⁴ As detailed in the ‘National policy Framework for Teacher Education and Development in South Africa’ (Dept of Ed, 2007)

Implications for the BEd programme

At present, student teachers from the Wits School of Education begin their TE within the first four months of the academic year. This study shows that the way in which first-year student teachers cope in their first TE session is strongly influenced by their prior educational experiences, and the notions of teaching they possess on entering the BEd programme. Many are eager to begin teaching, and with adequate support and guidance, make significant progress. However, others possess problematic misconceptions about teaching that to some extent can be attributed to the teaching they were exposed to during their schooling – problems associated with the legacy of Apartheid and Fundamental Pedagogics.¹⁷⁵ Calderhead (1988) argues that it is only when student teachers present a lesson for the first time that they “suddenly see classroom life from the teacher’s perspective” (p. 78). However, this is not always a positive experience. Many beginning BEd student teachers have not yet developed an understanding of subject matter knowledge or general pedagogical knowledge from which they can conceptualise lessons. For these student teachers such lessons may be based on transmission-mode teaching, leading to a demoralising experience when learners are uncooperative. The experiences of student teachers during TE and the teaching patterns observed by university tutors have provided a ‘big picture’ of issues relating to the TE programme in the BEd degree.

It has been said that TE is a time with “so much potential for lost opportunities” and where “relatively small changes can lead to dramatic improvements” (Quick & Sieborger, p. 4). I will now consider how the BEd programme could make changes, some big others small, in order to more fully exploit the opportunities for student teacher development through the TE programme.

‘Learning to teach’ by design, not chance

Hammerness et al. (2005a) argue that when “a well-supervised student teaching experience precedes or is conducted jointly with coursework, students appear

¹⁷⁵ See p. 73.

more able to connect theoretical learning to practice, become more comfortable with the process of ‘learning to teach’ and are more able to *enact* what they are learning in practice” (p. 375). However, the data from this study show that for some student teachers, like Amos and Joseph, the BEd programme did not substantially change existing perspectives on what it means to teach, nor were they always able to enact their teacher knowledge. However, other student teachers, like Zanele, Brenda and Maggie, demonstrated substantial changes in the way they thought about teaching, and their ability to enact their teacher knowledge. The theoretical framework of this study suggests that if the initial preconceptions of student teachers are challenged more rigorously, then they may be in a better position to engage with the new vision of teaching offered to them, to enact their teacher knowledge and to integrate feedback provided to them.

University tutors have observed that student teachers cope differently during their first TE session depending on the degree to which their apprenticeships of observation are aligned with the visions of teaching held by university tutors. A university tutor observes how student teachers who have “*content knowledge and [the] ability to employ certain strategies at the time of that first TE session are those that have been exposed to this in their own school experience and they bring it with them*” (UT FGD).

Historically, the TE programme in the BEd offered by the Wits School of Education follows the TE model inherited from the BPrimEd.¹⁷⁶ This model assumes that student teachers learn best about teaching by spending time in schools; observing and teaching with practicing teachers; and receiving regular feedback on their own attempts of teaching. Learning to teach by apprenticeship kept the status quo during a time when student teachers taught at the same sort of schools that they had attended as learners. Under these circumstances, student teachers’ apprenticeships of observation were more aligned with the type of teaching that they were expected to demonstrate.

¹⁷⁶ See p. 73 (Carrim et al., 2002, p. 198).

Following the democratisation of South Africa and the opening up of educational institutions to all races, BEd student teachers are highly diverse racially, culturally, linguistically, geographically and economically. Many of the BEd student teachers now come from traditional township schooling, and many others come to Johannesburg from rural areas, where the majority of schooling in South Africa “leaves much to be desired” (Taylor & Vinjevold, 1999, p. 131). With this shift in demographics, university tutors are now finding themselves addressing highly problematic notions of teaching and learning that numbers of student teachers bring with them into classrooms during TE. These notions have been acquired during a school career dominated by rote learning and lessons taught by teachers trained in Fundamental Pedagogics, who were discouraged from or afraid of encouraging critical thinking and controversial debate in their classes (Mattson & Harley, 2003, p. 288). The group of student teachers in this study who obtained distinctions for their final TE continue to be predominantly, though not exclusively, white and female.¹⁷⁷

University tutors can no longer assume that the majority of student teachers have ever observed the type of learner-centred teaching that tutors are trying to promote in their feedback. Neither can they assume that student teachers always observe such teaching during TE.¹⁷⁸ The data show that a number of student teachers (including Amos)¹⁷⁹ received challenging feedback repeatedly from different university tutors during different TE sessions, but continued to teach in a way consistent with conceptions of teaching as the transfer of information from teacher to learners. It has been shown that student teachers come into their teacher education programme with significant misconceptions that hold back their progress in ‘learning to teach’. In such cases, the provision of feedback is simply

¹⁷⁷ See Table 4.2, p. 124.

¹⁷⁸ See pp. 369 - 372.

¹⁷⁹ He did not form a vision for participative teaching, nor for the need to monitor learning, despite being given feedback on these issues in nearly every TE session throughout his BEd.

not enough to challenge student teachers into reconsidering their underlying assumptions about teaching and learning.

Given these changes, TE is no longer a time in which generally progressively-taught student teachers go into generally well-resourced classrooms and observe generally enquiry-based lessons. Schools of Education now need to respond to the changing apprenticeships of observation of student teachers by offering a proactive TE programme that designs specific learning experiences for student teachers. ‘Learning to teach’ should not be an “uncoordinated trial-and-error personal experience” as described by Calderhead (1988, p. 78).

To this end, I would like to propose that:

- The placement of first-year student teachers in schools for their TE is carefully considered, ideally to schools that are well managed, and with a pervading culture of teaching and learning.
- Many first-year student teachers need more support during TE beyond two university tutor lesson observations. An alternative model of TE worth considering may be a carefully structured campus-based induction programme, followed by time in the classroom during which student teachers complete specific observation tasks that help them to analyse and interpret specific aspects of classroom life. It would be ideal if during this time they had support from a dedicated team of university tutors. The focus of the first TE needs to shift away from the acquisition of survival skills to guided observation of teaching, supported interaction with learners, and supported lesson planning. Ideally, opportunities during the TE could be provided for student teachers to return to the university campus in order to engage in reflective discussions and lesson planning workshops. Facilitation of this process could strive actively to deconstruct some of their preconceptions of teaching and learning.
- Issues relating to ‘learning to teach’ should not be the domain of university tutors only. Schools of Education should disseminate

information about student teaching to the schools in which they conduct their TE sessions. This could be done through repeatedly inviting school representatives to attend seminars, and publishing articles relating to student teaching in professional and union-based newspapers. However, the effectiveness of one-off interventions may be extremely limited, especially considering that so many teachers themselves possess a narrow vision of teaching (Robinson, 2000; Taylor & Vinjevoold, 1999; Mattson & Harley, 2003). A more substantial intervention would be the reintroduction of a mentorship course for supervising teachers, offered by the university.¹⁸⁰ In particular, supervising teachers need to understand the developmental patterns of student teaching; processes and complexities associated with ‘learning to teach’; university expectations from student teachers during TE, and the changing nature of guidance that student teachers may need from supervising teachers at different times.

- Merely placing TE and coursework together in the same academic year¹⁸¹ does not ensure that theoretical learning is integrated with practice. Although certain students in the study were making these links, others (like Amos) were not. The evidence suggests that in some cases, student teachers graduate with some facets of their teaching still at lower levels. As was found in the former Edgewood College of Education, TE can still be perceived as “a discrete and separate part of the (teacher education) curriculum...with not much preparation beforehand, and not much follow-up when the students return” (Reddy, 2003, p. 188). A shift in the TE programme needs to be supported by a curriculum that actively supports ‘learning to teach’. That four years of the BEd failed to make a considerable difference in the teaching of student teachers like Amos and Joseph reveals that there are systemic problems within the current curriculum. It is essential, for example, that their apprenticeships of

¹⁸⁰ However, a course like this was refused accreditation, not based on its perceived quality, but because its aims could not be expressed in terms of pre-defined unit standards as stipulated in the NQF framework (see Shalem et al., 2004).

¹⁸¹ For example, the BEd degree

observation are more rigorously explored and challenged. Through the curriculum, an alternative conception of teaching must be actively promoted. Morrow's conception of teaching as the *practice of organising systematic learning* provides a powerful conception for understanding teaching as much more than the transmission of facts, or keeping learners quiet during a lesson.

In order to support the student teachers more pro-actively as they 'learn to teach', I believe that university tutors and supervising teachers could benefit from being able to recognise typical developmental teaching patterns of student teaching. The model generated by this study goes some way towards making a contribution to the construction of such knowledge. Mattson & Harley (2003) found that South African teachers often equate good teaching with efficiently organised classrooms. The findings of this study may encourage university tutors and supervising teachers alike to look at the quality of student teaching beyond the most visible manifestations of classroom management, and consider the process of teaching more holistically.

In a transforming country that is trying to deal with the aftermath of years of unequal schooling, producing effective teachers out of all student teachers who enter the profession should be a goal worth striving for. Grossman's (1992) argument that student teachers should be "not merely trained to adapt to existing conditions, but rather educated to challenge problematic practices", is particularly pertinent to 'learning to teach' in South Africa (p. 176).

Sharing the practices of university tutors

Shulman (1997b) recognises that teachers "work in lonely circumstances that make it difficult to share what we have learned with others" (p. 505). This professional solitude is particularly pronounced during TE sessions when university tutors spend their days travelling between schools, and are almost completely isolated from each other. Although this study has attempted to document the teaching practices of student teachers, it has used extensive data that

voice the ‘wisdom of practice’ of university tutors in responding to student teaching.¹⁸² These written responses encapsulate both the ‘knowledge in practice’ (as defined by Cochran-Smith & Lytle, 1999)¹⁸³ and the ‘wisdom of practice’ (a term used by Shulman, 1987a; 1997b) of university tutors, which until this point have been “isolated and unvoiced” (Shulman, 1997b, p. 505). The purpose of this study has not been to examine critically the practice of university tutors, but to identify the teaching patterns of student teachers. Nevertheless, the data used by this study could provide a lens through which university tutors can examine their own practices.

