

Critical pedagogic analysis: An alternative to user feedback for (re)designing distance learning materials for language teachers?

YVONNE REED

School of Education, University of the Witwatersrand

ABSTRACT: Internationally, guidelines for distance education advise the use of feedback from students in designing and redesigning materials. As my own attempt to elicit such feedback was an instructive failure, I decided to draw on theorisations of pedagogy, mediation and subjectivity and on international and local (South African) conceptualisations of a knowledge base for teacher education, together with Halliday's work in systemic functional linguistics and Kress and van Leeuwen's work in social semiotics, to devise a framework for what I have termed a critical pedagogic analysis of distance learning materials. I argue that such an analysis can assist materials designers and evaluators to uncover the subject positions constituted for readers of distance learning materials and that this is a worthwhile project because particular subject positions may affect readers' "investment" in their studies and in improving their classroom practice. After giving a brief account of the "feedback failure" and what I learned from it, I outline each "element" of the analytic framework and illustrate its use with examples from an analysis of three sets of South African teacher education materials.

KEYWORDS: Critical pedagogic analysis; materials designing; distance teacher education.

INTRODUCTION

One of my teaching and research interests is in the "potentials" (Bezemer & Kress, 2008) for learning that are enabled or constrained by the designers of textbooks and on-line materials for language teachers in schools, and by the designers of distance learning materials for language teacher education. The self-discipline and commitment required of distance education students suggest that the design of distance learning materials for pre-service and in-service teachers should encourage their "investment" (Norton, 2000) in the materials – both as students and as teachers. In her critique of teacher education programmes in South Africa, Moletsane (2003) argues that the failure of many of these programmes (both "contact" and "distance") to recognise and respond to teachers' diverse "life histories" and identities, has resulted in limited improvements to teaching practices in schools because teachers have not fully invested in what the programmes offer.

When two cohorts of teachers, enrolled in successive years for a professional development course titled *Theory and Practice of English Language Teaching*, experienced difficulties in responding to the assignments¹ that were based on content and activities in the materials I had designed for this course, I realised that aspects of these materials probably needed to be redesigned. For guidance on how to do this, I

¹ Those whose assignments were not satisfactory received guidance on how to improve them and were given time to rework and resubmit them.

turned to the extensive literature in the field of distance education materials design. In this literature, obtaining constructively critical feedback from students is widely advocated as a starting point for designing and redesigning materials and is generally accepted as unproblematic to achieve for example, Evans, 1995; Shubani & Okebukola, 2001). I decided to try to find out how teachers who had successfully completed the *Theory and Practice of English Teaching* course had responded to the ways in which their life histories, identities and teaching contexts had been constituted in the materials and to the ways in which content had been mediated. However, my attempt to do this was an instructive failure: the 18 teachers who responded to questionnaires (completed anonymously) and to focus group interview questions, wrote and spoke mainly as “satisfied customers” (Reed, 2005a, p. 270). For example, (i) *All the activities in the course material will help us to work easily with the students in our schools and classrooms.* (ii) *The writer helps us to think about learner-centred classrooms.* (iii) *All the units are fine and should be kept as they are.* (iv) *You share honestly about your own difficulties and this makes your writing genuine.* (v) *The writer knew that students take English as their second language.*

The very few suggestions for changes to the materials were of three broad types: (i) requests to the writer to use more explicitly the discourse of a new curriculum being introduced at that time (six questionnaire responses): for example, *All the examples should shift to the demands of curriculum 2005. This means examples must have outcomes;* (ii) requests for clearer connections between some of the theoretical input and its implications for practice: for example, *I was interested in the writing about scaffolding but it was not enough and I was not sure what to do in my classroom* (one of only three examples of such comments from the focus group discussions); (iii) requests for fewer activities (and “confessions” that activities were sometimes ignored): for example, *I am referring to page 6 in which one was expected to write down the difference between acquisition and learning before reading about these. Frankly, I did not attempt to, I simply went ahead to read* (one of 13 questionnaire responses in similar vein).

