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The challenges of curriculum change challenges of curriculum change teachers in Limpopo province

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CHAPTER 2

TEACHER LEARNING AND TEACHER DEVELOPMENT: PRACTICE, KNOWLEDGE AND PEDAGOGY

> Teachers are expected to teach new knowledge in new ways, and so engage in ongoing learning in relation to their professional expertise. They are expected to produce learners with high level skills and integrated and flexible knowledge so that they may take their rightful place as informed and active citizens in their new knowledge societies. Teachers are also expected to play a significant role in eradicating the social ills and inequalities that their learners bring to their classrooms. (Adler *et al*, 2002, p. 150)

The President's Schools Project was implemented at a time when research into educational reform recognised the central role that teachers played in any process aimed at improving teaching and learning in schools. Educational researchers like Wilson and Berne (1999) note that changing curriculum policy and assessment procedures alone does not lead directly to changes in teaching practices and that the professional development of teachers must be a central component in any educational reform process. Elmore and Burney (1999) have also situated the professional development of teachers at the centre of educational reform and instructional improvement. They point out that while a great deal is known about the characteristics of professional development, less is known about how to organise successful professional development so that it influences practice in large numbers of schools. This shift towards teacher development is also evident in post-apartheid South Africa, where teacher education is expressed as being critical to "repairing, redressing, professionalizing and changing current educational practices" (Adler, 2002, p. 2).

Linked to the increased worldwide focus on teacher development are calls for more research on how teachers learn during professional development processes. This is because little is known about what teachers do learn across the different development opportunities afforded them officially, or from projects

like the President's Schools. Wilson and Berne (1999) found that questions such as, "What knowledge do teachers acquire across these experiences?", and, "How does that knowledge improve their practice?" (p. 174) are often left unanswered, or even unasked. Research into teacher education faces challenges relating to what constitutes a knowledge base for teaching, how this knowledge is best acquired, and the resulting extent to which teachers' classroom practices change and/or improve.

The interrelated research issues of teacher learning and teacher development are central to this thesis, which focuses directly on a group of rural teachers, their classroom practices, and their perceptions of curriculum change. Adler (2002) reflects on a discursive shift that has recently taken place in research from theorising about teacher *change* to theorising about teacher *learning*. This shift opened up a discursive space for descriptions of what teachers learn, how teachers learn what they do, and what teachers do with that new knowledge to legitimately enter debates on teacher education. With a direct focus on teacher learning and teacher development, this chapter reviews the literature on both the curriculum and the pedagogy of professional development programmes. It is organised around three basic questions that probe the connections and contradictions between what "knowing more and teaching better" (Cochran-Smith and Lytle, 1999, p. 249) means in teacher education programmes planned for South African rural schools. First, given the theoretical principles that underpinned outcomes-based education (OBE) in South Africa, what changes did rural teachers need to make in their practice in order to successfully implement it? Second, what should the knowledge base for in-service teacher development programmes include to enable South African teachers to learn about the kind of learner-centred teaching associated with OBE? Third, where should professional development initiatives be located to best ensure that in-service rural teachers acquire this kind of knowledge?

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PRACTICE:

Teachers and teaching

Part of the post-1994 South African government's emancipatory agenda was to consider all people as being able to take control over their own learning, thus learner-centredness was placed at the heart of curriculum discourse in South Africa. In order to help teachers to implement learner-centred OBE in their classrooms, the Department of Education commissioned a plethora of in-service teacher training manuals. For example: teachers were inducted into the theoretical and philosophical roots of OBE (Department of Education, 1997d); the learner-centred classroom practices that the department associated with OBE were explained to teachers (Department of Education, 1997c); strategies to implement a continuous assessment programme within an OBE framework were also detailed (Department of Education, 1997b); and, school managers were provided with strategies that could support OBE in their schools (Department of Education, 1997e). A manual developed for Grade 7 teachers made the learner-centred nature of OBE explicit in this way:

> OBE advocates the learner-centred approach to teaching and learning. This means the focus is on learning, is on the outcomes themselves and on the performance. The focus is not on instruction. The main role of the teacher is to help the learners acquire the targeted knowledge, skills and values. (Department of Education, undated b, p. 38)

Along with learner-centredness, the curriculum policy document also served to entrench constructivism as the OBE learning theory when it was written that knowledge construction and production were to be emphasised over knowledge consumption (Department of Education, 1996a).

Both learner-centredness and constructivism are educationally robust concepts underpinned by research that can be traced back to Dewey and Piaget (see Edwards and Mercer, 1987; Darling-Hammond, 1994). Even though Dewey did not use the terms learner-centred or constructivist, his theory of teaching and

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learning did articulate some compatible ideas. For example, the curriculum in Dewey's experimental school at the turn of the twentieth century was "centred around children's interests" (Cuban, 1993, p. 40). Dewey also argued that learners should learn and make sense of new knowledge together, based on individual and collective experiences (Dewey, 1916). Having said this, it is also wise to remember Prawat's (1995) caution on misreading Dewey, as he reminds us that Dewey himself expressed doubts about the viability of activity-oriented instruction which underestimated the need for adult guidance and depended too much on the child's own innate capacity to make sense out of experience. If one accepts that Dewey at least set the stage for the emergence of a learner-centred pedagogy, then it is Piaget who must be credited with expanding this theory through his psychological work on the stages of child development. His theory considered learners to be individuals who make their own sense of the world and the experiences that surround them; thus learners were brought into a central position in learning experiences. Piaget viewed learning as a process of continual construction and reorganisation of knowledge, with the learner taking responsibility for that construction and reorganisation (Piaget, 1971; 1976; 1977; 1985; Piaget cited in Brooks and Brooks, 1993).

Vygotsky's (1962; 1978) theories about the social construction of knowledge was to some extent compatible with Piaget's theory even though they made different assumptions about the mechanisms for learning. Vygotsky described the zone of proximal development (ZPD) through which knowing is mediated and negotiated, stressing that, in his view, learning is a cumulative experience derived from, and informed by, an individual's and a group's cultural and historical experiences. In the ZPD, the teacher plays an active role of mediating between the learners' current thinking and the knowledge to be learned. Edwards and Mercer (1987) argue that Vygotsky's work on the ZPD is more helpful when considering children's knowledge in the context of formal schooling than the individualistic perspective in Piaget's work and the rather linear and compartmentalised assumptions he made about human development.