Groups of university tutors from different Schools of Education could be invited to form a ‘community of practice’ as an “ongoing venue for teacher learning”, where university tutors can meet to deepen their knowledge about how students ‘learn to teach’, reflect on and interrogate their practices of observing and supporting student teachers, and share their insights and challenges with each other (Cochran-Smith et al., 2001, p. 947). Such a process would provide a platform where TE becomes a scholarship of teaching, with informed and considered practice. The theoretical framework of this study has led me to believe that the establishment of such a community of practice would maximise the potential of TE to be a time of professional growth for both student teachers and university tutors alike. This however, would be a long-term goal. In the meantime, a culture of reflection on issues relating to student teaching could be nurtured through staff workshops and seminars that focus specifically on processes involved with mentoring and ‘learning to teach’.

Assessment of TE

The findings of this study have implications for methods of TE assessment at the Wits School of Education. I have shown that there are three different sets of

¹⁸² The comments written in lesson observation reports are inherently unpredictable, as certain issues manifest as the lesson unfolds.

¹⁸³ See pp. 102 - 103.

criteria for assessing student teachers in the different years of their study.¹⁸⁴ The findings of this study indicate that developmental levels of student teaching are not linked to the year of study; hence the present system of assessment is educationally questionable. It would make more sense to monitor student teaching along a continuum from Level 1 to Level 4 during all four years of study, in a way that aligns the assessment process with the learning it is intended to support (Gibbs, 1999, p. 41).

Many of the university tutors who observe student teachers do have a strongly developed sense of internal criteria that enable them to analyse and interpret student teaching and to provide them with productive feedback. However, certain lesson observation reports which I examined during the course of this study did not reveal useful data in terms of the challenges that student teachers tend to experience. In such cases, the university tutors merely described the visible elements of the lesson, such as what the student teacher did, and how learners behaved. My model may provide university tutors a lens through which they systematically interpret student teaching. This may be particularly useful for university tutors while they learn about 'learning to teach'. However, I would caution against using the model as a mechanical device that is reduced to a mere checklist of isolated components or features. The relational nature of this model insists that student teaching varies in response to levels of subject matter knowledge and contextual factors. Student teaching should not be analysed independently from issues like these.

In light of the concern that Robinson (2000) raises about the lack of depth of inquiry that many supervising teachers are able to provide to their student teachers, it may be possible to use this model for development of teachers as student mentors. My model could provide a language of description that university tutors are able to share with supervising teachers. Post-lesson discussions that centre on the student teaching in various facets may assist in

¹⁸⁴ See p. Table 5.3, p. 166.

introducing supervising teachers to the extent to which the student teacher is pedagogically reasoning his/her design of a systematic learning process.

Suggested areas of further research

This study is partially a response to Shulman's (1999b) call to establish a 'scholarship of teaching' by researching teaching practices and opening them up to critical review. I found lesson observation reports written in response to student teaching during TE to be a rich source of data. There is very little research into the classroom practice of student teachers, which represents a significant gap in both the international and the South African literature. There are many questions arising from this study that would be worth investigating, some of which will be mentioned here.

Considering other dimensions of teaching

This study focuses specifically on the development of student teaching in relation to their acquisition of PCK, mainly from the perspective of the university tutors and the student teachers themselves. There may consequently be other dimensions of teaching practice that are beyond the scope of this study. Some of these other facets may include, for example, communication and language; relationship with learners; consideration of the diverse contexts of learners, professionalism; ability to co-operate with colleagues and ethical dimensions of teaching. I propose that further aspects of teaching practice beyond the scope of this study can be identified and investigated.

Investigating the teaching of other groups of student teachers

This case study considered the entire group of BEd (Inter/Sen) student teachers who passed in four years through the BEd programme. This study could be a model for studies with other groups of student teachers. One of the groups that I think would be most interesting to investigate would be the (Inter/Sen) student teachers who took longer than 4 years to complete their BEd. A preliminary glance at this data shows that 32% of the student teachers who failed or dropped

out of their first year had problems during their TE with communication, compared to only 9% of those who were able to complete their BEd in four years. It would be useful to investigate such differences further.

It may be interesting to investigate how the developmental teaching patterns of Inter/Sen student teachers compare and contrast with the developmental teaching patterns of Sen/FET student teachers, who specialise deeply in two subjects, rather than having to teach across many learning areas.

Investigating supervising teachers' perceptions of student teaching

The primary sources of evidence used by this study are lesson observation reports written by university tutors. I considered the perspectives of the supervising teachers and the student teachers too, but to a lesser extent because of the limited data available. There are a number of reasons to think that a similar study based on the perspective of supervising teachers might be interesting. Firstly, the perspective of university tutors is inherently limited by the lack of knowledge of learners and their context. Supervising teachers, on the other hand, have an intimate contextual knowledge. It would be interesting to investigate how the insights of supervising teachers regarding a student's teaching practice are similar to, or differ from, that of university tutors, in light of their contextual knowledge. The perspectives of supervising teachers might, in view of their contextual understanding, generate a substantially different model to the one generated from the perspective of university tutors. Secondly, such a study could empirically address Robinson's (2000) concern that many supervising teachers do not have the depth of teaching themselves to be able to mentor student teachers effectively. An analysis of their comments and written feedback would reveal whether they in fact do equate good teaching with effective classroom management, as suggested by Mattson and Harley (2003).

Investigating student teachers' perceptions of their own teaching

A limitation of this study was that I did not always have access to the student teachers' reflections and evaluations of their own teaching. This limited the extent to which I could discuss the development of reflective thinking as part of 'learning to teach'. A study that considers the observations of the university tutor and supervising teacher and the student teachers' assessment of the lesson would further provide insight into how student teachers think about and reflect on their own teaching. Such research may be suitable for a phenomenological approach, which could focus on understanding how the student teachers themselves understand their own practice. A study of student reflections in conjunction with university tutors' lesson observation reports may reveal contextual factors that university tutors (as external observers) may not be aware of.

Research on the establishment of a *Community of Practice* for university tutors during TE

I have argued for the formation of a 'community of practice' that investigates issues of student teaching and understanding of their own practice by university tutors during TE. The deliberations and professional growth of such a group could form the basis for a research project, constructed in a model similar to that of Grossman, Wineberg and Woolworth (2001) as they investigated a community of teacher learners. Data from this study could act as a control against which future comments of university tutors could be compared, in order to investigate how being part of a 'community of practice' affects the way in which university tutors understand, support, challenge and assess student teachers during TE.

CONCLUSION

Student teachers enter teacher education programmes possessing preconceptions of teaching and learning acquired in the years they spent in classrooms as learners. Initial teacher education is a complex process whereby student teachers have to unlearn many of these preconceptions before they can 'learn to teach'. This is particularly relevant within the South African context, in which the education system has recently undergone radical transformations, and many student teachers will 'learn to teach' in a "vastly different context from the one in which they were schooled" (Robinson, 1999, p. 192). As many student teachers do not frequently observe supervising teachers modelling conceptually deep, enquiry-based teaching during their TE sessions, it is sometimes difficult for them to acquire a vision of the type of teaching that university tutors expect. This makes 'learning to teach' a particularly complex and challenging endeavour within the South African context.

Existing developmental models offer limited insights into the process of 'learning to teach' as they do not sufficiently address the diversity of student teachers; the variations in the contexts in which they teach; and the complex relationships that subject matter knowledge has with other facets of the teaching process. I analysed changes in the classroom teaching of 66 BEd student teachers over a four-year period, to generate a model of developmental levels demonstrated by their teaching. This multifaceted model, with four levels of development over five facets of teaching, recognises that student teachers take different paths in 'learning to teach'. I have argued that a student teacher's 'stage of development' is not a universally applicable set of teaching characteristics, but rather a unique profile of pedagogical action, based on the interrelationships between particular levels of interacting facets. The process of 'learning to teach' is a highly complex one, as it depends on the individual nature of each student teacher; the context in which student teachers are teaching; their degree of subject matter knowledge and general pedagogical knowledge; and the interactions between their levels of teaching in the five facets defined by this study. The findings of this study show

that although broad developmental patterns of student teaching can be identified, student teachers follow a variety of developmental trajectories in ‘learning to teach’.

The relational nature of this model has been explored through the study of five student teachers’ teaching practice, with consideration of how each facet relates to the others. This model may enable university tutors and supervising teachers better to analyse subject-related aspects of student teaching practice, and better to understand the complexities associated with the development of pedagogically reasoned action. Such understanding may reduce the instances where TE is merely an “uncoordinated trial-and-error personal experience, an exercise in modelling and imitation; an accumulation of practical tips on class management, or a cementing of pre-existing conceptions and misconceptions” (Calderhead, 1988, p.78). In addition, this understanding may enable both university tutors and supervising teachers to provide student teachers with an “appropriate balance of support and challenge” during their TE sessions (Calderhead & Shorrock, 1997, p. 197), thus optimising the potential of TE sessions to be “a process of self-discovery and reflection” (Calderhead, 1988, p.78).

The developmental teaching patterns that emerge from this study allow the teaching of future cohorts of student teachers to be compared to the baseline provided by the teaching of a group of student teachers who completed their BEd degree within the stipulated four-year period. These progressions could enable teacher educators to understand, monitor and support student teachers’ individual development in a more informed and systematic manner, and provide a clearer vision of a desired outcome: not simply producing graduating teachers who believe that the main priorities of teaching involves “getting through the day, keeping learners busy and maintaining order” (Feiman-Nemser, 1983, p. 157); but rather graduating teachers who are better able to enact their teacher knowledge as a basis for preparing and delivering conceptually sound lessons to their very first class of learners (Bransford et al., 2005a, p. 3).

Shulman (1987b) argues “a proper understanding of the knowledge base of teaching, the sources for that knowledge, and the complexities of the pedagogical processes” associated with teaching, will make it more likely that teacher education programmes produce graduating teachers who are “models of pedagogical excellence” (p. 108). I hope that this study may empower university tutors and supervising teachers alike better to recognise developmental patterns of student teaching, and enable them to support and challenge to the student teachers under their supervision, promoting the development of their teaching towards pedagogically reasoned action that enables worthwhile learning.