Possible reasons for my failure to obtain the detailed and constructively critical feedback that I sought were explored in some detail in an article published in *Open Learning* (Reed, 2005a). In brief, I had positioned my informants as “empowered” respondents who would give me access to their “figured worlds” (Holland, Lachicotte, Skinner & Cain, 1998) but I had not given them access to and control of the “liberating literacy” (a new discourse in Gee’s {1996} terms) that I expected them to use in their responses. Even had I done so, their histories in apartheid South Africa may have made it difficult for them to contest the perceived expertise of a university academic. Perhaps most importantly, they may have chosen to respond mainly as “satisfied customers” because they had achieved a qualification from what is widely recognised in South Africa as a prestigious university.

Subsequently, by reviewing a range of international and local publications (for example, Evans, 1994; Lockwood, 1992, 1994, 1995; Mills and Tait, 1996; Race, 1989, 1992; Rowntree, 1990; South African Institute of Distance Education [SAIDE], 2002; National Association of Distance Education and Open Learning in South Africa [NADEOSA, 2005]) I found helpful guidelines for some aspects of mediating knowledge and skills on the page or screen, but little or no reference to the issues of identity and investment which, like Moletsane (2003), I consider important in relation

to teachers' professional development, particularly in a country in which teachers are constructed negatively in most public discourse. It appears that none of these authors or organisations has investigated the subject positions constituted for learner-teachers (as students and as future teachers) or for teacher-learners (as professionals in the classroom and as students) when knowledge is mediated in particular ways on the page or screen, and this perceived gap in the literature is what prompted my attempt to develop a framework that could enable such an investigation.

This article outlines how I have drawn on the extensive literatures on pedagogy, teacher education, mediation, subjectivity, systemic functional linguistics and social semiotics to devise a framework for what I term *critical pedagogic analysis* of distance learning materials for teachers of English and other languages. I suggest that using the framework for textual analysis enables the subject positions offered to teachers to be identified and their likely investment in professional development to be hypothesised. Bezemer and Kress (2008) argue that textual analysis makes possible the formulation of hypotheses "more or less securely founded" about textual designs because texts are:

potentials of a quite specific kind, which in their specificity allow an unlimited (in number) yet constrained (in semantic scope) number of readings. These potentials can be understood as the sign-makers' shaping of signs such that the text-as-complex-sign fits the purposes of a rhetor (who frequently is also the designer), the designer and their sense of audience. (Bezemer & Kress, 2008, pp. 4-5; italics in the original)

The article includes examples of how the framework has enabled identification of, and critical reflection on, the subject positions constituted for readers of three sets of South African teacher education materials². The three sets of materials were chosen for analysis because each had received national and/or international recognition for excellence³. All texts are shaped by the process of their production and by the social conditions which influence this process (Fairclough, 1989). What is common to the designers of *Learners and Learning* (Gultig, 2001), *Language, Literacy and Communication* (University of Fort Hare, 1998-2000) and *Language in Learning & Teaching (LILT)* (Inglis, Thomson & Macdonald, 2000) is location in the changing landscapes (Chisholm, 2004) of South African school and teacher education.

² Devising the framework and using it in this analysis enabled me, subsequently, to interrogate *Theory and Practice of English Teaching* (Reed, 1996) from a critical distance and to identify both strengths (for example, a critical orientation to pedagogy) and weaknesses (for example, insufficient support for academic literacy development) in the original design.

³ *Learners and Learning* (Gultig, 2001) was designed by the South African Institute of Distance Education, an organisation about which Alan Tait from the UK Open University wrote as follows in 2002 in SAIDE's 10th anniversary publication: "SAIDE's fearless work has lit a torch for educational opportunity for all, in conjunction with the most effective of contemporary approaches to distance education. The work has not only been notable within South or even Southern Africa, but has a reputation world-wide for the impact it has made." Material from the University of Natal's B Ed programme, which includes the module *Language in Learning & Teaching (LILT)* (Inglis, Thomson & Macdonald, 2000), was highly commended in the inaugural National Association of Distance Education Organisations of South Africa (NADEOSA) awards for excellence in distance education in 2000. The University of Fort Hare materials, which include the *Language, Literacy and Communication* (University of Fort Hare) modules, won the NADEODSA award for excellence in 2005.

