
A conceptual framework for analysing the selection and organisation of content in teacher education materials

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Abstract

Bezemer and Kress argue that all texts are ‘potentials of a quite specific kind’ which in their specificity constrain the ways in which they can be read (2008, p.4). In distance education materials, the designers’¹ selection and organisation of content on the page or screen contributes to the ways in which their materials can be read. In this article I describe the process of conceptualising a two-part framework for analysing the selection and organisation of content in teacher education materials. I then use the framework to analyse the designers’ content and organisational choices for the topic ‘Reading’ in three sets of South African teacher education materials. I argue that comparing and contrasting these design choices contributes to understanding the subject positions offered to readers as students and as teachers.

Introduction

Morrow (2007a) argues that teacher education in South Africa must be concerned both with formal access to institutions of learning (i.e. access to programmes of study) and with access to specialised epistemology. For more than half the students enrolled in pre-service and in-service teacher education programmes in South Africa, formal access is through distance education programmes (Glennie, 2003). While teacher educators working in campus-based programmes can adapt their teaching to respond to evidence in the lecture or tutorial room of their failure to construct appropriate ‘learning pathways’ (Moll, 2003), designers of distance learning materials face the challenge of mediating content in ways that anticipate what pre-service or in-service teachers may experience as, for example, ‘relevant’, ‘interesting’ or ‘difficult’ when they engage with course materials.

¹ The term designers includes authors, illustrators, editors and any other professionals involved in the conceptualisation and production of texts.

The designers' selection and organisation of content on the page or screen contributes to the education discourse of the materials. Ivanic (1997) describes discourse as 'the mediating mechanism in the social construction of identity':

discourse, as an abstract noun with no plural, means something like 'producing and receiving culturally recognised, ideologically shaped representations of reality'. The term refers more to the **process** of representing reality than to the product, but encompasses both.

. . . The term can also be used as a count noun *a discourse*: this means something like 'a culturally recognized way of representing a particular aspect of reality from a particular ideological perspective.'

(Ivanic, 1997, p.17, italics, bold type and quotation marks in the original)

In distance education materials discourse as process, product or both offers readers particular identity positions. Such identity positioning may influence pre-service or in-service teachers' 'investment' in a programme of study (Norton, 2000; Toohey, Day and Manyak, 2007), with the positions offered being accepted fully or ambivalently, contested or rejected.² Work in progress towards understanding the identity positions offered in three sets of South African teacher education materials has included reviewing local and international teacher education literature on the selection and organisation of knowledge for teacher education programmes.³

In this article I describe how I have used the work of Banks, Leach and Moon (1999), Cochran-Smith and Lytle (1999), Adler, Slonimsky and Reed (2002), Darling-Hammond (2006) and Morrow (2007) to conceptualise a two-part framework for analysing both knowledge selections and the organisation of knowledge in teacher education materials. I then demonstrate how I have begun to use the framework to analyse the designers' selection and organisation of content on the topic of 'Reading' in three sets of South African materials and reflect briefly on the framework's possible value to designers and evaluators of teacher education materials.

²

Norton (2000) derives the concept of 'investment' from Bourdieu's work on cultural capital and uses it to argue that learners (of English as an additional language in the context in which she is writing) 'expect or hope to have a good return on that investment – a return that will give them access to hitherto unattainable resources' (p.10).

³

Other aspects of the study consider how a range of mediation strategies (e.g. in-text activities, scaffolded readings, visual design and language choices) offer particular positions to readers as students and as teachers

The material on ‘Reading’ is taken from:

- *Learners and Learning* (2001), a module in the South African Institute of Distance Education’s (SAIDE) Study of Education series, designed for use in both pre-service and in-service teacher education programmes, for which the materials consist of a learning guide, a reader and an audiotape
- *Language in Learning and Teaching (LILT)* (2000), a module in the University of Natal’s BEd. programme (subsequently a module in the University of KwaZulu-Natal’s BEd. Honours programme), designed for in-service teachers with a four-year qualification, for which the materials consist of a two-part course book – a learning guide, followed by a collection of readings
- *Language. Literacy and Communication Umthamo 2* (1999), a module in the University of Fort Hare’s in-service BEd. degree offered to ‘underqualified’ primary school teachers in the Eastern Cape⁴

The framework has been conceptualised in terms of elements of a knowledge base for teacher education and in terms of the orientations to knowledge that are suggested by the organisational design of course materials.

⁴ It is important to note that each set of materials has been recognised as an example of ‘best practice’ within the local and international distance education community. For example, materials from the University of Natal’s BEd. programme in which the module *Language in Learning and Teaching* is located, were highly commended in the inaugural National Association of Distance Education Organisations of South Africa (NADEOSA) awards for excellence in distance education in 2000. The six *Language, Literacy and Communication* imithamo are an important part of the BEd. materials for which the University of Fort Hare won the NADEOSA award for excellence in 2005. The materials designed by SAIDE, of which the module *Learners and Learning* is one example, have received both local and international acclaim. In 2002, Alan Tait from the UK Open University commended SAIDE for its ‘fearless work’ which has ‘lit a torch for educational opportunity for all, in conjunction with the most effective of contemporary approaches to distance education’ and for work which has ‘not only been notable within South or even Southern Africa, but has a reputation world-wide for the impact it has made’ (quoted in SAIDE, 2002, p.4).