REFERENCES

- Adler, J. (2002). Global and local challenges of teacher development. In J. Adler & Y. Reed (Eds.), *Challenges of Teacher Development: An investigation of take-up in South Africa*. Pretoria: Van Schaik. pp.1- 16.
- Adler, J. & Reed, Y. (Eds.), (2002). *Challenges of Teacher Development: An investigation of take-up in South Africa*. Pretoria: Van Schaik.
- Adler, J., Slonimsky, L. & Reed, Y. (2002). Subject-focused INSET and teachers' conceptual knowledge-in-practice. In J. Adler & Y. Reed (Eds.), *Challenges of Teacher Development: An investigation of take-up in South Africa*. Pretoria: Van Schaik. pp.135 – 153.
- Allais, S.M. (2003). The National Qualifications Framework in South Africa: A democratic project trapped in a neo-liberal paradigm? *Journal of Education and Work*, 16(3), 305–324.
- Babbie, E. & Mouton, J. (2001). *The Practice of social research*. Cape Town: Oxford University Press.
- Banks, J., Cochran-Smith, M., Moll, L., Richert, A., Zeichner, K., LePage, P., Darling-Hammond, L., & Duffy, H. (2005). Teaching diverse learners. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco: Jossey-Bass. pp. 232 – 274.
- Berliner, D. (2001). Learning about and learning from expert teachers. *International Journal of Educational Research*, 35, 463-482.
- Berliner, D. (2000). A personal response to those who bash teacher education. *Journal of Teacher Education*, 51(5), 358–371.
- Berliner, D. (1994). The wonder of exemplary performances. In J.N. Mangieri & C.C. Block (Eds.), *Creating powerful thinking in teachers and students*. Fort Worth: Harcourt Brace. pp.161 – 186.
- Boz, N. & Boz, Y. (2006). Do prospective teachers get enough experience in school placements? *Journal of Education for Teaching*, 32(4), 353–368.
- Bransford, J., Darling-Hammond, L. & LePage, P. (2005a). Introduction. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco: Jossey-Bass. pp. 1 – 39.

- Bransford J., Derry S., Berliner, D. & Hammerness, K. (2005b). Theories of learning and their roles in teaching. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco: Jossey-Bass. pp. 40 – 87.
- Calderhead, J. & Shorrock, S.B. (1997). *Understanding teacher education*. London: Falmer Press.
- Calderhead, J. (1991). The nature and growth of knowledge in student teaching. *Teaching and Teacher Education*, 7(1), 531 – 535.
- Calderhead, J. & Robson, M. (1991). Images of teaching students' early conceptions of classroom practice. *Teaching and Teacher Education*, 7(1), 1- 8.
- Calderhead, J. (1988). Learning from introductory school experience. *Journal of Education for Teaching*, 14(1), 75 – 83.
- Carrim, N., Postma, D. & Christie, P. (2003). The incorporation of colleges of education into universities in the provision of teacher education: The case of the Johannesburg College of Education and the University of the Witwatersrand. In K. Lewin, M. Samuel & Y. Sayed (Eds.), *Changing patterns of teacher education in South Africa: Policy, practice and prospects*. Johannesburg: Heinemann. Pp. 194 – 215.
- Cochran-Smith, M. (2001). Constructing outcomes in teacher education: Policy, practice and pitfalls. *Education Policy Analysis Archives*, 2 April 2001. 9(11), 1 – 57.
- Cochran-Smith, M. & Lytle, S. (1999). Relationships of knowledge and practice: Teacher learning in communities. *Review of Research in Education*, 24, 249–306.
- College of Education at Wits (2003) *School Experience: Principles & Practice*. Unpublished policy document, College of Education, University of the Witwatersrand, Johannesburg. Reproduced in Appendix D, pp. 462 – 469.
- Dachs, T. (1999). Large class teaching: A pilot study of eight Grade 5 classes in KwaZulu-Natal. Summarised in Taylor, N. & Vinjevoold, P. (Eds.), *Getting learning right: Report of the President's education initiative research project*. Joint Education Trust.
- Darling-Hammond, L. (2006a). *Powerful teacher education: Lessons from exemplary programs*. San Francisco: Jossey-Bass.
- Darling-Hammond, L. (2006b). Constructing 21st-century teacher education. *Journal of Teacher Education*, 57(3), 300–314.

- Darling-Hammond, L., Banks, J., Zumwalt, K., Gomez, L., Sherin, M.G., Griesdorn, J. & Finn, L-E. (2005). Educational goals and purposes: Developing a curricular vision for teaching. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco: Jossey-Bass. pp. 169 – 200.
- Darling-Hammond, L. & Bransford, J. (Eds.), (2005). *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco: Jossey-Bass.
- Darling-Hammond, L. (1997). *The right to learn: A blueprint for creating schools that work*. San Francisco: Jossey-Bass.
- Department of Education (2007). *The National Policy Framework for Teacher Education and Development in South Africa*. Pretoria: Government Gazette.
- Department of Education (2000). *Recognition and evaluation of qualifications for employment in education based on the Norms and Standards for Educators*. Pretoria: Government Gazette No. 20844, 4 February.
- Department of Education (1997). *Curriculum 2005: Lifelong learning for the 21st century*. Pretoria: Government Gazette.
- Department of Education (1996) *South African Schools Act 84 of 1996*. Pretoria: Government Gazette.
- Elliott, B. & Calderhead, J. (1993). Mentoring for teacher development: Possibilities and caveats. In D. McIntyre, H. Hagger & M. Wilkin (Eds), *Mentoring: Perspectives on school-based teacher education*. London: Kogan Page. pp. 166 – 189.
- Enslin, P. (1990). Science and doctrine: theoretical discourse in South African teacher Education, in M. Nkomo (Ed.), *Pedagogy of domination: towards a democratic education in South Africa*. New Jersey: African World Press.
- Ensor, P. (2003). The national qualifications framework and higher education in South Africa: some epistemological issues. *Journal of Education and Work*, 16(3), 326-346.
- Ensor, P. (2000). Knowledge and pedagogy in initial teacher education. *Journal of Education*, (25), 161-191.
- Entwistle, N., Skinner, D. & Entwistle, D. (2000). The nature and possible origins of conceptions of 'good teaching' amongst student teachers. *European Conference on Educational Research: Edinburgh*.
- Evertson, C.M. (1989). Classroom organisation and management. In M.C. Reynolds (Ed.), *Knowledge Base for the Beginner teacher*. Oxford: Pergamon Press.

- Feiman-Nemser, S. (2001). From Preparation to Practice: Designing a Continuum to Strengthen and Sustain Teaching. *Teachers College Record*, 103(6), 1013 – 1055.
- Feiman-Nemser, S. (1983). Learning to teach. In L.S. Shulman & G. Sykes (Eds.), (1983). *Handbook of research on teaching and policy*. New York: Longman.
- Fletcher, S. (1997). Modelling reflective practice for pre-service teachers: The role of teacher educators. *Teaching and Teacher Education*, 13(2), 237 – 243.
- Fraser, W.J., Killen, R. & Nieman, M.M. (2005). Issues in competence and pre-service teacher education, Part 2. The assessment of teaching practice. *South African Journal of Higher Education*, 19(2), 246-259.
- Fuller, F. & Brown, O. (1975). Becoming a teacher. In K. Ryan (Ed.), *Teacher education: 74th yearbook of the National Society for Study in Education*. Chicago: University of Chicago Press.
- Fuller, F. (1969). Concerns of teachers: A developmental conceptualisation. *American Educational Research Journal*, 6(2), 207-226.
- Furlong, J. (2000). School mentors and university tutors: Lessons from the English experiment. *Theory into Practice*. (Winter 2000) 39(1), 12–20.
- George, J., Worrel, P., Rampersad, J. & Rampaul, B. (2000). *Becoming a primary school teacher in Trinidad and Tobago: Teaching practice experience of trainees*. MUSTER discussion Paper No. 21. Centre for International Education: University of Sussex.
- Gess-Newsome, J. & Lederman, N.G. (Eds.), (1999). *Examining pedagogical content knowledge*. Dordrecht: Kluwer Academic Publishers.
- Gess-Newsome, J. (1999a). Pedagogical Content Knowledge: An introduction and orientation. In J. Gess-Newsome & N.G. Lederman (Eds.), *Examining pedagogical content knowledge*. Dordrecht: Kluwer Academic Publishers.
- Gess-Newsome, J. (1999b). Secondary teachers' knowledge and beliefs about subject matter and their impact on instruction. In J. Gess-Newsome. & N.G. Lederman (Eds.), *Examining pedagogical content knowledge*. Dordrecht: Kluwer Academic Publishers.
- Gibbs, G. (1999). Using assessment strategically to change the way students learn. In S. Brown & A. Glasner (Eds.), *Assessment matters in higher education*. Buckingham: Open University Press.
- Grossman, P.L., Schoenfeld, A. & Lee, C. (2005). Teaching subject matter. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing*

world: What teachers should learn and be able to do. San Francisco: Jossey-Bass. pp. 201 – 231.

Grossman, P., Wineburg, S. & Woolworth, S. (2001). Toward a theory of teacher community. *Teachers College Record*, 103(6), 942–1012.

Grossman, P.L. (1992). Why models matter: An alternate view on professional growth in teaching. *Review of Educational Research*, 62(2), 171-179.

Grossman, P.L. (1991). Overcoming the apprenticeship of observation. *Teaching and Teacher Education*, 7(1), 345-357.

Grossman, P.L. & Wilson, S.M. & Shulman, L.S. (1989). Teachers of substance: Subject matter knowledge for teaching. In M.C. Reynolds (Ed.), (1989). *Knowledge base for the beginner teacher*. Oxford: Pergamon Press.

Haigh, M. (2005). The enablers and hinderers of ‘learning to teach’ during the practicum – the student’s voice. *British Educational Research Association Annual conference*. Glamorgan: University of Glamorgan.

Hammerness, K., Darling-Hammond, L., Bransford, J., Berliner, D., Cochran-Smith, M., McDonald, M. & Zeichner, K. (2005a). How teachers learn and develop. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco: Jossey-Bass. pp. 358 – 389.

Hammerness, K., Darling-Hammond, L., Grossman, P., Rust, F. and Shulman, L. (2005b). The design of teacher education programmes. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco: Jossey-Bass. pp. 390 – 441.