Applying constructivist principles to learner-centred practices reveals the nuances and complexities involved in relating a learning theory to actual classroom teaching. Walkerdine (1984) cautions that if constructivism is conceived of in a loose and emotive manner, a sentimental view of the child often results, and an overly romanticised progressivism of learner-centred experiences results. Another danger concerns the form of activity learning that is often seen in classrooms within this type of learner-centred curriculum design. Group work and collaborative learning are examples of techniques that play upon a notion of active learning. Essentially, learners complete activities in groups while the teacher stands back, ostensibly facilitating the process wherein the learners are expected to find their own meanings. Another caution comes from Brophy and Alleman (1991) who warn against the over-emphasis of time-consuming activities loosely based on constructivist approaches. They argue that while there is a need to encourage learners to construct their own meanings, it is equally important for the teacher to interact with learners, and to negotiate their passage towards socially acceptable knowledge. Watts and Bentley (1991) suggest that a strong version of constructivism can only exist as a theoretical version, and that most constructivist teaching can be labelled "convenient" (p. 175). Von Glasersfeld (1996) would agree with this as he uses the term "trivial" (p. 307) to define most constructivist teaching. Yet another warning comes from Ernest (1996) who cautions against implementing a form of discovery learning where teachers channel learners towards the predetermined right answers of the teachers themselves. And lastly, in defining constructivism as "primarily a philosophical theory or position about knowledge and knowledge acquisition", Janvier (1996, p. 449) highlights the dangers that lie in assuming a link between learner-centred teaching, constructivist principles, and classroom realities. He does this as he believes that constructivism is not actually concerned with teaching, which by its very definition is an intervention into the processes of how other people learn, and as such he argues that teaching is largely determined by what he calls, "a-constructivist decisions" (*ibid*, p. 452). These cautions are re-visited in Chapter Six where a detailed analysis of

teachers' practices in the President's Schools is presented in view of it being illustrative of the teachers' understanding of learner-centred OBE.

It was this complex and often contradictory curriculum model that South African teachers were meant to implement in their classrooms, requiring them to make substantial shifts in their existing practice. Brodie *et al* (2002) discuss the nature of these shifts in relation to a four-year collaborative research project on teacher education in South Africa. They suggest that the teachers in their project needed to shift the interpersonal relations that characterised their classrooms in order for them to move towards learner-centred practices. These shifts in the control over interpersonal relations helped the teachers to establish the conditions under which they could them make curriculum and pedagogical shifts. The rest of this section considers these shifts more broadly in relation to teacher development in South Africa.

SHIFTING THE CONTROL OVER INTERPERSONAL RELATIONS

Since the advent of OBE, South African teachers have been required to assume a very specific role in the classroom, a role that views teachers primarily as guides or facilitators who are expected to establish the conditions under which their learners can construct their own meaning. These sophisticated requirements meant that South African teachers were expected to create a comfortable learning environment with friendly and caring relationships with learners. In most cases this substantial shift was reduced to a change in terminology, where teachers began to be referred to in official policy documents as 'educators' who facilitated learning, and not as 'teachers' who transmitted information. Most teachers in South African schools had little experience, and certainly no formal training, concerning this new role of facilitation as their classrooms had been characterised by a climate of strong authoritative control on the part of the teachers. A conceptual leap of staggering proportions, involving dramatic changes in the social relations in the classroom, was required

for the learner-centred vision of OBE to be realised. This was because the quality of learning required in an OBE curriculum is more effectively attained in classrooms characterised by shared power relations rather than in those characterised by the more traditional authoritarian classrooms of the apartheid era.

Issues relating to shifts in the control over interpersonal relations are also indirectly included in work done by Newmann and Associates (1996) in restructured American schools. They identified three criteria of "authentic pedagogy" (p. 18), namely the construction of knowledge, disciplined inquiry and value beyond the school, which could be used to ascertain the intellectual quality of lessons observed. Newman and his associates stress that for intellectual quality to be assured these three criteria need to work together in the classroom in a holistic way. It is within the criterion of disciplined inquiry that standards relating to interpersonal relations in the classroom are to be found. They argue that for disciplined inquiry to take place, teachers and learners are expected to participate together in substantive conversations which are defined as, "extended conversational exchanges…about subject matter in a way that builds an improved understanding of ideas or topics" (*ibid*, p. 33). While this standard does not relate directly to interpersonal relationships, it can be inferred that extended conversations cannot take place in classrooms characterised by authoritarian relationships. Essentially, the possibilities for extended conversations are minimal in classrooms where rote learning, lectures, recitation pre-planned bodies of information with sets of questions habitually exist. Another implication that can be drawn from their work is that even if teachers in South African rural schools did manage to shift the nature of the interpersonal relations in their classrooms, this alone would not ensure that their lessons were of intellectual quality as other equally important shifts needed to be made.

Work done by Lingard *et al* (2001a; 2001b) in the Queensland Reform Longitudinal Study (QRLS) in Australia also stress the point about intellectual quality and they refer directly to the issue of interpersonal relations in line with

the Australian concern for enhanced social as well as academic outcomes. In their research, Lingard *et al* (2001a) observed four dimensions in classrooms where their concept of "productive pedagogies" (p. 3) was apparent. These dimensions are intellectual quality, connectedness to the world, supportive classroom environment, and recognition of difference. The supportive classroom environment is one that is characterised by issues such as student control and social support thus reflecting shifts in the control over interpersonal relations in implementing productive pedagogies in classrooms. But once again, attaining the dimension of a supportive classroom environment alone is not enough to ensure intellectual quality, as the other three dimensions also need to be addressed.

Professional development programmes should help teachers acquire the skills to shift the control over interpersonal relations in their classrooms, but they also need to help teachers consider the extent to which the content and method of the curriculum needs to be shifted in order for lessons of intellectual quality to be delivered to learners.

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SHIFTING THE CONTENT AND METHOD OF THE CURRICULUM

Given the transformational nature of the South African version of OBE, teachers were required to make significant shifts concerning the content of the curriculum and the instructional practices that they used in classrooms. No longer was racial or sexist content within a framework of authoritarian teaching practices acceptable. As was stated in the official curriculum policy document:

> Learner-centred pedagogy (the learner milieu and interests become the basis for 'negotiating' with the teacher the content – pacing and execution of learning) (Department of Education, 1996a, p. 51).

Making these kinds of shifts within a learner-centred OBE framework are much more complex than shifting the control over interpersonal relations. This is

especially true when one considers that fundamental pedagogics left rural South African teachers with a legacy of docility and a set of approaches that "block and hinder the development of critical and innovative teaching strategies" (Chisholm, 1993, p. 3). OBE as a curriculum policy gave teachers the power to make these shifts, but it provided them with little or no guidance concerning how to do this appropriately. The kind of transformational curriculum discourse of that time assumed that teachers had the skills that would enable them to make appropriate choices regarding content and method. Teachers were expected to make key decisions in the sequencing, grading and pacing of the curriculum, a level of decision-making that once rested exclusively with the Department of Education. In essence, teachers were expected to know what was relevant for their learners, and they were expected to be able to frame that relevant content in ways that were appropriate and meaningful in terms of learning.