Conceptualising a knowledge base for teacher education

It could be argued that the category ‘teachers’ knowledge’ emerged only in the early 1980s and it is evident that both what counts as professional knowledge and how to conceptualise such knowledge is the subject of ongoing debate. (See, for example, Munby, Russell and Martin, 2001). Since its publication in 1987, Shulman’s categorisation of a knowledge base for teaching and, in particular, his work on pedagogic content knowledge, has been widely used to inform the design of teacher education curricula. However, some teacher educators have expressed concern about the ‘static’ nature of this conceptualisation (e.g. Banks, Leach and Moon, 1999; Tinning, 2007) and about the perpetuation of a divide between ‘formal’ and ‘practical’ knowledge through the very attempt to provide a bridge between the two (Cochran-Smith and Lytle, 1999).

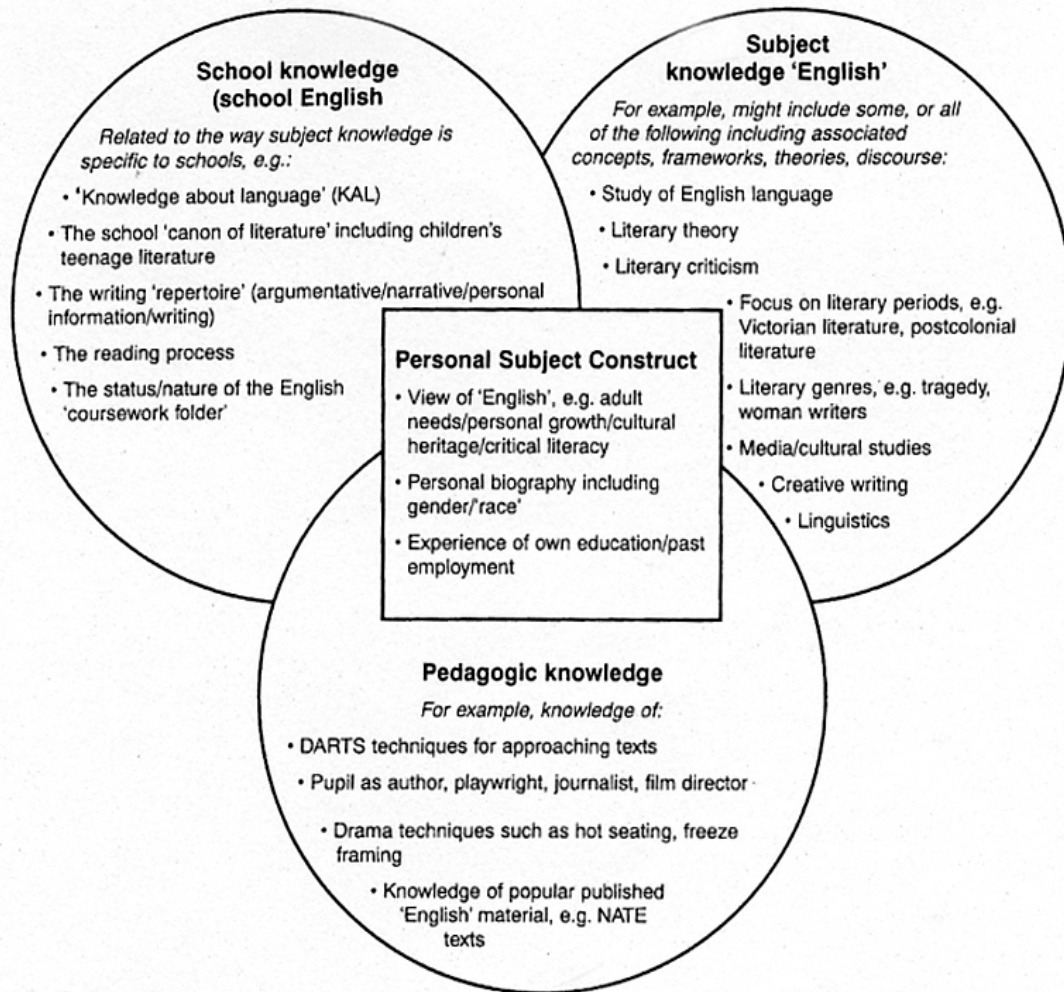
Banks, Leach and Moon (1999) draw on a wide range of theorists and on their own research in classrooms in the United Kingdom to develop a model of a knowledge base for teachers in which subject or disciplinary knowledge, pedagogic knowledge and school knowledge (which includes curriculum knowledge) are dynamically interrelated, with teachers’ personal constructs of a school subject at the heart of their professional knowledge-making. Pertinent to an analysis of materials designed for pre-service and in-service teacher education, is their view that the model is applicable both to student teachers working out a rationale for their classroom practice and to ‘expert’ teachers working in times of curriculum and social change (Banks, Leach and Moon, 1999). The diagram in Figure 1 presents subject, school and pedagogic knowledge as dynamically interrelated:

... a teacher’s subject knowledge is transformed by his or her own pedagogy in practice and by the resources which form part of his or her school knowledge

(Banks, Leach and Moon, 1999, p.95).