Hargreaves, A. & Fullan (Eds.), (1992). *Understanding teacher development*. New York: Teachers College Press.

Harley, K., Barasa, F., Bertram, C., Mattson, E. & Timm, H. (2000). The real and the ideal: Teachers’ roles and their competences in South African policy and practice. *International Journal of Educational Development* 20(4), 287 – 304.

Hawe, E. (2002). Assessment in a Pre-service Teacher Education Programme: the rhetoric and the practice of standards-based assessment. *Asia-Pacific Journal of Teacher Education*, 30(1), 93 –106.

Hayes, D. (2003). *A student teacher’s guide to primary school placement: Learning to survive and prosper*. New York: Routledge Falmer.

Hoban, G.F. (2002). *Teacher learning for educational change*. Buckingham: Open University Press.

- Horowitz F.D., Darling-Hammond, L., Bransford, J. (2005). Educating teachers for developmentally appropriate practice In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco: Jossey-Bass. pp. 88 – 125.
- Horowitz, F. D. (1987). *Exploring Developmental Theories: Towards a structural / behavioural model of development*. New Jersey: Lawrence Erlbaum Associates.
- Huberman, M. (1993). *The lives of teachers*. Translated by Neuvel, J. Teacher Development Series. New York: Teachers College Press.
- Huberman, M. (1992). Teacher development and instructional mastery. In A. Hargreaves & Fullan (Eds.), *Understanding teacher development*. New York: Teachers College Press.
- Imig, D.G. & Imig, S.R. (2006). What do beginning teachers need to know? An essay. *Journal of Teacher Education*, 57(3), 286–291.
- Jansen, J. (2003). Image-ining teachers: Policy images and teacher identity in South African classrooms. In K. Lewin, M. Samuel & Y. Sayed (Eds.), *Changing patterns of teacher education in South Africa: Policy, practice and prospects*. Johannesburg: Heinemann. pp. 118 – 129.
- Joram, E. & Gabriele, A.J. (1998). Pre-service teachers' prior beliefs: Transforming obstacles into opportunities. *Teaching and Teacher Education*, 14(2), 175–191.
- Kagan, D.M. (1992). Professional growth among pre-service and beginning teachers. *Review of Educational Research*, 62(2), 129-169.
- Kagan, D.M. & Tippins, D.J. (1991). How student teachers describe their pupils. *Teaching and Teacher Education*, 7(1), 345–357.
- Kennedy, M.M. (2006). Knowledge and vision in teaching. *Journal of Teacher Education*, 57(3), 205–212.
- Lefoka, J.P., Jobo, M. & Moeti, B. (2001). *Teaching Practice at the national teacher training college in Lesotho*. MUSTER discussion Paper No. 25. Centre for International Education: University of Sussex.
- LePage, P., Darling-Hammond, L. & Akar, H. (2005). Classroom management. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco: Jossey-Bass. pp. 327 – 357.
- Lewin, K., Samuel, M. & Sayed, Y. (Eds.), (2003). *Changing patterns of teacher education in South Africa: Policy, practice and prospects*. Johannesburg: Heinemann.

- Lewin, K. (2003). International perspective on teacher education across MUSTER countries. In K. Lewin, M. Samuel & Y. Sayed (Eds.), *Changing patterns of teacher education in South Africa: Policy, practice and prospects*. Johannesburg: Heinemann. pp. 342 – 362.
- Lortie, D.C. (1975). *School-teacher: A sociological study*. Chicago: University of Chicago Press.
- McIntyre, D. & Hagger, H. (1993). Teacher expertise and models of mentoring. In McIntyre, D., Hagger, H. & Wilkin, M. (Eds.), *Mentoring: Perspectives on school-based teacher education*. London: Kogan Page.
- Mangieri, J.N. & Block, C.C. (Eds.), *Creating powerful thinking in teachers and students*. Fort Worth: Harcourt Brace.
- Marais, P. & Meier, C. (2004). Hear our voices: Student teachers' experiences during practical teaching. *Africa Educational Review*, 1(2), 220–223.
- Martin, S. & Cloke, C. (2000). Standards for the award of qualified teacher status: Reflections on assessment implications. *Assessment & Evaluation in Higher Education*, 25(2), 183 – 190.
- Mattson, E. & Harley, K. (2003). Teacher identities and strategic mimicry in the policy/practice gap. In K. Lewin, M. Samuel & Y. Sayed (Eds.), *Changing patterns of teacher education in South Africa: Policy, practice and prospects*. Johannesburg: Heinemann. pp. 284 – 305.
- Mawoyo, M. & Robinson, M. (2005) The organisation of pedagogy in a learnership model of teacher education. *South African Journal of Education*, 25(2), 109-114
- Maxwell, J. (1996). *Qualitative research design: An interactive approach*. Thousand Oaks, California: Sage Publications.
- Maynard, T. (1996). Primary school teachers as mentors of subject knowledge. <http://www.aare.edu.ac/95pap/maynt/95379.txt>
- Maynard, T. & Furlong, J. (1995). *The growth of professional knowledge: Mentoring student teachers*. London: Routledge.
- Maynard, T. & Furlong, J. (1993). 'Learning to teach' and models of mentoring. In D. McIntyre, H. Hagger & M. Wilkin (Eds.), *Mentoring: Perspectives on school-based teacher education*. London: Kogan Page. pp. 69 – 85.
- McIntyre, D., Hagger, H. & Wilkin, M. (Eds.), (1993). *Mentoring: Perspectives on school-based teacher education*. London: Kogan Page.
- McNally, J., Cope, P., Inglis, B. & Stronach, I. (1997). The student teacher in school: conditions for development. *Teaching and Teacher Education*, 13(5), 485–498.

- Meier, C. (2005). Addressing problems in integrated schools: student teachers' perceptions regarding viable solutions for learners' academic problems. *South African Journal of Education*, 25(3), 170–177.
- Merriam, S.B. (2002). *Qualitative research in practice: Examples for discussion and analysis*. San Francisco: Jossey-Bass.
- Miller, P.H. (1989). *Theories of Developmental Psychology*. New York: W.H. Freeman & Co.
- Morine-Deshimer, G. & Kent, T. (1999). The complex nature and sources of teachers' pedagogical knowledge. In J. Gess-Newsome & N.G. Lederman (Eds.), *Examining pedagogical content knowledge*. Dordrecht: Kluwer Academic Publishers.
- Morrow, W. (2007). *Learning to teach in South Africa*. Cape Town: HSRC Press.
- Morrow, W. (2005 October). What is teachers' work? *Kenton Conference*. Reproduced in Morrow, W. (2007). *Learning to teach in South Africa*. Cape Town: HSRC Press.
- Morrow, W. (2001). Scripture and practices. *Perspectives in Education*, 19(1), 87–106.
- Morrow, W. (1999) The Practice of Organising Systematic Learning. UNESCO / CIEP Colloquium: Paris. In Morrow, W. (2007). *Learning to teach in South Africa*. Cape Town: HSRC Press.
- Morrow, W. (1996) What is Teacher Education? National Commission on Higher Education. Reproduced in Morrow, W. (2007). *Learning to teach in South Africa*. Cape Town: HSRC Press. pp. 69 – 90.
- Ngidi, D.P. & Sibaya, P.T. (2003) Student teacher anxieties related to practice teaching. *South African Journal of Education*, 23(1), 18-22.
- Nkomo, M. (ed.) *Pedagogy of domination: towards a democratic education in South Africa*. New Jersey: African World Press.
- Parker, B. & Deacon, R. (2005). *Theory and practice: South African teacher educators on teacher education. Occasional Paper No. 6*. Johannesburg: Centre for Education Policy Development.
- Parker, B. (2003). Roles and responsibilities, institutional landscapes and curriculum mindscapes: A partial view of teacher education policy in South Africa: 1990-2000. *Changing patterns of teacher education in South Africa: Policy, practice and prospects*. Johannesburg: Heinemann.

- Perry, W. (1970). *Forms of Ethical and Intellectual Development in the College Years*. New York: Holt-Rinehart.
- Piaget, J. (1952). *The origins of intelligence in children*. New York: Norton.
- Quick, G. & Sieborger, R. (2005). What matters in practice teaching? The perceptions of schools and students. *South African Journal of Education*, 25(1), 1-4.
- Raths, J. & Lyman, F. (2003). Summative evaluation of student teachers: An enduring problem. *Journal of Teacher Education*, 54(3), 206-216.
- Reddy, V. (2003). Face-to-face training in a conventional pre-service programme. A case study to Edgewood College of Education. In K. Lewin, M. Samuel & Y. Sayed (Eds.), *Changing patterns of teacher education in South Africa: Policy, practice and prospects*. Johannesburg: Heinemann. pp. 176 – 193.
- Review Committee on C2005. (2000). *A South African curriculum for the twenty first century: Report of the review committee on Curriculum 2005*. Pretoria.
- Reynolds, A. (1992). What is competent beginning teaching? A review of the literature. *Review of Educational Research*, 62(1), 1 – 35.
- Reynolds, M.C. (Ed), (1989). *Knowledge base for the beginner teacher*. Oxford: Pergamon Press.
- Ria, L., Seve, C., Saury, J., Theureau, J. & Durand, M. (2003) Beginning Teachers' situated Emotions: a study of first classroom experiences. *Journal of Education for Teaching*, 29(3), 219 – 233.
- Riksaasen, R. (2001) Visible and Invisible Pedagogies: a study of student socialization in teacher education. *European Journal of Teacher Education*, 24(1), 47 – 57.
- Robinson, M., Vergnani, T. & Sayed, Y. (2003). Teacher education at the University of the Western Cape. In K. Lewin, M. Samuel & Y. Sayed (Eds.), *Changing patterns of teacher education in South Africa: Policy, practice and prospects*. Johannesburg: Heinemann. pp.159 – 175.
- Robinson, M. (2003). Teacher education policy in South Africa: The voice of teacher educators. *Journal of Education for Teaching*, 29(1), 19 – 34.
- Robinson, M. & Vergnani, T. (2001). Becoming a teacher at UWC: The case of the Post Graduate Certificate in Education (PGCE). UWCPIE. pp. 68–78.
- Robinson, M. (2000). *Mentoring and teacher development: A case study*. Unpublished doctoral thesis, University of Western Cape, Cape Town.