However, within these broad landscapes, each design team also responded to the different institutional imperatives briefly outlined here.

In the designing of *Learners and Learning*, experienced distance education materials designers, based at the South African Institute of Distance Education, mentored newcomers to the field of materials design who had relevant teacher education experience. The brief given to the design team was to design for a diverse readership:

Aimed at formal and informal teacher education, this series presents valuable open-learning materials for use in distance education or in face to face teaching. Intended for use in colleges of education at diploma level, these modules may also be used with additional readings in higher or post-graduate diploma courses. (Gultig, 2001, back cover).

The team aimed to “enable teachers to analyse learning and to reflect on what they can do to improve it” (Gultig, 2001, back cover).

The design team based at the University of Fort Hare consisted of experienced teacher educators who collaborated with local primary school teachers and with international distance education experts from universities in Australia and the United Kingdom. *Language, Literacy and Communication* was designed for a very specific and localised readership: underqualified primary school teachers in the Eastern Cape province. The design team decided to

- Affirm teachers as experienced in the classroom, in community and family life;
- Foreground the local;
- Offer an integrated curriculum with explicit links between one umthamo⁴ and another;
- Guide and support a process of change in classroom practices;
- Assist teachers to theorize old and new practices and to become reflective practitioners. (Reed, 2005b, p. 105)

Language in Learning & Teaching (LILT) was designed by experienced teacher educators from the University of KwaZulu-Natal, who used and modified the materials with several cohorts of students before finalising them for publication. The materials were designed for primary and secondary school teachers who had already obtained a degree or a four-year teaching diploma. The back cover of the Learning Guide / Reader states that the designers aimed to provide “an opportunity for teachers in all learning areas to develop an informed understanding of how learners use language for thinking and learning, and how teachers can facilitate the development of communicative skills in talking, listening, reading and writing.” According to the module co-ordinator, the designers also aimed to offer teachers “an experience of transformative learning” which would assist them to spearhead change in their classrooms (Thomson, 2001, pp. 7-8).

The development of a framework for a critical pedagogic analysis of each set of materials, which is outlined in the next section, enabled evaluation of how, and to

⁴ Umthamo means “bite-sized chunk” or “mouthful” in isiXhosa. The designers chose to produce a series of 36- or 48-page booklets on particular topics, arguing that these would be easier for readers to “digest” than full-length books.

what extent, each design team's aims were realised and what subject positions were offered to readers – as students and as teachers.

CRITICAL PEDAGOGIC ANALYSIS

One of the main aims of critical pedagogic analysis (CPA) is to uncover the social interests at work in teacher education materials. Using Gore's (1993) and Bernstein's (1996) conceptualisations of pedagogy as "the process of knowledge construction" as a point of departure, key questions for a CPA of teacher education texts are:

- How and in whose interests is knowledge produced/reproduced and mediated?
- Who do the designers consider to be the "ideal subject" – as student and as teacher?
- Who may be advantaged or disadvantaged by a particular constitution of this ideal subject?
- What actions of this subject are sanctioned or prohibited?

The theoretical and empirical work on pedagogy of Bernstein (1996; 1999), Canagarajah (1999; 2005) and Luke (2008) enables these general questions to become more focused. For example, in mediating knowledge (and skills) on the page or screen, how do designers classify and frame disciplinary knowledges (Bernstein, 1996, 1999)? Is their orientation towards "mainstream" or "critical" pedagogies (Canagarajah, 1999, 2005)? What might be gained by weaving together elements of traditional pedagogies with elements of more dialogic, critical pedagogies (Luke, 2008)?