In the diagram, the examples of what could be included within each element were developed by a group of English teachers with whom the authors worked. Banks, Leach and Moon argue that not only is the development of a teacher’s professional knowledge a dynamic process, but that this knowledge is brought into existence by the learning context in which the teacher is situated. This argument suggests that each of the elements in the model could be positioned inside an outer ‘contexts circle’.

Figure 1: A model for conceptualising teachers' professional knowledge, with examples from a group of English teachers (Source: Banks, Leach and Moon, 1999, p.96)



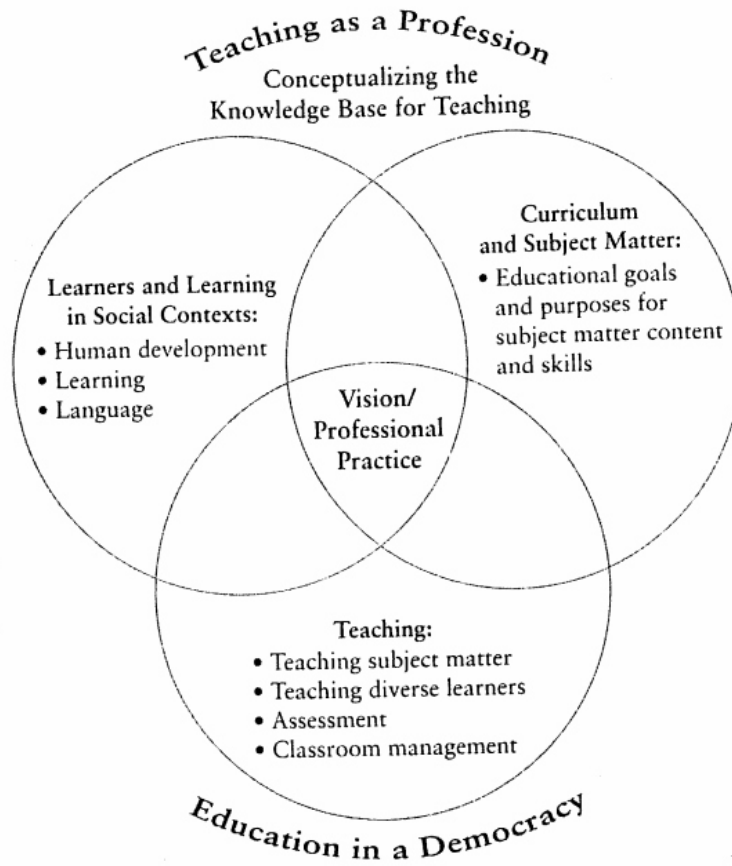
In reporting on an extensive study of 'successful teacher education programs' in the USA, Darling-Hammond (2006) states that '[H]ow these programs conceptualise the knowledge base for teacher education involves a set of ideas about *what* teachers need to learn – the content of preparation – and *how* they need to learn it – the processes that allow teachers to develop useful knowledge that can be enacted in ways that respond to the complexity of the classroom' (2006, p.80; italics in the original). In this study Darling-Hammond and Bransford identified eight elements characteristic of what they consider to be new conceptualisations of knowledge for teaching. These new conceptualisations:

- emphasise understanding learners and learning as central to making sound teaching decisions;
- understand that the subject matters and that subject-specific pedagogical knowledge is important;
- unite the study of subject matter and children in the analysis and design of curriculum;
- see learners, subject matter and curriculum as existing in a socio-cultural context;
- seek to develop a repertoire of teaching strategies and an understanding of their purposes and potential uses for diverse goals and contexts; place extraordinary emphasis on the processes of assessment and feedback as essential to both student and teacher learning;
- seek to develop teachers' abilities as reflective decision makers;
- see teaching as a collaborative activity conducted within a professional community that feeds on-going teacher learning (2006, p.81–82).

Like Banks, Leach and Moon, Darling-Hammond and Bransford use overlapping circles to represent diagrammatically the interrelated elements of a knowledge base for teaching.

Figure 2: Conceptualising the knowledge base for teaching (Darling-Hammond, 2006)

Figure 4.1. Conceptualizing the Knowledge Base for Teaching



Source: Darling-Hammond and Bransford, 2005, p. 11.

With reference to knowledges for teacher education programmes in South Africa, Adler, Slonimsky and Reed have argued that one of the challenges for teacher educators is to ‘characterise and articulate “subject knowledge for teaching” and to clarify how its acquisition by teachers lies in the co-ordination of subject, pedagogic and contextual knowledge – or what can be renamed teachers’ conceptual knowledge-in-practice’ (2002, p.151). In similar vein, Morrow (2007b) lists four fundamental categories of competence which teacher educators in South Africa need to take into account:

- a strong and properly-grounded conception of teaching and an effective grasp of the definitive ideals of the professional practice of organising systematic learning. . .
- the kind of second-order knowledge of content needed in order for it to be possible to teach it. . .
- knowledge of the social, organisational and institutional contexts, and other conditions of the practice of teaching. . .
- competence in organizing systematic learning. . .