The concept of relevance is also one that Newmann and Associates (1996), as well as Lingard *et al* (2001a) link to their typologies of both authentic and productive pedagogies respectively. Newmann and Associates talk of non-authentic pedagogy as having little or no connectedness between teaching and the world beyond the classroom. And Lingard (*ibid*) use the term "relevance" (p. 8) to refer to links between lessons and learners' background knowledge. Elements of productive learning, they argue, include the extent to which teachers' explicitly invoke and use the learners' background knowledge, and the extent to which knowledge is presented as problematic. However, once again it needs to be remembered that teaching and learning needs to contain all of the elements of authentic or productive pedagogies in order for intellectual quality to be assured.

South African teachers have found it very difficult to make shifts in terms of relevant content and methods in their classroom. This was shown in Taylor's (1999) vivid picture of South African classrooms where he argued that a balance between everyday knowledge and the more formal, specialised abstractions of "school knowledge" (*ibid*, p. 111) were not generally found. He based his

conclusions on research done by Bernstein (1996) who argued that middle class children have access to both school and everyday knowledges, whereas working class children only have access to everyday knowledge based on their personal experiences. This suggests that if a curriculum does focus on the everyday at the expense of the formal, it denies its learners access to disciplined knowledge. Taylor (1999) cautions that in situations where school knowledge is totally submerged, "the results are likely to be disastrous…an unorganised confusion of contrived reality" (p. 121). An intellectually rigorous curriculum that is responsive to learners' needs is one that is structured to relate to, but not limited to, aspects of learners' everyday knowledge.

IMPLICATIONS FOR TEACHER DEVELOPMENT IN SOUTH AFRICA

The quote at the beginning of this chapter indicates that extremely sophisticated demands were placed on teachers to realise the goal of curriculum reform in South Africa, namely to implement exemplary OBE practices in their classrooms. Teachers were expected to shift the authoritarian tones of their classrooms to accommodate more democratic interpersonal relations. They also had to make content and methodological shifts in their practice to align their teaching more closely to the requirements of OBE. Micro-educational changes of this nature are much more complex to implement than macro-educational changes (Fullan, 2000). Or to put it another way, "change ultimately is a problem of the smallest unit" (McLaughlin, 1987, p. 174). This serves as a reminder that working with the actual curriculum that teachers deliver to their learners requires teacher educators to work at the classroom level with the teachers. It also signals that this type of work is much more difficult to do well, than for example, developing large-scale curriculum policies for teachers.

Researchers such as Broadfoot *et al* (1991), Brown (1991), Harlen and Qualter (1991), Torrance (1991) and Brady (1996) have documented that even in well resourced countries, where teachers have been professionally very well

prepared for teaching, implementing OBE places enormous demands on them. The fiscal constraints imposed on the education system by the South African government further complicated the situation for rural teachers who were already experiencing problems with teaching and learning. These problems were researched by the President's Education Initiative (PEI), the first broad based intervention by the Department of Education into the fields of teacher development and instructional practices. The findings of this research are documented in a book entitled '*Getting Learning Right'* which synthesised information from thirty-eight diverse research projects. In this book it was written:

> There is broad consensus that teaching and learning in the majority of South African schools leaves much to be desired. The problems are generally described in terms of teacher-centredness, pupil passivity, rote learning, and the like. (Taylor and Vinjevold, 1999, p. 131)

The legacy of apartheid education is much to blame for this situation as, historically, pre-service teacher training in South Africa for black teachers was of very poor quality. The higher education institutions of the apartheid era were characterised by "fragmentation, inequality and inefficiency" (Greenstein, 1997, p. 9) in terms of the manner in which black teachers received their pre-service teacher education. In no way did this pre-service training equip teachers with the skills necessary to deal with the sophisticated demands that OBE placed on them. The educational doctrine of fundamental pedagogics, supported by the colleges of education in many of the ex-homelands of the apartheid era, was based on authoritarian principles that were translated into classroom practices as a "series of propositions which brooked no analysis and critique" (Taylor and Vinjevold, 1999, p. 132). This was very different to the learner-centred and constructivist approaches that underpinned OBE. Christie (1998) maintains that the learning and teaching that resulted in black schools has been of such a questionable nature that what is required is total transformation and not just the development of what currently exists in schools. This makes the arena of

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teacher education crucially important for South African teachers and, at the same time, very difficult to do well and to do meaningfully.

In conclusion, the form of teaching that South African teachers were expected to practice in their classrooms was underpinned by learner-centred practices and constructivist theories of learning. By implication this meant that in order to deliver 'good' OBE lessons in their classrooms, teachers needed to know when and how they could connect their lessons to the lives of their learners with the aim of transforming those learners' lives; and that they needed to do this within a socially supportive learning environment. The manner in which the OBE policy documents were written made this incredibly difficult to do as curriculum content was de-emphasised, and where it did appear it was to be negotiated with the learners who played a much more active role in terms of their own learning. This type of practice was very different from the type of practice in which the teachers in the President's Schools were trained and which constituted their teaching experiences. As these teachers' experiences were characterised more by a strict official control over curriculum content in authoritarian classrooms that were profoundly teacher-centred, what the teachers were expected to learn and then to implement in their classrooms was far removed from their day-to-day experiences of classroom practice.

KNOWLEDGE:
Teachers and knowing

The 'simple' idea that teachers who know more teach better has governed multiple efforts to improve education in areas such as policy, research and teacher development (Cochran-Smith and Lytle, 1999). But there are radically different views about what "knowing more and teaching better" (*ibid*, p. 249) actually means in this contested site of teacher development. In agreeing with Shulman's (1987, p. 9) claims that teaching is essentially "a learned profession" and that teachers are members of a "scholarly community", serious questions

need to be asked about what knowledge teachers should learn in order for them to become full and active members of such a community. The construction of a substantial and professional curriculum for teacher learning is a significant challenge facing all teacher developers, but especially those working in under-resourced rural schools where the legacy of fundamental pedagogics remained active, and where the challenges of teaching and learning were compounded by the implementation of OBE.

Reviewing the contemporary literature on teacher education reveals similar sets of features for the knowledge base of effective teacher development programmes. Shulman (1986; 1987, 1999; 2000) writes about the content knowledge and pedagogical knowledge that all teachers require, and he argues strongly for both of these knowledges to be meaningfully addressed in teacher development programmes. Elbaz (1983), Connelly and Clandinin (1986) and Fenstermacher (1994) add to this literature by theorising about how teachers' personal practical knowledge needs to be acknowledged during in-service teacher development programmes. This section does not provide a summary of these sets of features, but rather groups them together under what are considered here to be the two main categories of knowledge needed by in-service teachers. The first category relates to the conceptual knowledge that teachers need in order to teach well. Adler *et al* (2002) refer to this as "disciplinary knowledge-in-practice" (p. 139), which they theorise is a co-ordination of content and pedagogical knowledge. The second knowledge category considered here deals with the manner in which in-service teachers connect their new conceptual knowledge to their existing knowledge of the classroom situation. After defining each category, this section then considers the pedagogical price to be paid if either of the categories is excluded from in-service teacher development initiatives, especially those trying to impact on the nature of teaching and learning in rural schools.