- Robinson, M (1999). Initial teacher education in a changing South Africa: Experiences, reflections and challenges. *Journal of Education for Teaching*, 25(3), 91 – 101.
- Samuel, M. & Pillay, D. (2003). The University of Durban-Westville: Face-to-face initial teacher education degree programmes. In K. Lewin, M. Samuel & Y. Sayed (Eds.), *Changing patterns of teacher education in South Africa: Policy, practice and prospects*. Johannesburg: Heinemann. pp.130 – 158.
- Schön, D.A. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. San Francisco: Jossey-Bass.
- Schulze, S. (2003). The courage to change: Challenges for teacher educators. *South African Journal of Education*, 23(1), 6-12.
- Shalaway, L. (1997). *Learning to teach...not just for beginners*. New York: Scholastic.
- Shalem, Y., Allais, S.M. & Steinberg, C. (2004). Outcomes-based quality assurance: what do we have to lose? *Journal of Education*, (34), 51–77.
- Shalem, Y. & Slonimsky, L. (1999). Can we close the gap? Criteria and obligation in teacher education. *Journal of Education*, (24), 5–29.
- Shepard, L., Hammerness, K., Darling-Hammond, L. & Rust, F. (2005). Assessment. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco: Jossey-Bass. pp. 275 – 326.
- Shulman, L. (2004). *The wisdom of practice: Essays on teaching, learning and learning to teach*. San Francisco: Jossey-Bass.
- Shulman, L. & Hutchings, P. (2004). *Teaching as Community Property: Essays on Higher Education*. San Francisco: Jossey-Bass.
- Shulman, L.S. (2002). Making differences: A table of learning. *Change*, 34(6), 36–44.
- Shulman, L.S. (1999a). Taking learning seriously. *Change*, 31(4), 10-17.
- Shulman, L.S. (1999b). The scholarship of teaching: New elaborations and new developments. *Change*, 31(5), 10–15.
- Shulman, L.S. (1997a). Communities of learners and communities of teachers. Monographs from the Mandel Foundation # 3. Jerusalem: The Mandel Foundation, 1997. Reproduced in Shulman, L. *The wisdom of practice: Essays on teaching, learning and learning to teach*. San Francisco: Jossey-Bass.

- Shulman, L.S. (1997b). Professional development: Learning from practice. Reproduced in Shulman, L. *The wisdom of practice: Essays on teaching, learning and learning to teach*. San Francisco: Jossey-Bass.
- Shulman, L.S. (1997c). Professing the liberal arts. In R. Orrill (Ed.), *Education and democracy: Re-imagining liberal learning in America*. New York: College Entrance Examination Board. Reproduced in Shulman, L. (2004). *The wisdom of practice: Essays on teaching, learning and learning to teach*. San Francisco: Jossey-Bass.
- Shulman, L.S. (1996). Just in case: Reflections on learning from experience. In J. Colbert, P. Desherg, & K. Trimble (Eds.), *The case for education: Contemporary approaches for using case methods*. Boston: Allyn and Bacon. Reproduced in L. Shulman (2004). *The wisdom of practice: Essays on teaching, learning and learning to teach*. San Francisco: Jossey-Bass.
- Shulman, L.S. (1992). Research on teaching: A historical and personal perspective. In F.K. Oser, A. Dick, & J.L. Patry (Eds.), *Effective and responsible teaching: The new synthesis*. San Francisco: Jossey-Bass. Reproduced in Shulman, L. (2004). *The wisdom of practice: Essays on teaching, learning and learning to teach*. San Francisco: Jossey-Bass.
- Shulman, L.S. (1989). Towards a pedagogy of substance. *AAHE Bulletin*, 41(10), 8-13. Reproduced in L. Shulman & P. Hutchings (2004). *Teaching as Community Property: Essays on Higher Education*. San Francisco: Jossey-Bass.
- Shulman, L.S. (1987a). Learning to teach. *AAHE Bulletin*, 40(3), 5-9. Reproduced in L. Shulman & P. Hutchings (2004). *Teaching as Community Property: Essays on Higher Education*. San Francisco: Jossey-Bass.
- Shulman, L.S. (1987b). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57(1), 1 – 22. Reproduced in L. Shulman & P. Hutchings (2004). *Teaching as Community Property: Essays on Higher Education*. San Francisco: Jossey-Bass.
- Shulman, L.S. (1986). Those who understand: Knowledge growth in teaching. In *Educational Researcher*, 15(2), 4–14. Reproduced in L. Shulman (2004). *The Wisdom of Practice: Essays on teaching, learning and learning to teach*. San Francisco: Jossey-Bass.
- Smith, D. (1999). Changing our teaching: The role of pedagogical content knowledge in elementary science. In J. Gess-Newsome & N.G. Lederman (Eds.), *Examining pedagogical content knowledge*. Dordrecht: Kluwer Academic Publishers.
- Smith, P.K. & Cowie, H. (1991). *Understanding children's development*. Oxford: Basil Blackwell.

- Soudien, C. (2003). Notions of teacher professionalism in the context of a racially divided society: The case of South Africa. In K. Lewin, M. Samuel & Y. Sayed. *Changing patterns of teacher education in South Africa: Policy, practice and prospects*. Johannesburg: Heinemann. pp. 273 – 283.
- Standards Generating Body (SGB) for Educators (2001). *Qualifications from the educators in schooling SGB (Registered by the SAQA Board)*; Johannesburg: SAIDE.
- Statistics South Africa (2003). *Census 2001: Census in brief*. Pretoria: Statistics SA.
- Steele, M. (2003). Teacher education policy: A provincial portrait from KwaZulu-Natal (1994 – 2000) ‘Dead men walking’. In K. Lewin, M. Samuel & Y. Sayed (Eds.), *Changing patterns of teacher education in South Africa: Policy, practice and prospects*. Johannesburg: Heinemann. pp. 107 – 117.
- Taylor, N. & Vinjevold, P. (Eds.), (1999). *Getting learning right: Report of the President’s education initiative research project*. Joint Education Trust.
- Taylor, N. & Vinjevold, P. (1999). Teaching and learning in South African schools. In N. Taylor & P. Vinjevold (Eds.), *Getting learning right: Report of the President’s education initiative research project*. Johannesburg: Joint Education Trust. pp. 131- 162.
- Tomlinson, P. (1995). *Understanding mentoring: reflective strategies for school-based teacher preparation*. Buckingham: Oxford University Press.
- Van der Linde, P. (1986). *The role of the teacher-tutor in the practicum period of teacher preparation in primary schools in the Transvaal: PTA College of education*. Unpublished master’s research report, UNISA, Pretoria.
- Vygotsky, L.S. (1962). *Thought and Language*. Cambridge, Mass: MIT Press.
- Welch, T (2002) Teacher education in South Africa before, during and after apartheid: an overview. In J. Adler & Y. Reed (Eds.), *Challenges of Teacher Development: An investigation of take-up in South Africa*. Pretoria: Van Schaik. pp.17 – 52.
- Wiggins, G. & McTighe, J. (1998). *Understanding by Design*. Upper Saddle River, NJ: Prentice Hall.
- Williams, M. & Watson, A. (2004). Post-lesson debriefing: delayed or immediate? An investigation of student teacher talk. *Journal of Education for Teaching*, 30(2), 85–96.
- Wood, K. (2000). The experience of learning to teach: changing student teachers’ ways of understanding teaching. *Journal of Curriculum Studies*, 32(1), 75- 93.

Yule, R.M., Crowley, J.I., Duff, J., Higgs, P., Kortenhoeven, C.J., MacPherson, C.R.B., Munting, J., Nel, J., Nowlan, J.W., Olivier, A. Spies, M. & Tait, K. (1990). *Readings on Teacher Education*. Johannesburg: Lexicon Publishers.

Zemba-Saul, C., Starr, M.L. & Krajcik, J.S. (1999). Constructing a framework for elementary science teaching using pedagogical content knowledge. In J. Gess-Newsome & N.G. Lederman (Eds.), *Examining pedagogical content knowledge*. Dordrecht: Kluwer Academic Publishers.

Zumwalt, K. (1989). Beginning professional teachers: The need for a curricular vision of teaching. In M.C. Reynolds (Ed.), *Knowledge base for the beginner teacher*. Oxford: Pergamon Press.

APPENDIX A: LETTERS OF INFORMATION & CONSENT

Wits School of Education
27 St Andrews Road
Parktown

10 August 2005

Dear Student teacher

I am currently doing a research dissertation towards my Masters in Education degree, specialising in Higher Education. I am researching the typical problems that first year student teachers experience during their Teaching Experience.

I am specifically interested in B. Ed students, who are specialising in the Intermediate Phase, and are now in their third year of study. I believe that your input and experience would be a very valuable source of information for me, and I would like to invite you to join the study.

You will need to participate in a focus group discussion, which should last about 60 - 90 minutes. The discussion during this focus group discussion will be taped and transcribed for analysis. During this focus group discussion, you would be asked to share the difficulties you encountered during Teaching Experience, with a special focus on your first and second years of study. You will also be asked about what kind of assistance and tutoring you found most helpful during these difficulties.

At all times, your name will be kept confidential – you will be identified by a pseudonym only. The people you may mention will also be kept confidential. You may be quoted in the dissertation, but it will be done in such a way that your identity is not revealed.

The purpose of this investigation is to identify the typical difficulties that student teachers experience on Teaching Experience, to understand the process of learning to teach, and to find ways that university tutors can support students through this process. The dissertation will be published, and the research generated may lead to staff seminars. It is hoped that any input you share may help university tutors to support future students more effectively.

Yours sincerely

A handwritten signature in black ink, reading 'Lee Rusznyak'. The signature is fluid and cursive, with the first letters of each word being capitalized and prominent.

Mrs Lee Rusznyak

(Researcher)

Wits School of Education
27 St Andrews Road
Parktown

10 August 2005

Dear University tutor

I am currently doing a research dissertation towards my Masters in Education degree, specialising in Higher Education. I am researching the typical problems that first year student teachers experience during their Teaching Experience.