(Morrow, 2007b, pp.84–85)

Elements of a framework for analysing knowledge selections in teacher education materials

Though there are some variations in terminology and in examples, the following elements appear to be common to the conceptualisations of knowledge for teacher education programmes put forward by Banks, Leach and Moon (1999), Adler, Slonimsky and Reed (2002), Darling-Hammond (2006) and Morrow (2007b):

- substantive knowledge of the subject or discipline to be taught;
- pedagogic content knowledge (for Banks, Moon and Leach this includes aspects of what they term ‘school knowledge’ as well as ‘pedagogic knowledge’ and for Morrow it includes both second order knowledge of content and competence in organising systematic learning);
- knowledge of how learners learn;
- knowledge of the curriculum;
- contextual knowledge

At the heart of the models proposed by Darling-Hammond and Bransford and Banks *et al.* is an ‘element’ which suggests that teachers’ histories and identities are central to the choices they make in regard to subject content and to pedagogy. In the framework below I have included the element ‘knowledge of self as learner and teacher’.

While none of the authors referred to above include the development of pre-service or in-service teachers’ own academic literacy in their

conceptualisations of a knowledge base for teacher education, some distance learning materials for South Africa's teachers include content and activities which are designed to support their academic reading and writing development. Many of the teachers registered for pre-service and in-service programmes are English additional language speakers whose schooling may have under prepared them for the demands of tertiary study. For this reason I have included 'academic literacy' in the knowledge base.

Thus the framework proposed for analysing content selections consists of the seven elements listed below. Next to each one is an example of content on the topic of 'Reading' which serves to illustrate how I understand the element:

- subject/disciplinary knowledge – material that relates to theories about reading⁵
- pedagogic knowledge – material that relates to methods of teaching reading
- knowledge of how learners learn – material related to what is involved in learning to read, both cognitive processes and sociocultural processes
- knowledge of the curriculum – material that focuses on current curriculum statements about reading and their 'translation' into classroom practice
- contextual knowledge – material that locates reading and the teaching of reading in sociocultural context
- knowledge of self as learner and teacher – at a metacognitive level this includes material that promotes reflection on past and present learning and teaching practices but also on other factors contributing to identity formation, including identity as a reader
- academic literacy – material that aims to extend teachers' academic reading and writing competencies.

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What is included in the subject knowledge category will vary according to the 'information focus' of teacher education materials. The examples given by the teachers in Banks *et al.*'s (1999) study indicate what these teachers considered to be the subject or disciplinary knowledge needed by teachers of English in the United Kingdom.

In Table 1 each of the seven elements is listed in the left-hand column. The columns to the right of each element offer a schematic tabulation of three design teams' use of this element in teacher education materials on the broad topic of 'Reading'. As one of the reviewers of this article points out, the elements are not always entirely distinct – conceptually or in their instantiation on the page. For example, the teachers in Banks, Leach and Moon's (1999) study place 'The reading process' within their category of 'school knowledge' but it could also be located within 'pedagogic knowledge' if the focus in the materials is on strategies for supporting learners' development as readers, or in 'subject knowledge' if the focus is on theories about reading. In the unit on Reading in *Language in Learning and Teaching (LILT)*, the article 'Understanding the reading process' includes content on both theories about reading and on learners and the ways in which they learn (or fail to learn) and so I have placed it within both elements in the framework presented in Table 1.

Table 1: Content selected for materials with a focus on Reading by the designers of three sets of South African teacher education materials

Elements of a knowledge base for teaching	<i>Learners and Learning, Learning Guide Section 4 pages 113–148; Reader Section 4 pages 131–166</i>	<i>Language in Learning and Teaching (LILT) Learning Guide Unit 2 pages 57–82 Reader Chapter 4 pages 155–168</i>	<i>Language, Literacy and Communication, Umthamo 2 pages 1–48</i>
Subject/disciplinary knowledge	LG: learning to read: pp.114–115; LG: What kinds of reading support school learning? pp.128–132; Different levels of reading: pp.134–135 Reader: The act of study: pp.133–136; The magic of reading: pp.137–144; Guided adventures in learning: pp.145–153	LG: importance of reading/learning to read/reading theory: p.57, 59, 61–62; different genres for different purposes: pp.76–79; Reader: Understanding the reading process: pp.155–168	Whole language: the easy way to language development: pp.38–42
Pedagogic knowledge	Developing active and independent readers: pp.132–134; Reader: Developing communities of reading and learning:	LG: textbook survey: p.58; teaching reading in grade 1: p.65; making reading a focus of content lessons: p.71; designing and using a	classroom management and timetabling: pp.2 and 4–9; collecting iintsomi: pp.16–24; using iinstomi in the classroom: pp.25–36;