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CONCEPTUAL KNOWLEDGE

Teacher education has inherited a legacy of imbalance in terms of the relative importance given to either content or pedagogy in professional development programmes. Shulman (1986) refers to a blind spot in teacher development programmes especially with respect to the curriculum of such programmes. He calls this blind spot, the "missing paradigm" (p. 7), which he compares to a swinging pendulum in the tradition of teacher development, with content knowledge being at one end of the pendulum and pedagogical knowledge at the other. The particular swing of the pendulum at any given moment leaves an inherent imbalance in terms of what constitutes the important things that teachers are expected to know in order to be able to teach well. This imbalance has resulted in a sharp distinction between content and pedagogy in many teacher development initiatives. Teachers are usually taught the content of what they are expected to teach, or they are taught what to do in the classroom with the content that it is assumed they already have; rarely are they taught both.

Adler *et al* (2002) relate this imbalance directly to teacher education in South Africa. They note that the teacher education pendulum in South Africa swings between:

> …a focus on pedagogical strategies and contextual issues without careful links to how these do or do not support conceptual learning, and a focus on conceptual knowledge that ignores the complexities of transforming this knowledge into appropriate opportunities for learning in school classrooms (p. 151).

Embedded in this comment is the suggestion that problems with, and concerns about, teachers' classroom practice in South Africa are often related to the distinction between knowledge and pedagogy that exists in many teacher development programmes. This distinction may be less problematic in well-resourced schools, where teachers are well-skilled to do their jobs as they already have some expertise in the subject(s) they teach; but, as later chapters will show, this distinction was highly problematic in the rural President's Schools,

where teachers were expected to teach a new range of learning areas to their learners without the benefit of appropriate text books and other teaching and learning resources.

As content and pedagogy are two of the cornerstones in all educational processes, this category of conceptual knowledge focuses on both of these as central to the forms of knowledge that teachers need in order to enhance their professional skills. Keeping knowledge of content and knowledge of pedagogy together in this category of conceptual knowledge is an attempt to ensure that both receive equal attention.

Content knowledge

Teachers have a special responsibility in relation to content knowledge, as they are the primary sources of knowledge that can potentially lead learners to understand subject matter. Therefore, it is essential that they are confident in the knowledge of the subject(s) they teach. Shulman (1986; 1987), in writing at length about the content knowledge of teachers, points out that it is a knowledge that goes beyond the mere facts of a domain. Understanding is central to this category of knowledge as "teachers need not only understand *that* something is so; the teacher must further understand *why* it is so" (Shulman, 1986, p. 9, emphasis in the original). In other words, teachers need to have the more conceptual knowledge and forms of reasoning that underpin their particular disciplines, or learning areas as they are now referred to in OBE. Included in this conception of content knowledge is what Ball and Cohen (1999) call the "meanings and connections, not just procedures and information" (p. 7) that teachers need to know about the subjects that they teach. It is crucial for teachers to understand how ideas connect across fields and that as knowledge is constructed, it can also be contested. These understandings would help teachers to be well positioned to select and use contexts, problems and applications appropriately in their classrooms.

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It seems almost trite to state that teachers need to understand the subject matter that they teach, and that this needs to happen in ways quite different from how they learned it themselves as students. But while much has been written about the curriculum of teacher development programmes, teachers' content knowledge has become so naturalised and invisible that it is dangerously close to being taken for granted. There is a huge pedagogical price to be paid in under-resourced rural schools, where teachers' subject matter competencies have been compromised, through no fault of their own, by deficiencies within their prior education; and if these challenges are not addressed by in-service teacher development initiatives.

The problems associated with teachers' content knowledge have been exacerbated in South Africa since the implementation of OBE. Jansen (1999b) claims that OBE actually "trivialises content" (p. 152). He goes further by saying that content is not acknowledged as a critical vehicle for giving meaning to the outcomes mandated in OBE policy for South African schools. Ideological issues concerning where the control over content lies and the conditions under which that control is exercised were not adequately addressed in the OBE curriculum policy documents. The advent of OBE resulted in the pendulum of teacher development in South Africa swinging away from the content knowledge of teachers, arguably to the detriment of teaching, especially in schools where the teachers themselves were victims of Bantu Education.

Pedagogical knowledge

Shulman (1999) reminds us that, "conceptual knowledge for teaching is as much about pedagogy as it is about content" (p. x-xi). Just as teachers need to know about content in ways that transcend mere facts, they also need to know about pedagogy in ways that transcend mere teaching methods. Pedagogical knowledge includes being able to identify the most powerful examples,

illustrations, analyses, explanations and demonstrations of a teaching moment, as well as knowing the most useful form of representing them so that they are comprehensible to others. Knowledge of pedagogy is not simply knowing how to use different methods in the classroom, but rather it is about knowing and understanding the theoretical basis underpinning different approaches to teaching, and therefore being able to make informed and appropriate selections. In the context of OBE, teachers were required to establish learner-centred classrooms where they acted as facilitators through using group work, thus developing learners who took responsibility for their own learning and who were motivated by the constant feedback they received from their teachers (Department of Education, 1996a). This implies that teachers needed to understand the theory of collaborative learning and not just how to use group work as a technique.

Creating classrooms characterised by learners interacting around complex but interesting problems, learners initiating much of their own learning, and teachers working flexibly with their learners in a variety of ways and settings, suggests that there is a near limitless array of pedagogical issues on which teacher development programmes need to focus. In order to equip teachers adequately to fulfil these requirements, teachers' learning of pedagogy should move from broad principles of classroom management and organisation to the more specific pedagogical content knowledge that Shulman (1987) defines as:

> …that special amalgam of content and pedagogy that is uniquely the province of teachers...It represents the 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. (p. 8)

Included in this sub-category of conceptual knowledge is the pedagogical knowledge teachers need in order to become more insightful with regard to their learners through understanding how children acquire their subject matter knowledge. Teachers need to know what children find interesting, where their learners potentially will experience difficulty, and how they can expand their own

interpretive frames to see more possibilities in learners' abilities. In order to teach well, teachers need to listen to their learners and to observe them as they engage in activities together. The knowledge of children and their learning that teachers need to develop includes, "what it means to learn, what helps children (or anyone else) learn, and how to 'read' children to know more about what they are thinking and learning" (Ball and Cohen, 1999, p. 9). Insights into learners and learning are crucial aspects of pedagogical knowledge as they help teachers to develop lessons containing meaningful and challenging activities that foster learning.