I am specifically interested in the experience and tutoring of B. Ed students, who are specialising in the Intermediate Phase, and are now in their third year of study. I believe that your input and experience as a tutor during School Experience would be a very valuable source of information for me, and I would like to invite you to join the study.

You would need to participate in a focus group discussion, which should last about 90 minutes. The discussion during this focus group discussion will be taped and transcribed for analysis. During this focus group discussion, you would be asked to share the difficulties you observe student teachers encountering during Teaching Experience, especially during their first and second years of study. You will also be asked about what kind of assistance and tutoring you offer students during these difficulties.

At all times, your name will be kept confidential – you will be identified by a pseudonym only. The people you may mention will also be kept confidential. You may be quoted in the dissertation, but it will be done in such a way that your identity is not revealed.

The purpose of this investigation is to identify the typical difficulties that student teachers experience on Teaching Experience, to understand how student teachers learn to teach, and to find ways that university tutors can support students through this process. The dissertation will be published, and the research generated may lead to staff seminars. It is hoped that any input you share may help other university tutors support future students more effectively.

Yours sincerely



Mrs Lee Rusznyak
(Researcher)

Informed Consent form

Research Dissertation: M. Ed. (Tertiary Education): Student Development on Teaching Experience

I, _____ consent to participate in this study conducted by Leanne Rusznyak (88-00355 X) for a research dissertation investigating the development of Intermediate B Ed students on Teaching Experience.

- I realise that no harm will come to me, and that the research is being conducted for educational purposes.
- I participate voluntarily and that I may withdraw from the study at any time.
- I also have the right to review the transcripts made of our conversation before these are used for analysis, if I so choose.
- I can delete, amend or retract any of my remarks.
- Everything I say will be kept confidential by the interviewer. I will only be identified by a pseudonym in the dissertation. In addition, any persons I refer to in an interview will be kept confidential.
- Quotes from me may be used in the dissertation, but they will be reported in such a way that my identity is anonymous. Any specific individuals I refer to will be given a pseudonym. I understand that the dissertation will be published, but my identity will remain anonymous.

Name: _____

Signature: _____

Date: _____

Informed Consent form

Research Dissertation: M. Ed. (Tertiary Education): Student Development on Teaching Experience

I, _____(consent /do not consent) to participate in this study conducted by Lee Rusznyak (88-00355 X) for a research dissertation investigating the experiences of Intermediate B Ed students on Teaching Experience.

I realise that the research is being conducted for educational purposes.

I participate voluntarily and that I may withdraw from the study at any time.

I will only be identified by a pseudonym in the dissertation. In addition, any persons I refer to in an interview will be kept confidential.

Quotes from my reflective journal / reflective essay (may / may not) be used in the dissertation. If used, they will be reported in such a way that my identity is anonymous. Any specific individuals or courses I refer to will be given a pseudonym. I understand that the dissertation will be published, but my identity will remain anonymous.

Signature:_____

Date:_____

APPENDIX B: INTERVIEW SCHEDULES

Interview Schedule for student teachers:

1. Why did you choose to study to be a teacher?
2. Describe your own schooling: How you were taught and how did you learn?
3. Before you came to Wits School of Education, how did you imagine you would be as a teacher? Do you still feel that way? If not, what has made you change your idea? What challenges did you encounter (especially in first year) as you made the adjustment from being a learner to a teacher?
4. What other difficulties have you experienced on Teaching Experience? Give examples. What has helped you deal with these difficulties? Give examples

Interview Schedule for university tutors:

1. The role and responsibilities of the university tutor during TE, and the process of observing lessons and giving support/feedback to student teachers;
 - Describe your role as a university tutor during Teaching Experience
 - Do you think that students can be prepared for TE beforehand or are there simply things that they have to learn from experience? If so, how can it be done? How can we make this preparation more explicit?
2. The characteristics of first year teaching students, and the skills/attitudes expected of them during their beginning stages of learning to teach;
 - What expectations do you have of beginner student teachers, on Teaching Experience? What should they be able to do?
 - A preliminary examination of about 150 tutor observation reports on first year students yielded the following results:

		March 2003	Sept 2003
Preparation	Structuring of file	1	2
	Lesson plans	10	8
	Formulating outcomes	6	7
Teacher support materials	Absence of support materials	4	4
	Using support materials effectively	2	8
Communication	Command of language of instruction	3	0
	Voice control	9	7
Execution of lesson	Involving the learners by questioning	6	8
	Pacing	10	9
	Giving of instructions	6	6
	Actively involving learners	6	11
	Moving around and facilitating during task	6	5
	Interacting with answers given by learners	5	7
	Concluding the lesson	5	7
Subject knowledge	Inaccurate content; unable to answer questions	3	6
Relationship with learners	Lack of general class awareness	4	1
	Too friendly; familiar	4	2
	Lacking in assertiveness and confidence	6	2
Class control	Getting learners focused before teaching, discussions	15	13
	Keeping control of the class	12	13
SAMPLE SIZE		34	37

(Sample group: B.Ed (Inter/Sen) First years 2003)

How have you seen these or other problem areas manifest in the classroom?

- What other typical problems have you observed as first year student teachers are adjusting to their new role as “teacher”?

3. Typical difficulties they have observed student teachers experiencing during their TE sessions:

- Examine the Teaching Experience assessment forms. Rank the criteria used in the assessment form and in terms of their importance, according to your views

H: High importance

M: Medium importance

L: Low importance.

- On what grounds have you given a “no credit” result on Teaching Experience or deemed a first year student teacher to be “unsuitable” to the teaching profession?
- On what grounds would you pass / fail 2nd – 4th year student teachers who have struggled to cope during Teaching Experience?
- What is your understanding of a “competent” student teacher in each year of study?
- Have you ever judged a student teacher to be “excellent”? If so, on what grounds?
- Have you ever tutored a more senior student, who with hindsight, you think should have failed in first year? What sorts of problems were being experienced?

4. The catalysts of growth and development in student teachers they have tutored, and the abilities of student teachers to reflect and the development of reflective practice.

- What typical guidance / support have you offered to the teaching students assigned to you?
- When does subject matter knowledge become critical to teaching?
- Is deep subject matter knowledge more important for Sen / FET student teachers than for intermediate phase student teachers?
- How do you mediate the development of a student teacher’s reflective practice during TE?

APPENDIX C: TE ASSESSMENT TOOLS

- TE Assessment tool used prior to 2003 (pp. 456 – 457)
- TE Assessment tool used for BEd first-year student teachers (p. 458)
- TE Assessment tool used for BEd second- & third-year student teachers (pp. 459 – 460)
- TE Assessment tool used for BEd fourth-year student teachers (p. 461)

**Johannesburg College of Education & University of the Witwatersrand
School Experience – Assessment Profile & Evaluation**

Section A – Administrative Information

JCE Student Number

--	--	--	--	--	--	--	--

Student Name & Initials Mr/Mrs/Miss/Sr

1) Primary

PP	PJP	PSP	BJP	BSP
----	-----	-----	-----	-----

 2) Secondary

PE	H.EC	TECH	SC/MATH	COMM
----	------	------	---------	------

School 3) Year

1	2	3	4
---	---	---	---

Secondary Students only: Subject

4) Form completed by:

Teacher	Tutor	Teacher & Tutor	Other?
---------	-------	-----------------	--------

Name/s Date

Section B – Degree of Proficiency. Please Indicate

5) For all 2nd, 3rd, 4th year students:

Credit	Supplementary recommended	Fail
--------	---------------------------	------

6) For 1st Year students:

Suitable	Doubtful	Not suitable
----------	----------	--------------

Section C – Proficiency Profile

- 7) Degree of KNOWLEDGE & INSIGHT into subjects taught
- 8) Value/effectiveness of PUPIL LEARNING
- 9) Quality of RELATIONSHIP with pupils
- 10) Ability to COMMUNICATE
- 11) Ability to MOTIVATE, AROUSE & MAINTAIN INTEREST
- 12) Planning and PREPARATION
- 13) Variety and appropriateness of TEACHING STRATEGIES
- 14) Effective GROUP CONTROL
- 15) Degree of PROFESSIONALISM
- 16) WILLINGNESS TO LEARN and accept guidance

GENERAL COMMENTS. If necessary, please attach documents giving additional information

.....

.....
 Teacher Principal Tutor

Note: WHITE COPY – JCE; BLUE COPY – STUDENT; GREEN COPY - SCHOOL

SECTION D – DIAGNOSTIC PROFILE: INDICATE AREAS OF WEAKNESS ONLY

For all 2nd, 3rd and 4th year students (but can be used for 1st year students who have taught on a regular basis)

A = AREA TO WHICH STUDENT SHOULD PAY ATTENTION

E = AREA OF SEVERE WEAKNESS WHICH REQUIRES REMEDIATION

PERSONAL QUALITIES AND INTERPERSONAL SKILLS

17	INTERACTION WITH COLLEAGUES	☐ A	☐ E
18	RELIABILITY AND CONSCIENTIOUSNESS	☐ A	☐ E
19	Ability to MOTIVATE, AROUSE and MAINTAIN INTEREST	☐ A	☐ E
20	COMMUNICATION Voice projection	☐ A	☐ E
21	Fluency, pronunciation, vocabulary	☐ A	☐ E
22	Confidence, self-assurance	☐ A	☐ E
23	Ability to ENCOURAGE pupils to EXPLORE topic, etc. further	☐ A	☐ E
24	Ability to EVALUATE QUALITY OF OWN PERFORMANCE in teaching	☐ A	☐ E

PREPARATION AND PLANNING OF LEARNING EXPERIENCES

25	THOROUGH KNOWLEDGE of the subject matter, content	☐ A	☐ E
26	SUITABILITY AND VALUE of the AIMS	☐ A	☐ E
27	CLARITY OF AIMS – the purpose of the lessons is clear	☐ A	☐ E
28	Appropriate thought given to the NEEDS of the pupils	☐ A	☐ E
29	ORGANIZATION OF THE LEARNING EXPERIENCE – holistic, integrated	☐ A	☐ E
30	QUALITY of stimulus material – AV aids, etc.	☐ A	☐ E
31	THOUGHTFUL MARSHALLING, appropriateness of stimulus material	☐ A	☐ E
32	Effective planning of GROUP WORK, INDIVIDUAL WORK, etc	☐ A	☐ E
33	ORIGINALITY (non-stereotyping) of worksheets, tests, questionnaires, etc.	☐ A	☐ E