	pp.154–166.	reading questionnaire: p.73–75; strategies for teaching/encouraging reading across the curriculum: pp.80–82	Appendix: Making a Big Book: pp.43–48:
Knowledge of how learners learn	LG: Title of module; LG: What happens when we read a book? pp.116–119; Why is reading so difficult? pp.119–123 What makes reading a meaningful experience? pp.124–126	LG: Introduction of metacognition: p.59 Reader: Understanding the reading process pp.155–168	benefits for learners of an integrated curriculum: pp.10–13
Knowledge of the curriculum	LG: Languages Learning Area: p.137; OBE: pp.144–145		OBE: p.2; Languages Learning Area: p.23
Contextual knowledge	LG: EAL readers: p.117; EAL readers' homes: p.126; literacy in Africa: p.127	LG: Refs to EAL readers: pp.60, 64, 66–67; reading contexts in SA: p.68; resource constraints in schools: p.82	oral literature: p.2; collecting an intsoni: pp.16–18 and p.25; an intsoni presented in both isiXhosa and English: pp.19–21; giving status to all languages of the province: p.23
Knowledge of self as learner and teacher	LG: responses to 'half-truths' about reading: p.113; views on differences between spoken and written language: p.115; reflections on own experiences of learning to read/being a reader: p.121 and 125; own views on teaching reading: p.122, 126 and 143. Reader: p.144 and p.150: personal response to ideas in readings	LG: Reflecting on self as young reader and as reader of academic texts: pp.59, 60, 63, 64; reflecting on teaching: p.68; reflecting on views on reading: p.72 Reader: reflecting on self as adult reader: p.155	Reflections on work experiences; position on school timetables: p.4, p.6, p.8, p.12; reflections on experiencing 'whole language': pp.15–16; reflections on story-collecting experiences: p.24, p.26; reflection on using the stories in the classroom: p.28/31 and p.33/35
Academic literacy	LG: note-making: p.115 and 125; turning notes into academic discourse: p.125; understanding text structures: pp.139–14:	LG: surveying study material: p.58; previewing a text: p.59; making notes and scanning a text for specific information: p.68	No references to this in this module

While acknowledging that such a summary cannot adequately represent the content selections made by the designers and noting that it is not always easy to categorise knowledge elements, the table does provide an indication of how three design teams have conceptualised content on a broadly similar topic (in this instance 'reading'). For example, 34 of the 48 pages of *Language, Literacy and Communication Umthamo 2* focus on pedagogic knowledge. The pages describe in considerable detail how to collect isiXhosa moral tales (iintsomi) how to use these tales in classroom reading lessons and how to make reading materials (Big Books). The designers foreground classroom practice within a particular context: under-resourced primary schools in the Eastern Cape. By contrast, and unsurprisingly in view of the module's title, it is subject knowledge 'about' reading and knowledge of how learners learn that are privileged in both the study guide and reader designed for the module *Learners and Learning*. Analysis of the pages on Reading in the study guide and reader for *Language in Learning and Teaching (LILT)* indicates that the designers approach has been to attempt to 'balance' subject knowledge, knowledge of how learners learn and pedagogic knowledge.

Summarising the knowledge selections also enables analysis of similarities and differences of approach to a particular element of the knowledge base. For example, each of the design teams has included activities which require teachers to be reflective but the 'object' of these reflections differs. In *Language, Literacy and Communication Umthamo 2* this object is primarily the teachers' practices of collecting and using stories. In the other two sets of materials it is mainly reflections on one's own experiences as a reader and on the ideas about reading that have been introduced in the text. What I have categorised as 'contextual knowledge' is broadly similar in *Learners and Learning* and in *Language in Learning and Teaching (LILT)*. The designers give attention to the challenges of reading in an additional language (English) and in print-resource-poor homes and communities. By contrast, the designers of *Umthamo 2* foreground the use of isiXhosa and English in a reading programme and thus promote South Africa's official language-in-education policy of additive bi- and multi-lingualism.

Identifying and tabulating elements of a knowledge base also enables identification of 'silences' in course materials. For example, in these materials there is very little explicit reference to South African curriculum documents and in the case of the *Language, Literacy and Communication umthamo*, no reference to academic literacy.

Understanding orientations to ‘teacher knowledge’

Alongside the on-going debate about the ‘what’ of teacher education (Wilson and Berne, 1999) has been debate about “the sources of teacher knowledge and the kinds of cognitive processes associated with such knowledge” (Webb, 2007, p.280). For Webb, the essence of this debate is the extent to which teacher knowledge is more appropriately conceptualised as “codifiable and generalizable” or as “event-structured and personal” (2007, pp 280–281). If codifiable and generalisable, then it is assumed that teacher knowledge is propositional and theoretical – termed ‘epistemic knowledge’ by Loughran (2006) – and that it is learned through a combination of ‘knowledge transfer’ in the form of instruction, and ‘knowledge application’ in the form of the teaching practicum. If event-structured and personal, then teachers create knowledge in contexts of practice, in the process developing practical wisdom or phronesis (Loughran, 2006). Loughran argues that teacher educators need to bridge the gap between these two conceptualisations by drawing on both:

It is not that one is more important than another, both inform good teaching, but it is the manner in which each are called upon and used that dramatically influences the way that each are (sic) interpreted by students of teaching, and therefore ultimately accepted, rejected, understood and valued (2006, p.65).