The content and pedagogical problems teachers in most of South Africa faced immediately after the advent of OBE have been well documented in the report of the PEI. In this report, Taylor and Vinjevold (1999) wrote about "teachers' low levels of conceptual knowledge, their poor grasp of their subjects and the range of errors made in the content and concepts presented in their lessons" (p. 139). While the strengths and weaknesses of the PEI report have been criticised (see Vally, 1999), it does provide a devastating account of teaching and learning practices across a range of South African schools in the early years of the new educational system. Taylor and Vinjevold's report concluded that there would be an enormous pedagogical price to be paid if teacher development programmes aimed at South African teachers in general, and rural teachers in particular, did not deal rigorously and equitably with content and pedagogy.

If the conceptual knowledge that teachers need in order to teach well could be broadly referred to as a 'theoretical' component for both pre-service and in-service curricula for teachers, then the next section could be called the 'practical' component that in-service teachers particularly require from teacher development programmes specifically designed for them.

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CONCEPTUAL KNOWLEDGE AS PRACTICE

Shulman (2000) notes "practitioners in teaching know a great deal more about teaching than our theories can yet account for" (p. 134). One way of drawing on this knowledge is to recognise the contextual site of teaching and learning practice as a key element in any in-service teacher development programme. In order to teach well, teachers need to be able to make useful connections between the concepts embedded in content and pedagogical knowledge, and learning how to do this can only be done in relation to practice (Ball and Cohen, 1999). In other words, just as teacher knowledge is situated in practice, it must also be learned in practice (Feiman-Nemser and Remillard, 1995).

Work done by Cochran-Smith and Lytle (1999) on three different theoretical conceptions of teacher learning has proven useful in looking at trends with regard to the practical parts of an in-service curriculum for teacher education. Of particular relevance here is their concept knowledge-*in*-practice, which they define as:

> The knowledge teachers use to teach…is manifested in their actions and in the decisions and judgements they make in an ongoing way. This knowledge is acquired through experience and through considered and deliberative reflection about, or inquiry into, experience. (p. 262)

This view of teachers' knowledge-*in*-practice foregrounds the status of the personal opinions and beliefs teachers hold concerning teaching and learning. These beliefs, which develop over years of experience in the classroom, interact in different ways with the conceptual knowledge that teachers acquire from professional development programmes. This section deals with teachers' personal practical knowledge (Connelly and Clandinin, 1986) and how, depending on the circumstances, it can either enhance or hinder teachers' understanding of practice.

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Personal practical knowledge

Elbaz (1983) writes about the practical knowledge of teachers that includes the complex, practically oriented set of understandings that teachers actively use to shape and direct their teaching. Connelly and Clandinin (1986) use a slightly different phrase, personal practical knowledge, to describe the experiential knowledge of teachers that is embodied in, and reconstructed out of, the narratives of their lives. The "wisdom of practice [which includes] the maxims that guide…the practices of able teachers", was theorised about by Shulman (1987, p. 11) when he extended his view of the competent professional. Later, Clandinin (1992) further clarified the definition of personal practical knowledge as the:

> …kind of knowledge, carved out of, and shaped by, situations; knowledge that is constructed and reconstructed as we live out our stories and retell and relive them through processes of reflection (p. 125).

Continuing with the focus on able teachers are Cochran-Smith and Lytle (1999) who emphasise that it is the knowledge of very "competent teachers" (p. 262) that is important. They explain:

> To improve teaching, then, teachers need opportunities to enhance, make explicit, and articulate the tacit knowledge embedded in experience and in the wise action of very competent professionals (*ibid*, pp. 262-263).

This type of knowledge includes how expert teachers make judgements, how they conceptualise and describe classroom dilemmas, how they name and select aspects of classroom life for attention, and how they think about and improve their craft. In addition, the voices of these competent teachers, the questions they ask about their practice, and the interpretive frames they use to understand and improve on that practice, are also considered to be part of their personal practical knowledge. Experienced professionals are able to pose and to construct problems out of the complexity of their practice and then connect them to problems they encountered previously. In this knowledge category, the

teacher is seen as a mediator of ideas, as a constructor of meaning and knowledge, and as a person whose actions in the classroom are realisations of these mediations and constructions.

Including teachers' personal practical knowledge in the curriculum of in-service programmes suggests that teachers' biographical experiences need to be collected by the programme developers. Shulman (1986) refers to these biographical experiences as "case knowledge" (p.11) and develops the idea to include more than a report of an event in a teacher's life. His idea includes case literatures that "illuminate both the practical and the theoretical…the development of a case literature whose organisation and use will be profoundly and self-consciously theoretical" (p. 11). When these cases are embedded in the daily practice of teaching they have the potential to provide mental frameworks for teachers to construct personal philosophies for their practice. Clandinin and Connelly (1994) call these "narrative stories" (p. 149) and argue that collecting them and using them in in-service teacher development programmes helps teachers make sense of their teaching. The argument being made is that teachers learn when they have opportunities to examine and to reflect on the knowledge that is implicit in either their own good practice, or the good practice of expert teachers with whom they have contact. This assumes that teachers have opportunities in their schools to come into meaningful contact with other teachers who have extensive content knowledge and pedagogical skills. It also assumes that adding the dimensions of the personal and the practical to their existing knowledge base better equips teachers to create compelling and well-informed classroom curricula enriched with personal knowledge about real-world applications of the content being taught. As there is no single absolute way of doing this in practice, teachers need to build a repertoire of successful teaching and learning experiences. This enables teachers to teach in a manner that helps their learners engage actively with content in effective ways.

Fenstermacher (1994) also writes about teachers' personal practical knowledge, which he refers to broadly as "what teachers know that is a result of their experience as teachers" (p. 12) and which is distinct from what they know about teaching that is based on the research of others. However, he does embed his discussions of practical knowledge in an epistemology rooted in the distinction between practical and formal knowledge, with hegemony regarding the latter. The points he makes are crucial and worth quoting at some length:

> There are serious epistemological problems in identifying as knowledge that which teachers believe, imagine, intuit, sense and reflect upon. It is not that such mental activities might not lead to knowledge: rather, it is that these mental events, once referred to or expressed, must be subjected to assessment for their epistemic merit. (*ibid*, p. 47)

And

> There is much merit in believing that teachers know a great deal and in seeking to learn what they know, but that merit is corrupted and demeaned when it is implied that this knowledge is not subject to justification or cannot or should not be justified. The challenge for teacher knowledge research is not simply one of showing us that teachers think, believe, or have opinions but that they know. (*ibid*, p. 51)

Fenstermacher's epistemological caution is picked up again in Chapter Seven when conclusions are drawn about the knowledge as practice of the teachers in the project.