TEACHING PERFORMANCE AND PUPIL LEARNING

34	For the pupils was there CLARITY AS TO THE PURPOSE of the lessons?	☐ A	☐ E
35	Was there CONCEPTUAL UNDERSTANDING from EXPLANATIONS given?	☐ A	☐ E
36	Skill in effective use of QUESTIONING TECHNIQUES	☐ A	☐ E
37	The EFFECTIVE USE of stimulus material	☐ A	☐ E
38	QUALITY AND USE of blackboard	☐ A	☐ E
39	Degree of PUPIL PARTICIPATION	☐ A	☐ E
40	The PACING of the lessons	☐ A	☐ E
41	Use of a variety of TEACHING STRATEGIES	☐ A	☐ E
42	Appropriateness of TEACHING STRATEGIES	☐ A	☐ E
43	Quality of PUPIL PERFORMANCE	☐ A	☐ E
44	Variety of EVALUATION PROCEDURES to assess progress	☐ A	☐ E
45	Review and use of evaluation to IMPROVE TEACHING	☐ A	☐ E

GENERAL CLASS MANAGEMENT AND ADMINISTRATIVE ABILITIES

46	KNOWLEDGE of syllabus/es and schemes of work	☐ A	☐ E
47	CONTROL of written work – thoroughness, punctuality etc.	☐ A	☐ E
48	FIRMNESS and consistency in controlling discipline	☐ A	☐ E
49	EFFECTIVENESS in giving instructions	☐ A	☐ E
50	EFFICIENCY in completing registers, compiling lists, doing admin. tasks	☐ A	☐ E

FURTHER COMMENT (IF ANY):

**COLLEGE OF EDUCATION AT WITS
ASSESSMENT FORM FOR SCHOOL EXPERIENCE FOR FIRST YEAR B.ED.**

STUDENT'S SURNAME Mr/Ms/ First name

STUDENT'S NUMBER SCHOOL

TUTOR TEACHER

OVERALL DECISION: CREDIT / NO CREDIT

Please assess on the five-point scale by circling the chosen letter. E = FAIL.

1. Communication in language of instruction:					
Voice: volume, pitch, pace, enunciation, tone/expression	A	B	C	D	E
Clear questions, instructions and explanations	A	B	C	D	E
Quality of written communication	A	B	C	D	E

Comment

2. Preparation and presentation					
File correct and updated	A	B	C	D	E
Lesson prep according to requirements	A	B	C	D	E
Outcomes clearly stated	A	B	C	D	E
Outcomes achieved	A	B	C	D	E
Quality of learner activity / involvement	A	B	C	D	E
Sound knowledge of content	A	B	C	D	E
Evidence of research	A	B	C	D	E
Integrated use of teaching aids	A	B	C	D	E

Comment

3. Attitudes					
Respectful and professional treatment of learners	A	B	C	D	E
Co-operates well with colleagues	A	B	C	D	E
Willing to learn and adapt	A	B	C	D	E
Enthusiastic and committed to the profession	A	B	C	D	E
Fits in with the requirements of the school	A	B	C	D	E

Comment

4. Classroom management					
Ability to facilitate on-task behaviour in learners	A	B	C	D	E
Suitable pacing of work	A	B	C	D	E
Ability to handle disruptions / misconduct by learners	A	B	C	D	E
Ability to create a positive learning environment	A	B	C	D	E

Comment

Signature of tutor: Signature of teacher

College of Education at Wits (JCE)
Assessment Document For Students on School Experience

STUDENTS SURNAME: Mr / Mrs / Miss _____
 FIRST NAME: _____
 STUDENT NUMBER _____ YEAR OF STUDY: _____
 COURSE: _____ DATE: _____
 SCHOOL: _____ TEACHER: _____
 TUTOR: _____ SECONDARIES: SUBJECT / LA _____

SCHOOL EXPERIENCE I, II, III, IV, ADDITIONAL.

OVERALL RESULT: **CREDIT** **SUPPLEMENTARY** **NO CREDIT**

This document is based on the Six Roles of an Educator (from the Norms and Standards for Educators p.54, but Role 6 has been absorbed into Role 2) and *The Development Appraisal Document for Educators PLI*.

Minimum requirements for each year are suggested in the last column. SE IV should be evaluated on all criteria. If students in other years display competence beyond the minimum, please indicate.	Non Applicable	Excellent	Very competent	Competent		Not yet competent	Incompetent	SE year: minimum
1. LEARNING MEDIATOR (IN THE CLASSROOM)								
1. Communication in language of instruction								1
Voice: volume, pitch, pace, enunciation, tone								1
Questions								1
Giving instructions								1
Explaining								1
2. Attitude to learners, respectful, professional, supportive								2
3. Level: sensitive to learners' needs								2
4. Classroom management: arrangement, organisation								1
5. Classroom management: constructive discipline								1
6. Integrated use of media/aids: chalkboard, OHP, etc.								1
7. Stimulating and directing critical and creative thinking								3
8. Effective group and pair work: learner centred								1
9. Suitable pacing of learner activities								2
10. Effectiveness of learner development (quality of learning)								2
11. Sound knowledge of content								1

	Non Applicable	Excellent	Very competent	Competent			Not yet competent	Incompetent	SE year: minimum
2. INTERPRETER AND DESIGNER OF LEARNING PROGRAMMES AND MATERIAL (PREPARATION)									
1. Planning in line with the new curriculum (interpreting official documents)									3
2. selecting and sequencing sufficient, suitable and accurate content									3
3. Selecting a variety of teaching strategies appropriate to learner context									3
4. Have outcomes been clearly stated?									1
5. Have outcomes been achieved?									1
6. Quality and accessibility of preparation/record file									1
3. LEADER, ADMINISTRATOR AND MANAGER									
1. Co-operates with colleagues, a good teamworker									1
2. Regular control and assessment of learners' work									3
7. SCHOLAR, RESEARCHER AND LIFE-LONG LEARNER									
1. Evidence of thorough research (beyond textbooks)									1
2. Wide general knowledge appropriately applied in the learning situation									3
3. Ability to reflect on self as educator									2
8. COMMUNITY. CITIZENSHIP AND PASTORAL ROLE									
1. Upholding and teaching the Constitution, human rights and responsibilities and respect for others	Applies to all								1
2. Developing lifeskills e.g. related to study or social issues like HIV, crime, violence, drugs									3
3. Providing a listening ear, or extra help to those in need									3
4. Active involvement in the extra-mural programme of the school. Minimum 2 activities per week.									1

GENERAL COMMENTS: _____

TUTOR: _____ TEACHER: _____ PRINCIPAL: _____

College of Education at Wits (JCE)
Assessment Document For Students on School Experience
CONTINUOUS SCHOOL EXPERIENCE (SP) ASSESSMENT

STUDENT NAME: _____ COURSE: _____

STUDENT NUMBER: _____ DATE: _____

SCHOOL: _____ OVERALL RESULT: ☐ CREDIT ☐ NO CREDIT

This report will be the focus of the discussion in the final meeting of the teacher, the student and the tutor. The report should take the following criteria into consideration:

1. The degree of knowledge and insight into the relevant learning areas.
2. The planning, preparation and integration of the units of work.
3. The development and effective use of support materials.
4. The variety and appropriateness of teaching strategies.
5. The ability to motivate, arouse and maintain interest (include here the learning environment established).
6. The effectiveness of learner development.
7. The assessment of learner development.
8. The effectiveness of control (discipline).
9. Classroom management (administration, time management, giving instructions, asking questions, organising group work).
10. The ability to communicate (instructions, explanations, descriptions, questions).
11. The quality of the student teacher's relationship with learners.
12. The degree of professionalism (code of conduct).
13. The quality of the student teacher's relationship with teachers and school organisation (include leadership and initiative).
14. Extra-curricular involvement.

A page has been included on which to write this report. If required additional pages may be used.

TEACHER/STUDENT/TUTOR _____ PRINCIPAL _____

APPENDIX D: SCHOOL EXPERIENCE PRINCIPLES & PRACTICE

COLLEGE OF EDUCATION AT WITS

SCHOOL EXPERIENCE: PRINCIPLES & PRACTICE

Introduction

School-based Teaching Experience is an essential part of a College student's training. In an integrated study programme for the new Bachelor of Education degree (introduced in 2003) as well as the Bachelor of Primary Education degree and the Higher Diploma in Education (phased out from 2003), Teaching Experience complements professional and academic courses, and is a fundamental part of the study programme. Schools are the sites in which students are required to apply acquired knowledge and skills, and to demonstrate competence in an authentic educational context.

During periods of Teaching Experience, students ought to be regarded as junior colleagues, responsible and committed to the schools to which they are assigned. They need to comply – in every respect relevant to them as students – with the ethos, policies and codes applicable to the staff of the school.

Rules stipulate that a student must obtain an overall pass for Teaching Experience in each year of study. Performance during Teaching Experience is assessed according to clearly defined criteria.

Levels of competence and essential outcomes

Teaching Experience aims to cover the essential roles of the educator and applied competences laid down in *Norms & Standards for Educators 2000*, and the exit-level outcomes specified by the Standards Generating Body (SGB) for Educators in Schooling.

To fulfill requirements at Wits for the Bachelor of Education degree, a student must demonstrate competence in the following outcomes. (These criteria ought to be applied also to candidates for the Bachelor of Primary Education degree and the Higher Diploma in Education.)

In the first and second years of study (basic competence, NQF level 5) *

- Basic understanding of the principles and practice of teaching for outcomes-based and related approaches to education
- Basic skills of classroom and learning group management & discipline
- Preparation and presentation of particular lessons, showing appropriate awareness of appropriate cognitive levels and content
- Appropriate personal use of the language of learning & teaching
- Fundamental skills relevant to a specified school phase
- Basic skills of assessment of individual learners' competence
- Awareness of individual learners' needs
- Assistance in school-based extra-curricular activities

- Basic understanding and application of professional and school-based codes of performance
- Ability to reflect critically on comments and professional advice relating to teaching practice and methods.