A framework for understanding teacher learning proposed by Cochran-Smith and Lytle at the end of the 1990s addresses the ‘how’ of teacher education by conceptualising knowledge-practice relationships in terms of ‘knowledge-for-practice’, ‘knowledge-in-practice’ or ‘knowledge-of-practice’. I have slightly adapted this framework and used it to design a table which summarises how knowledge, teachers, teaching and educational change are imagined in different ways in each of the three conceptualisations.

Table 2: Knowledge-Practice relationships in three conceptions of teacher learning

Knowledge-Practice Relationship	Subject/‘book-based’ knowledge for practice	Practice-based knowledge in practice	Meta knowledge of subject and practice in relation to each other and to context
Images of Knowledge	Defined and distinctive ‘formal’ knowledge of ‘subjects’, educational theory and pedagogy – produced mainly by university-based academics	Knowledge base is Th what very competent teachers have come to know through their practice; knowledge acquired through reflections on experience – groups/dyads of more and less experienced teachers generate knowledge through working together in and on practice	Through enquiry teachers problematise ‘formal’ and ‘practical’ knowledges – knowers and knowledge located in socio-political contexts
Images of Teachers, Teaching and Professional Practice	Teaching involves applying ‘received knowledge’ in a practical situation – knowledge for use	Teachers generate knowledge through reflection on ‘wise practice’ – the classroom is a ‘knowledge landscape’	Teachers expected to be transformative Teaching as praxis
Images of Teacher Learning and Teachers’ Roles in Educational Change	Teachers come to know what is already known and use this knowledge to effect change	Teachers learn through reflecting on their own and other teachers’ practices in order to improve these practices	Teachers learn through participation in on-going action research communities
Current Initiatives in Teacher Education, Professional Development and/or Teacher Assessment	Programmes in which teachers learn and demonstrate knowledge for certification purposes	Pre-service teachers learn through ‘assisted performance’ with mentors; in-service teachers through professional development opportunities supported by external facilitators	School or district-based teacher enquiry communities, teacher conference presentations and publications

Cochran-Smith and Lytle argue that such a framework

. . . exposes a number of provocative issues about the whole topic of teacher learning and the role of communities. These issues are at once subtle, in that very different meanings are often embedded beneath the surface of similar language and structures, and also striking, in that the differences are enormously significant for how teachers understand and position themselves in various initiatives for school improvement as well as how universities and other educational institutions position teachers and teacher learning in relation to change (1999, p.295).

Some of these provocative issues are raised in the work of Canadian teacher educators Connelly and Clandinin who distinguish between ‘knowledge for teachers’ and ‘teacher knowledge’. They are critical of those who support a ‘knowledge for teachers’ approach to teacher education, arguing that this view constructs knowledge as a possession:

In this view knowledge needs continual updating and may lead to the stripping of knowledge, sometimes called deskilling (Apple, 1979), or to the continual accumulation of knowledge which is what the teacher-testing movement is after (2007, p.90).

They support an alternative conceptualisation which they term ‘teacher knowledge’: “teachers hold knowledge that comes from experience, is learned in context and expressed in practice” (2007, p.90).

In *Developing a Pedagogy of Teacher Education* Loughran argues that teacher education “is where all students of teaching should learn to challenge their deeply held views of teaching and learning; so often implicit in practice but so rarely articulated, confronted and examined” and that teacher educators should ‘model’ such processes (2006, p.42). In his view ‘modelling’ must go beyond the traditional notion of demonstration lessons “to focus attention on the dilemmas, puzzles, issues and concerns that comprise the problematic nature of teaching” (2006, p.42) so that students of teaching are encouraged “to learn about and better value the knowledge, skills and abilities that are inherent in good teaching” (2006, p.177).

For teacher educators, modelling a process of interrogating ‘deeply held views of teaching’ is already a considerable challenge in an on-campus programme but in a print-based distance learning programme it is a much more daunting task when ‘unpacking teaching’ must be done on the page or screen.

The constraints of an article do not permit a detailed analysis of the full range of organisational strategies used by the three design teams to ‘unpack’ reading and the teaching of reading in the pages of their materials. For example, I do

not address the role of visual design and layout, though I acknowledge their importance. Instead, I offer a brief summary of findings from an analysis of selections from each set of materials which was enabled by the framework developed from Cochran-Smith and Lytle's work on knowledge-practice relationships. I suggest that, as an analytic tool, this framework offers a way of understanding how the particular organisational strategies selected by designers contribute to constructions of teacher identities and teaching practices.

Learners and Learning

In the introduction, the designers explain in considerable detail how the module is organised and conclude with the summary of its organisation and content that is presented in Figure 3.

Figure 3: Summary of module content from *Learners and Learning* (Gultig, 2001, p.4)

4
ABOUT THIS MODULE

What will you learn in this module?

Not surprisingly, *Learners and Learning* aims to develop your understanding of learning. It seeks to assist you, as a teacher, to be able to analyse learning, and in so doing, to reflect on what you can do to improve it.

We have divided the module into six sections. This first section:

- introduces the module;
- discusses how we'd like you to study;
- explains how we understand learning;
- begins to explore, at a simple level, how learning is initiated.