While the personal practical knowledge of teachers is important, it is essential that it forms part of a more extensive knowledge base of teaching that also includes knowledge of content and knowledge of pedagogy. To paraphrase Welch (2002, p. 28), it is not conceptual knowledge *or* practice, or even conceptual knowledge *and* practice, but rather, conceptual knowledge *as* practice, that helps teachers learn more about their teaching with a view to improvement. McLaughlin (2002) argues that while new pedagogical content knowledge and personal practical knowledge are essential for teachers to improve classroom practice and instruction, more knowledge alone cannot

accomplish much improvement. She states that these multiple forms of knowledge interact with each other in complex ways and that researchers need to consider how the sites and sources of teacher learning affects teachers' abilities and motivation to learn and use new knowledge. These issues are considered in the following section.

PEDAGOGY:

Teachers and learning

In post-apartheid South Africa, the clearest official policy direction for the design and delivery of teacher education programmes was contained in Section 5 of the *Norms and Standards for Educators - The Transformation of Existing Practice: Standards for the Design and Delivery of Educator Development Programmes* (1998). In this document, quality learning was defined as being made up of three inter-connected kinds of competence that teachers need to develop in their learners. It stated:

> *Practical competence* is the demonstrated 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. It is grounded in *foundational competence* where the learner demonstrates an understanding of the knowledge and thinking that underpins the action taken; and integrated through *reflexive competence* in which the learner demonstrates ability to integrate or connect performances and decision-making with understanding and with an ability to adapt to change and unforeseen circumstances and to explain the reasons behind these adaptations. (Department of Education, 1998, p. 10, emphasis added)

The notion of in-service teachers being able to foster these kinds of competencies in their learners' authentic contexts implies that in order for teachers to learn how to do this, their learning should also take place in their authentic contexts, namely in schools and classrooms. Thus, in keeping with official guidelines, in-service teacher development programmes in South Africa need to be school- and classroom-focused. This shifts the locus of teacher

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development programmes from pre-packaged courses workshopped by outside 'experts' to authentic activities that take place in schools and classrooms. In making these changes, teacher development initiatives would not violate the conditions for teaching and learning which have caused the failure of many such programmes (Newmann *et al,* 2000). This change also corresponds to Cochran-Smith and Lytle's (1999) third conception of teacher learning, namely "knowledge-*of*-practice" (p. 272), and brings into teacher education debates the notion of school-based learning collectives and inquiry communities. Cochran-Smith and Lytle's conception of knowledge-*of*-practice maintains that:

> …the central image is of teachers and others working together to investigate their own assumptions, their own teaching and curriculum development, and the policies and practices of their own schools and communities (*ibid*, p. 279).

Situating teacher development as close to the classroom as possible is part of a global trend towards teacher collaboration and reflective practice. This trend has been produced and used predominantly in developed countries, where the key premise is that communities of teachers working together in and around their practice in authentic ways leads to improvements in the quality of teaching and learning in schools. This section reviews debates on how locating teacher development programmes in school-based teacher collaborative communities can create the conditions under which the practice of in-service teachers could improve. Important concepts like leadership and reflection, which support collaboration, are problematised, and some of the challenges each brings to the nature and complexity of teacher development in South Africa are identified.

TEACHER COLLABORATION

Earlier in this chapter it was argued that shifting the control over interpersonal relations in the classroom could help teachers establish a precondition for the more complex shift in the content and method of the curriculum, and that both

shifts could contribute to the successful implementation of OBE in South African schools. However, the success of OBE in schools did not just rely on what teachers did in their classrooms; it also relied on the manner in which teachers prepared for those classroom experiences. Many theorists whose work is central to this section share the assumption that if this preparation for teaching takes place collaboratively, then teachers broaden and diversify their knowledge and create opportunities to see new versions of practice and to understand things differently (see Fullan and Stiegelbauer, 1991; Newmann and Associates, 1996). Even though each of the theorists has different nuances concerning collaboration, they do share three common strands. The first strand is that teacher learning is considered to be fundamentally a social enterprise, a collective endeavour. This locates teacher collaboration in a sociocultural perspective of teacher learning which proposes that learning processes are primarily social in nature, and "that learning and development occur as people participate in the sociocultural activities of their communities" (Rogoff, 1994, p. 209). Thus, from a sociocultural perspective, learning is "something that happens between people when they engage in common activities" (Bredo and McDermott, 1992, p. 35). The second strand is that when teachers' professional skills are placed at the centre of the school culture in a collaborative way, then a key condition for improving teaching in schools has been established. The third strand relates to context, as all the theorists reviewed conducted their research in the developed world.

There has been a growing effort over the last two decades to provide an organisational structure that enables groups of teachers to come together and to talk about their work, to learn from one another and to address curriculum issues (Cochran-Smith and Lytle, 1992). Fullan and Stiegelbauer (1991) use the term "collaborative work cultures" (p. 84) to describe this effort in Canada, stressing that the more teachers interact concerning their own practice, the more they are able to bring about improvements in teaching and learning. In a later publication, Fullan (2000) suggests that the existence of collaborative work cultures, or the now more popular phrase, "professional learning communities" (p. 581), makes a

difference in how well learners do in schools. Fullan and Stiegelbauer (1991) acknowledge that the link between professional development and improved teaching practice is a single-factor solution to a multifaceted phenomenon and as such is much more complex than is initially realised. They do not, however, provide much detail concerning how collaboration happens in schools, nor do they establish a clear relationship between teacher collaboration and improvements in practice. In addition, before being able to improve on their existing practice, teachers need to understand what 'good practice' is so that they can recognise it when they see it. Thus, in the South African context, teachers would need to understand the learner-centred nature of OBE and be able to recognise it in practice before being able to teach it themselves in their own classrooms.

Ball and Cohen (1999, p.13), as well as Wenger (1998, p. 137), use the concept "communities of practice" to describe places where teachers' theories and ways of understanding are developed, negotiated and shared. McLaughlin (2002) also talks of communities of practice, and argues that these communities are sites of learning "by virtue of their collective inquiry" (p. 107). Based on research conducted in the United States of America, Ball and Cohen stress that groups of teachers need to have a purpose grounded in the activities of practice, and that their deliberations should take place in a disposition of puzzlement; in essence a discourse of inquiry needs to be cultivated in a community of practice. It is unclear how this inquiry stance could be established in rural schools in South Africa and begs the question; can teachers' tacit (Polyani, 1967) theories be made explicit so that they can engage critically with them in an authoritarian environment where substantive conversations have traditionally been rare?