** Note*

In the first year of study, a student may not yet be able to demonstrate all areas of competence at the required level. The student may nevertheless be admitted to the second year of Teaching Experience if, in the opinion of the assessors, sufficient potential and commitment have been shown during the first year to indicate that the outcomes could be achieved in the second year.

In the third year of study (core competence, NQF level 6)

- Application of knowledge and skills developed in the first and second years
- Design and presentation of lesson sequences
- Application of appropriate language, cognitive levels and content
- Integration of skills relevant to a specified school phase and learning area/teaching subject
- Assessment and evaluation of competence and progress at individual and group levels
- Effective assistance to learners with special needs, and appropriate intervention
- Design and use of basic learning materials
- Mediation in learners' competence in the language of learning, literacy and numeracy
- Ability to reflect critically on teaching practice and methods
- Effective participation in school-based extra-curricular activities
- Awareness of an educator's role in a school community.

In the fourth year of study (advanced competence, NQF level 6)

- Application of knowledge and skills developed in the first, second and third years
- Co-ordination, design and presentation of extended lesson units
- Advanced application of skills relevant to a specified school phase and learning area/teaching subject, including the use of appropriate language, cognitive levels and content
- Development of learning support programmes to assist learners who are at risk
- Design, interpretation, use and evaluation of learning materials
- Implementation of strategies for assessment and evaluation of learning progress
- Application to teaching methods of classroom-based enquiry or/and research
- Co-ordination of and effective participation in school-based extra-curricular activities
- Participation as an educator in a school community
- Knowledge and application of professional rights & responsibilities.

Allocation of students to schools

Whenever possible, students are permitted to apply for allocation to schools of choice, subject to the school's capacity and areas of specialization. The final decision rests with the College, and a student is not permitted to change from the allocated school to another without permission of the College in consultation with both schools concerned.

In the case of primary schools, students are allocated to either the Foundation or Intermediate phase. Foundation phase students who include an Early Childhood Development (ECD) elective in their studies are required to complete a specified portion of their total Teaching Experience in an ECD environment. High school allocations are made according to the students' teaching subject or learning area specialization.

During their course of training, students are required to attend a reasonable number of schools, and are encouraged to experience a range of institutional types to enhance their scope and flexibility.

Note

In the second or third year of study, students are allowed an elective option during one period of Teaching Experience. The option may include a school specializing in a phase in which the student has not chosen to specialize, a school catering for special needs, or a school located beyond the reach of the College (for example, schools in provinces other than Gauteng, or outside of the country). In these cases, the student may not be visited and assessed by a College tutor. Applications by students to attend such schools are normally approved, provided that the student has a satisfactory Teaching Experience record and the school can satisfy the College that a member of staff is available who can provide supervision and independent evaluation of the student.

Whenever possible, the College will arrange for final-year students to visit to their allocated schools prior to commencement of Teaching Experience. The purpose of the visit is to familiarize the student with the location, ethos, curriculum and timetable of the school, and to receive information about her/his expected teaching responsibilities and the topics and outcomes s/he will be expected to cover. In the time between this visit and the commencement of the actual Teaching Experience, students are required to liaise with College tutors, who will assist them as far as possible to prepare for their task.

The student's teaching load

The teaching load will be influenced by a number of factors, for example:

- the school's evaluation of a student's current competence;
- the school's capacity to provide effective supervision;
- the programme(s) currently being offered in the relevant classes.

While the College places no maximum limit on the amount of teaching a student may undertake, schools are requested to take her/his actual level of experience and proven capacity into account. There should be a reasonable balance between on-site learning and actual delivery.

The normal minimum requirements are as follows:

In the first year of study
By the end of the first period of Teaching Experience, the student should be teaching at least 1-2 lessons per day (preferably in the presence of the teacher). This load (1-2 lessons) should be the minimum required throughout the second period of Teaching Experience.
In the second year of study
2-3 teaching lessons per day.
In the third year of study
3-4 teaching lessons per day, leading ideally to a final week of continuous teaching (i.e., a teaching load normal to the staff of the school).
In the fourth year of study
An increasing teaching responsibility, culminating in continuous teaching (i.e., a teaching load normal to the staff of the school).

When the student is not involved in whole-class teaching, s/he should be involved in such activities as:

- observation of teaching by the class/subject teacher;
- assistance with the learning of smaller groups or individuals (e.g., learners with special needs);
- educational assistance beyond the classroom (e.g., school media centre);
- production of required learning materials.

The student should not be allocated more free time than is customary for the staff of the school as a whole. The student's whole-school activities should include a reasonable amount of participation in extra-curricular activities (e.g., sports, clubs and societies, media centre supervision, &c.), in accordance with the year-by-year progression indicated in the outcomes listed above.

The student is expected to teach a variety of lessons relevant to the school phase, learning area or teaching subject. Unless special circumstances demand it, the student should not repeat lessons taught on a previous school experience.

The teaching load includes lessons observed by the College tutor. Tutors are normally able to observe 3-4 lessons during each period of Teaching Experience. It is hoped that supervising teachers will observe and comment on as many of the student's other lessons as possible.

Preparation of lessons

Students are required to produce a written record of preparation for each lesson presented, in a format acceptable to both the College and the school. The record of preparation must be kept in a file that is available for perusal, as and when required, by the College tutor and/or the supervising teacher. The record must include any learning materials produced for lessons taught, as well as a copy of all written evaluation reports from the tutor and/or the supervising teacher.

The student's responsibilities to the school

The student is required to comply with all school policies, including:

- codes regulating relationships and communication with the school principal, teachers, learners and parents;
- codes of punctuality (arrival at and departure from school and lessons);
- dress and deportment codes;
- codes of classroom manners and discourse.

It is the prerogative of the school principal to approve or decline any application by a student for leave of absence. In the case of unavoidable legitimate absence (e.g., on medical grounds or family bereavement) the student is expected to inform the school principal and College tutor telephonically, as soon as possible. If the principal requires, the student must also complete a formal application for leave of absence.

The supervising teacher

The College acknowledges the crucial role of the supervising teacher, and greatly appreciates the time, effort and professional expertise a mentor devotes to our students. The progress of students is considerably enhanced by getting maximum opportunity to observe and learn from experienced practitioners, to receive advice, and to have their own lessons discussed and evaluated. The College expects of students, in turn, that they will regard their time spent at the school as a period of valuable learnership, and will attempt, to the best of their ability, to put into practice any sound recommendations arising out of regular evaluation by the supervising teacher.

The student is expected to comply with all duties assigned by the duly appointed supervising teacher, provided that they are professionally reasonable and are designed to achieve the essential outcomes of Teaching Experience, as described above. Such duties may include substitution for absent teachers, as required by the principal or supervising teacher, as long as it has been ascertained beforehand that

the student is competent to manage the task and has, whenever possible, been given reasonable advance notice in order to be adequately prepared.

The College tutor

A member of the College staff is assigned as liaison tutor to each school. The main functions of the liaison tutor are:

- to liaise with the school, the principal and the teacher in overall charge of visiting students;
- to mediate with regard to any problems that may arise between the College and the school, or between the school and a student;
- to collect the final assessment reports of students (unless the reports have already been collected by individual student tutors).

In addition, each student is assigned an individual tutor. The main functions of the individual tutor are:

- to maintain regular contact with the student;
- to observe the student and to assess the student's progress;
- to evaluate the student's performance, in consultation with the supervising teacher;
- to recommend the final result of the student's performance.

The tutor will visit the school, consult with the principal and supervising teacher, and observe the teaching practice of the student as often as possible. The school should convey to the tutor any problems emerging from the student's performance as soon as possible, so that they can be addressed in good time.

The student is also expected to keep in close contact with her/his College tutor, by informing the tutor, in good time, of the teaching timetable to which s/he has been assigned, any alterations that may occur, as well as any other factors that may affect the student's teaching schedule.

The task of tutors is greatly alleviated if they are informed in good time about (1) access to the school property, (2) arrangements for secure parking, (3) suitable times for introduction to the school principal and supervising staff, (4) any changes to the student's timetable of teaching, and (5) any other factors that may affect the student's performance.

Assessment and evaluation of the student

The student is assessed during each period of Teaching Experience. The assessment concentrates on:

- the student's compliance with all requirements laid down by the College and the school;
- her/his fulfillment of the essential outcomes prescribed for a specified level of Teaching Experience;
- the extent to which the student has failed to match, matched or surpassed the essential outcomes;

- aspects of the student's performance that merit special commendation, or may require special attention during subsequent periods of Teaching Experience.

Early in the period of Teaching Experience, the tutor will arrange a time for assessment. Ideally, assessment is conducted in the presence of tutor, supervising teacher, and student. (The presence of the student may, in certain cases however, be waived if the tutor and supervising teacher agree that it is not conducive to an objective assessment.) If there is agreement concerning the quality of the student's performance, the tutor and supervising teacher will submit a joint report to the College.

Should the supervising teacher not be available at the agreed time, the tutor must arrive at an assessment of the student independently. If the tutor and supervising teacher are unable to agree on evaluation of a student, separate reports should be submitted to the College.

It is sometimes necessary, in borderline cases, for the tutor to call in a moderator. The moderator will normally be a senior member of the College staff, whose recommendation is considered in conjunction with the assessment of the tutor and the supervising teacher.

Assessment reports of the tutor and supervising teacher are normally made available to the student, on the understanding that they are provisional. A final decision on the student's Teaching Experience result is made by the Faculty Examinations Committee at the end of the academic year. The Committee will take into account the comments and evaluation of the tutor and/or supervising teacher, provided that all the details have been conveyed beforehand to the student.

Teaching Experience results

The student may be granted any one of the following results by the Examinations Committee:

- credit for the relevant level of Teaching Experience;
- credit withheld, pending completion of any outstanding requirements;
- supplementary examination, normally requiring additional Teaching Experience to be arranged by the College in consultation with the school;
- in the case of prolonged legitimate absence (e.g., on the grounds of medical incapacity or close family bereavement), a deferred examination, to be arranged by the College in consultation with the school;
- no credit, on the grounds that the essential outcomes required for the specified level of Teaching Experience have not been fulfilled.

In the case of final-year students, a mark is given to the student for both periods of Teaching Experience. A student who is granted a mark of 75% or above for both periods may be awarded a pass with distinction.