Sections Two to Six each pose, and provide tools for answering, a critical question about learning:

Section	Critical question about learning explored	
Section Two	How do we, as teachers, enable learners to learn?	This section explains how learners move from the known to the unknown.
Section Three	How is school learning different from everyday learning?	We explore how teachers can implement good school learning in classrooms.
Section Four	What role do texts and literacy (reading and writing) play in learning?	We argue that reading and writing are crucial to good school learning.
Section Five	What role do teachers play in producing and improving learning?	In this section we consider this question in detail.
Section Six	How can teachers use different theories of learning to help them understand learning in their classrooms?	We examine a number of different cognitive theories and consider the relationship between theory and practice.

If you want to find out more about this module's key ideas or thought structure, turn to page 18 of Section 1.4 and read 'The module's key themes'. You could also read each section's 'Introduction'.

At the end of each section we consider how the ideas about learning discussed relate to the South African debate about outcomes-based education.

These designers constitute readers as students of teaching who will benefit from materials in which headings, sub-headings and introductions guide them through the texts in the learning guide, reader and audiotape. The content selections are carefully scaffolded within the overall frame of a series of contentious statements (referred to in the materials as 'half-truths') and organised so that readers re-visit and re-think what has been introduced in earlier sections. In terms of both content selections and organisation the design suggests a 'knowledge for practice' orientation to teacher education. Readers are provided with the knowledge of others as a stimulus for their own thinking and as a starting point for the construction of their own knowledge about learning and teaching – regardless of whether they are pre-service or in-service teachers.

Language, Literacy and Communication

One of the organisational strategies chosen by the designers of the materials for the BEd. degree programme in which the *Language, Literacy and Communication imithamo*⁶ are located, was to prepare 32 or 48 page ‘mouthfuls’ which are ‘fed’ to teachers at regular intervals rather than a conventional book length learning guide. A second strategy was to design materials to be used in conjunction with fortnightly or monthly contact workshops facilitated by *abakhwezeli*⁷ who keep these mouthfuls at just the right temperature. In each *umthamo* content is sequenced to provide support for a Key Activity which teachers are required to complete and bring to a workshop. The conclusion offers either a theoretical text as ‘confirmation’ of what teachers have been constituted to experience as valuable about the Key Activity and other activities and/or summarises what the designers consider to be key features of the content. In some *imithamo* the conclusion also challenges teachers to continue learning and to take responsibility for providing quality learning experiences in their classrooms.

In both the content selections and the organisational strategies there is evidence of elements of Cochran-Smith and Lytle’s ‘knowledge-for-practice’ and ‘knowledge-in-practice’ and, to some extent, even ‘knowledge-of-practice’. Teacher-learners are directed by the designers to apply theoretically-informed pedagogies in their classrooms (knowledge-for-practice) but at the same time they are encouraged to reflect on their experiences of using ‘new’ pedagogies, to conduct research and to generate their own theory (knowledge-in-practice). They are also encouraged to be ‘agents of change’ in their schools (e.g. University of Fort Hare, LLC Umthamo 5, 2000, p.36) and to problematise theoretical and practical knowledge when they discuss the Key Activities with fellow teacher-learners at the contact sessions (knowledge-of-practice).

⁶ In isiXhosa umthamo (plural imithamo) means ‘a bite-sized chunk’.

⁷ In isiXhosa umkhwezeli (plural abakhwezeli) means ‘someone whose job is to keep the fire burning just right so that the food in the pot cooks well’

Language in Learning and Teaching (LILT)

The *LILT* materials are the most hybrid in terms of content selection and organisational design. The learning outcomes which frame the module are oriented towards teacher-learners' professional development as teachers and academic development as students. With reference to the former, the designers constitute them as interested in "enhancing" their practice as a result of their "thorough understanding" of the content of the module (Inglis, Thomson and Macdonald, 2000, p.4). With reference to the latter, they are constituted as learners with an interest in 'deepening' their understanding of theoretical concepts and findings from empirical research and as able to 'articulate' this understanding both orally and in writing (Inglis *et al.*, 2000, pp.3–4).

The general introduction includes a section with the sub-heading 'The structure of this module' in which the designers explain one of the limitations of print-based distance learning materials:

One of the problems which we face when writing a Learning Guide like this is that we have to turn information-gathering and knowledge construction into something that appears to be quite linear, when in real life it is not. We have presented this module in defined pieces that follow one after the other, but in reality you can't separate everything as we have done here. However, by referring you to chapters in the Reader, and by anticipating theories that we will cover in later units, and by reminding you of aspects already covered in earlier units, we attempt to show you a less linear process. It is therefore very important that you, as the learner, are active in integrating the parts into a meaningful whole. (Inglis *et al.*, 2000, p.4)

By problematising the organisational design the design team challenges teachers to make personal the knowledge that is offered. I think it can be argued that although a 'knowledge for practice' orientation is dominant in materials designed for students who are studying for a qualification, the designers of the *LILT* material also recognise that experienced teachers bring a range of knowledges to their studies and have the capacity both to problematise knowledge and to work transformatively in their classrooms (knowledge in and of practice).