Newmann (1996), with his colleagues Kruse *et al* (1995) and Louis *et al* (1996), provide explicit evidence on the relationship between professional community and learner performance in restructured American schools. Essentially, they found that restructured schools had teachers and school managers continually working together in a professional learning community, with their attention

focusing on learner achievement. Louis *et al* (1996) use the phrase, "schoolwide professional communities" (p. 179) to describe their particular form of teacher collaboration which concentrates on the professional responsibilities of teaching and learning. They also found that in restructured schools, substantive reflective conversations, focused on pedagogy, took place within schools' professional communities. These substantive conversations resulted in the deprivatisation of practice, in the augmentation of teachers' talents and knowledge, and impacted on the manner in which teachers changed their instructional practices to obtain better learner results (Kruse *et al*, 1995). Later, Louis and Kruse (1998) approached teacher collaboration more from an organisational perspective that was described in terms of organisational memory, information distribution and interpretation. However, as this research was only conducted in twenty-four restructured schools, little indication is provided as to how to locate teacher collaboration as a development strategy in schools that have not undergone a restructuring process. In addition, it could be suggested that the link between teacher collaboration and improved learning may not be quite so clear in schools in the developing world as it was in the restructured American schools studied.

Problems associated with teacher collaboration have also been documented. For example in Australia, Lingard *et al* (2001b) talk about how collaboration can be experienced as simple collegiality which does not necessarily lead to teacher learning or improvements in practice. They use the term "teacher professional communities" (p. 65) to differentiate between collegiality and collaborative groups where teachers do learn and where practice has the possibility of improving. Little and McLaughlin (1993) stress that school-wide professional communities are rare, and that where they do exist they are often of weak intensity. Research done by Talbert (1993) indicates that as teacher communities are usually dominated by a subject culture, they do not often involve many of the teachers in a school.

In the work of each theorist reviewed above, certain assumptions are made about what teacher collaboration is and its potential impact on practice; but they

do all agree that if teachers take part in substantive conversations about their practice, then they have established an important pre-condition under which their teaching practice has the potential of improving. The rest of this section deals with the literature on two mechanisms that could enhance the potential of teacher collaboration to support improvements in classroom practices, namely leadership and reflection.

Supporting teacher collaboration through leadership

Ball and Cohen (1999) argue that establishing and maintaining teacher collaboration requires a professional knowledge and culture revolution in schools, and that as such, it cannot be spontaneous, but must be co-ordinated and led. In a broad sense, educational leadership is about influence - who exerts it, its character, its purposes and its outcomes - and it can be characterised by different styles or types. For example, Hall and Hord (1987) defined three styles of leadership among principals: responder, manager, and initiator. Blase and Anderson's (1995) empirical research identified three similar kinds of leadership styles; normative-instrumental, facilitative, and empowering. The typology developed by Leithwood *et al* (1999) focuses attention on more comprehensive styles of formal leadership, for example: instructional leader, transformational leader, moral leader, participative leader, managerial leader, and contingent leader. While these typologies are thought provoking and set the scene for understanding what constitutes school leadership, they do not really explain the emergence of leadership in the President's Schools. In this project, curriculum leadership was seen to emerge out of the collaborative actions of teachers rather than from within the formal management structures of the schools. This kind of leadership was quite different to the kind of leadership described in the typologies above in that it was located informally with individual teachers who performed specific leadership actions aimed at helping their peers with curriculum dilemmas. Because of this, it is rather the conceptual differences that Christie (2001) argues exist between leadership, management and headship

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that help to clarify concepts and theories of leadership that are particularly useful to this thesis. Essentially, Christie argues that, in the context of schooling, headship is a structural position that includes responsibility and formal accountability; and similarly that management "relates to structures and processes by which organisations meet their goals and central purposes, and arguably, is more likely to be tied to formal positions than to persons" (p. 238). She argues that leadership, on the other hand, can be found and built both inside and outside of these formal school structures.

The concept of the teacher as leader is not a new one. In the mid-1980s, along with a wave of restructuring as educational reform, there was a call for changes in the ways teachers were involved in the decision-making practices of schools. Devaney's (1987) work describes several areas in which teachers might reasonably demonstrate leadership at the school level. She usefully notes that teacher leaders need to maintain legitimacy with their peers, and to do this they should continue to teach and to improve their own teaching. In her understanding of teacher leaders, they should also organise and lead well-informed peer reviews of practice and organise and lead in-service education. In effect, the teacher leader advises and assists other teachers with their practice. In a three-year study of teachers who played a leadership role at their schools, Lieberman *et al* (1988) develop criteria that were used in their selection; ultimately they were looking for the skills that would be teachable to the new teacher leaders of the future. They found that teacher leaders had a broad range of skills, abilities and experiences. For example: many were involved in curriculum development activities; they had pursued varied professional development activities; and they had administrative, organisational and inter-personal skills. In turn, Ball and Cohen (1999) characterise a teacher leader as a person who plans and develops opportunities for teacher learning. In order to do this, the teacher leader has to understand the content and the terrain, be a skilled observer with a repertoire of practices in his/her stance of understanding the teacher as learner. Trust of the other teachers in the community was also seen as a key factor. Advocates of participatory decision-making for teachers

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assume that this has a direct correlation to improved practice in schools. However, research into the relationship between participatory decision-making and change in classroom practices has not successfully shown that this relationship does indeed lead to improvements in practice (see Fullan and Stiegelbauer, 1991; Smylie 1994); it has also not explained why some teachers emerge as leaders in some schools while others do not.

Many leadership theorists identify the creation of a supportive environment by the leader as an important condition under which improvements can be made in an organisation. This condition is irrespective of whether the leader is in a formal position in the school or not. These conclusions are apparent in the field of leadership through business and organisational development as well as in the field of leadership in schools. For example, Covey (1991) writes about successful leadership as including the fostering of mutual respect in businesses. And in connection with school leadership, Firestone (1996) talks of the importance of "providing encouragement and recognition" (p. 408) as a function of leadership for change. Deal and Peterson (1994) argue that as school leaders, principals should posses among other things, symbolic traits that resolve dilemmas through the "sensitive, expressive touch of an artistic and compassionate leader" (p. 113). And Lambert (1995) theorises about reciprocal processes where leaders create relationships that "evoke potential in a trusting environment" (p. 36). Later chapters will question the extent to which the supportive environment that characterised teacher collaboration in the project was able to enhance teacher learning.

In some leadership studies (see Bennis and Nanus, 1985; Beckard and Pritchard, 1992) teacher leaders have been considered as visionary saviours. This automatically positions other teachers as having little power and lacking "personal vision and [the] inability to master the forces of change, deficits which can be remedied only by a few great leaders" (Senge, 1990, p. 340). But as later chapters will show, it was not only the teacher leaders who were empowered to make curriculum decisions, but many other teachers as well; thus

this literature was misleading in some respects, and unhelpful in others. This unease found resonance in Christie's (2001) work when she said that, "consideration of individual leadership is necessary, but it is not sufficient in explaining the social relations of leadership" (p. 240). Several sections in Chapters Five and Six focus on what the teacher leaders did in what this thesis calls their 'participatory communities' to improve teaching in their schools. As such, this thesis locates teacher leadership in an "emerging action-based theory of leadership" (Fullan, 1996, p. 720), with the key question being, What acts of curriculum leadership undertaken by teachers had the potential of enhancing practice in classrooms? rather than, What leadership attributes did the individual teacher leaders demonstrate? Lambert (1995) also talks of acts of leadership, which she defines as:

> …the performance of actions...that enable participants in a community to evoke potential within a trusting environment, to reconstruct or break set with old assumptions, to focus on the construction of meaning, or to frame actions based on new behaviours and purposeful intention (p. 47).