Conclusion

I have suggested in this article that a review of selected international and local teacher education literature has enabled the conceptualisation of a two-part framework which, despite its limitations (principally in the 'fuzziness' of some elements in the knowledge base), I have found useful for identifying

similarities and differences in the selection and organisation of content and for identifying orientations to ‘teacher knowledge’ in three sets of South African teacher education materials. I am not arguing that any one of these sets of materials is ‘better’ than another, especially as they were designed for different readerships, but I do argue that the selection and organisation of content in each set offers different positions to readers as students and as teachers – positions that may affect their investment in their studies and in particular teaching practices. While it is obviously true that positions accepted or rejected by readers (as students or teachers or both) can only be investigated in situations of use, I find persuasive the argument of Bezemer and Kress (2008) that all texts are ‘potentials of a quite specific kind’ which in their specificity constrain the ways in which they can be read. My main aim in this article has been to offer a framework as a starting point for identifying the potentials which the selection and organisation of content in specific ways offer to readers of particular teacher education texts.

References

- Adler, J., Slonimsky, L. and Reed, Y. 2002. ‘Subject-focused INSET and teachers’ conceptual knowledge-in-practice’. In Adler, J. and Reed, Y. (Eds), *Challenges of teacher development: an investigation of take-up in South Africa*, pp.135–152. Pretoria: Van Schaik.
- Banks, F., Leach, J. and Moon, B. 1999. ‘New understandings of teachers’ pedagogic knowledge’. In Leach, J. and Moon, B. (Eds), *Learners and pedagogy*, pp.89–110. London: Paul Chapman and The Open University.
- Bezemer, J. and Kress, G. 2008. ‘Gains and losses: a historical study of textbook design for secondary education’. Paper presented at AREA, New York. March 2008.
- Cochran-Smith, M. and Lytle, S.L. 1999. ‘Relationships of knowledge and practice: teacher learning in communities’. In Iran-Nejad, A. and David Pearson, P. (Eds), *Review of research in education*, 24. Washington: American Educational Research Association.

Connelly, F.M. and Clandinin, D.J. 2007. 'Teacher education – a question of teacher knowledge'. In Freeman-Moir, J. and Scott, A. (Eds), *Shaping the future: critical essays on teacher education*, pp.89–106. Rotterdam: Sense Publishers.

Darling-Hammond, L. 2006. 'Conceptualizing the knowledge base for teaching'. In Darling-Hammond, L. 2006. *Powerful teacher education – lessons from exemplary programmes*, pp.77–112. San Francisco: Jossey-Bass.

Glennie, J. 2003. 'Working together to maximize the role of distance education in higher education in South Africa – a report back on the research done for the Council of Higher Education'. Keynote address, NADEOSA Conference, Johannesburg, 27 August 2003.

Gultig, J. (Ed.) 2001. *Learners and learning*. Cape Town: Oxford University Press.

Inglis, M., Thomson, C. and Macdonald, A. 2000. *Language in learning and teaching (LILT)*. Pietermaritzburg: University of Natal Press.

Ivanic, R. 1997. *Writing and identity: the discursive construction of identity in academic writing*. Amsterdam: John Benjamins.

Loughran, J. 2006. *Developing a pedagogy of teacher education*. London and New York: Routledge.

Moll, I. 2003. *What is a learning-centred learning centre?* Johannesburg: SAIDE.

Morrow, W. 2007a. 'What is teachers' work?' *Journal of Education*, 41: pp.3–20.

Morrow, W. 2007b. 'What is Teacher Education?' In Morrow, W. *Learning to teach in South Africa*. Cape Town: HSRC Press. pp.69–90.

Munby, H., Russell, T. and Martin, A.K. 2001. 'Teachers' knowledge and how it develops'. In Richardson, V. (Ed.), *Handbook of research on teaching. Fourth Edition*. Washington, D.C.: American Educational Research Association.

Norton, B. 2000. *Identity and language learning: gender, ethnicity and educational change*. London: Longman.

SAIDE. 2002. '10 years on, 1992–2002'. *Open Learning in Distance Education, Special Issue*, July 2002.

Shulman, L. 1987. 'Knowledge and teaching: foundations of the new reform', *Harvard Educational Review*, 57(1): pp.1–22.

Tinning, R. 2007. 'Engaging pedagogies for teacher education: considering a modest critical pedagogy for preparing tomorrow's teachers'. In Freeman-Moir, J. and Scott, A. (Eds), *Shaping the future: critical essays on teacher education*. Rotterdam: Sense Publishers.

Toohy, K., Day, E. and Manyak, P. 2007. 'ESL Learners in the early school years: identity and mediated classroom practices'. In Cummins, J. and Davison, C. (Eds), *International handbook of language teaching*. New York: Springer, pp.625–638.

University of Fort Hare. 1999. *Language, literacy and communication, Umthamo 2*.

University of Fort Hare, 2000. *Language, literacy and communication, Umthamo 5*.

Webb, P.T. 2007. 'Accounting for teacher knowledge: reterritorializations as epistemic suicide', *Discourse: studies in the cultural politics of education*, 28(2): pp.279–295.

Wilson, S. and Berne, J. 1999. 'Teacher learning and the acquisition of professional knowledge: an examination of contemporary professional development'. In Iran-Nejad, A. and David Pearson, P. (Eds), *Review of research in education. No.24*. Washington: American Educational Research Association.

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