Framing teacher leadership in terms of action shifts the analysis from merely considering the leadership characteristics of individuals to including an understanding of the potential impact that leadership acts can have on teaching practice. Concentrating on the actions of the teacher leaders rather than on their personal attributes presents leadership as a possible set of actions that anyone in the community could perform. Thus, this thesis is positioned ambivalently in relation to "the tendency to equate educational leadership with individuals" (Hayes *et al*, 2001, p. 219).

Supporting teacher collaboration through reflection

In this section the literature on how reflective practices can provide an additional support mechanism for teacher collaboration is reviewed. Research on teacher reflection is rooted in Donald Schon's (1983; 1987; 1995) work, which was later extended by Zeichner (cited in Zeichner and Liston, 1996). Central to Schon's

work are the concepts of tacit knowledge, knowing-in-action, and reflection-in-action. He argues that knowing-in-action is the knowledge of practice developed by experienced, skilled professionals, that such knowledge is generally tacit, and that teachers are "unable to make it verbally explicit" (1987, p. 25). His concept of reflection-in-action goes one step further, in which he maintains that through observations and reflection, one can make this knowledge explicit and use it for thinking in the immediacy of practice. Schon ultimately defines a reflective practitioner as one who can think while acting, and thus is able to respond to the uncertainty, conflicts and uniqueness involved in situations in which professionals practice.

Zeichner and Liston (1996) extended Schon's concept of reflection-in-action and argue that it contains three varying levels, beginning with a technical way of thinking about practice, moving to reflections on the choices teachers make in their practice, and culminating in the kinds of reflections that are guided by concerns for justice and equity. These reflective skills are developed through practitioners thinking critically together about the contexts in which they work, and how they affect the people who function within them. Zeichner and Liston (*ibid*) list five key attributes of reflective teachers. In their words, a teacher who is reflective is one who:

> …examines, frames, and attempts to solve the dilemmas of classroom practice; is aware of and questions the assumptions and values he or she brings to teaching; is attentive to the institutional and cultural contexts in which he or she teaches; takes part in curriculum development and is involved in school change efforts; takes responsibility for his or her own professional development (p. 6).

The concept of a "narrative of inquiry" (Ball and Cohen, 1999, p.17) is developed as a related form of teacher reflection, which concludes that teachers must be assisted to develop analytical tools in order to be able to reflect on their practice in a meaningful and learning manner. Once teachers have acquired these analytical tools, they can then develop possibilities and methods of reasoning, alternatives and conjectures in their collaborative communities. They argue that

this type of reflection acknowledges the limits of "knowledge-*in*-practice" (Cochran-Smith and Lytle, 1999, p. 262) and improves teachers' capacities to manage and learn from their experiences in a thoughtful and analytical way.

Using the notion of inquiry as stance, Cochran-Smith and Lytle (*ibid*) discuss the salient analytical and reflective dimensions that teacher-inquiring communities need to have in order to stimulate teacher learning and improvements in classroom practice. They suggest that teachers need to use particular ways of describing, discussing and debating practice to lead to the joint construction of knowledge through conversation. This type of activity in an intellectual community can make tacit knowledge visible. Zumwalt (1986) argues that if teaching is defined as an intellectual activity, then teachers need to learn how to reflect and make wise decisions about practice. They need to regard teaching as an activity that is complicated and uncertain, and not as an activity that can be confined to applying techniques. Teachers need to redefine their own relation to knowledge about teaching and learning, and they can only do this through reflecting on their practices together.

Wilson and Berne (1999) establish a framework wherein teacher reflection can take place within a community. They suggest that for reflection to succeed, teachers need to be provided with three different opportunities to develop a community of practice. First, teachers need the opportunity to talk about subject matter. Second, teachers need the opportunity to talk about students and learning. As the community grows, teachers develop a shared knowledge that transcends and shapes the knowledge of individual participants. Third, they need opportunities to talk about teaching. These kinds of conversations become more substantive and focused over time.

The issues raised by the theorists reviewed above reveal several assumptions that are made about teachers and schools. First, they assume that if teacher collaborative communities are characterised by some form of reflective stance, then they have the possibility of leading towards improvements in classroom

practice. Second, they assume that teachers can identify the dilemmas of their practice and can then articulate these substantive issues. Third, they assume that if teachers are supplied with analytical tools for reflection, then they can have substantive conversations about these issues, learn from them together, and then improve practice. However, serious issues need to be raised about the possible nature of reflection in rural schools in South Africa, how this mechanism could be sustained over time, and the extent to which it could help or hinder improvements in teaching and learning. Later Chapters will scrutinise the assumptions more closely in the context of six rural schools in South Africa.

CONCLUSION

This chapter began by probing the uneasy alliance that exists between learner-centred pedagogy and constructivism; the theoretical constructs that underpinned OBE. This was done to highlight potential difficulties the teachers in the project may have experienced both in understanding these theories and then in using them to inform their practices. These arguments are used to frame Chapter Six that analyses teachers' understanding of active learning in relation to the activities that they developed for their lessons.

The potential problems that both teachers and teacher educators may experience in being able to equitably address complex sets of educational processes in their practices were also reviewed in this chapter. In terms of teachers, these challenges are located around the extent to which teachers are able to make shifts in the interpersonal relations in their classroom, while at the same time not neglecting to make the more complex shifts required in terms of curriculum and pedagogy. Similarly, the challenges raised for teacher educators are around the extent to which they are able to address issues relating to the content knowledge and pedagogical knowledge of in-service teachers, while at the same time giving due attention to the personal practical knowledge that experienced teachers have accumulated over years in the classroom. These

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issues are also probed in Chapter Six where the project teachers' knowledge is made explicit in relation to their content knowledge, pedagogical knowledge and personal practical knowledge.

The chapter ended by probing debates around where in-service teacher development should be located in order for it to positively impact on teaching practice. The conclusion was drawn that for development initiatives to be successful, they should be located close to the teachers' authentic contexts and that they should assist in developing school-based teacher learning communities. It was also argued that for these collaborative structures to enhance teacher learning they need to be supported in schools, and that this support could take the form of leadership and reflection. As will be shown later in this thesis, the issue of teacher learning communities, termed participatory communities, emerged as a central theme in this research. This theme is explored through drawing on the literature reviewed here and reveals the nature of the participatory communities, the kinds of support mechanisms they depended on during the project, and the extent to which they did enhance teacher learning and teaching practice.

The next chapter moves to a discussion of the research methods and procedures used in this thesis.

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