Lantolf and Thorne (2006), with acknowledgement to Vygotsky (1978), define mediation as "the process through which humans deploy culturally constructed artifacts, concepts and activities to regulate (that is, gain voluntary control over and transform) the material world of their own and each other's social and mental activity" (Lantolf & Thorne, 2006, p. 79). For distance education, what is significant about this definition is that it includes, as did Vygotsky (1978), both the self and others as agents in the mediating process.

From a review of the extensive collection of teacher education materials in the library of the South African Institute of Distance Education and of a selection of Open Education Resources (OERs), I identified seven "elements" (that is, interrelated parts of a whole) of a CPA framework which materials designers and evaluators may find useful for investigating how knowledge is mediated on the page or screen and what subject positions such mediation offers to readers as students and as teachers. These elements are:

- content selection
- in-text activities – types and purpose(s)
- illustrative cases or "pedagogic episodes" (Loughran, 2006)
- the scaffolding (if any) of readings
- linguistic choices
- choices of images and other aspects of visual design

- organisation and other aspects of layout.

In the space of a single article it is not possible to demonstrate in any detail how these were used in a CPA of the materials described above, so I focus on the analysis of content selection, as I consider this to be the core element on which decisions about the other design elements are likely to be based. However, I have tried to give an indication of how an analysis of the other elements can contribute to an understanding of the subject positions offered to readers.

Analysing content selection

From a review of the work of acknowledged leaders in the field of teacher education internationally and in South Africa (Alexander, 2008; Banks, Leach & Moon, 1999; Darling-Hammond, 2006; Morrow, 2007)⁵, six “content elements” common to their conceptualisations of a knowledge base for teacher education were identified. In Table 1 each element is illustrated with an example of content on the topic “Reading” in materials for language teachers.

Content element	Example from the topic “Reading”
<i>Subject or disciplinary knowledge</i>	Material that relates to theories and research about reading
<i>Pedagogic knowledge</i>	Material that relates to methods of teaching reading
<i>Knowledge of how learners learn</i>	Material that relates to what is involved in learning to read, both cognitive processes and sociocultural processes
<i>Knowledge of the curriculum</i>	Material that focuses on current curriculum statements about reading and their “translation” into classroom practice
<i>Contextual knowledge</i>	Material that locates reading and the teaching of reading in sociocultural context
<i>Knowledge of self as learner and teacher</i>	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

Table 1. Content elements common to teacher educators’ conceptualisations of a knowledge base for teacher education (illustrated with examples from the topic “Reading”)

⁵ Banks, Leach and Moon have been leaders in the development of teacher education pedagogy at the UK Open University and Leach and Moon have been leaders of the Research Group on Teacher Education Across Societies and Cultures and also of the Teacher Education for Sub-Saharan Africa (TESSA) project. At Stanford University Darling-Hammond launched the School Redesign Network and the Stanford Educational Leadership Institute. She has authored or edited numerous books and over 300 articles on educational policy and practice. Alexander’s book *Culture and Pedagogy* won the AERA outstanding book award in 2001. In 2008-09 he was president of the British Association for International and Comparative Education. In 2008 Morrow was awarded the Education Association of South Africa’s Honorary Medal for his contributions to education over 43 years. He founded the journal *Perspectives in Education* and published extensively with his final book being *Learning to Teach in South Africa*.

To these elements I have added *academic literacy*, because in contexts in which many students are using an additional language for their studies, materials designers frequently include support for the extension of academic reading and writing competencies.

Tables 3-7, in the appendix illustrate how these elements were used to identify what the designers of three sets of South African teacher education materials chose to foreground, background or ignore in selecting content on the topic “Reading”. *Learners and Learning* foregrounds knowledge about learning to read and reading to learn and the liberating possibilities of both; knowledge about how learners learn and critical reflection on this; academic literacy (by scaffolding the reading of extracts from an international literature). The learning guide and accompanying reader background pedagogic knowledge and curriculum knowledge, giving readers little explicit guidance about how to teach reading. *Language, Literacy and Communication* foregrounds pedagogic and contextual knowledge; reflection on pedagogic practices; curriculum knowledge. The course materials background knowledge about reading; learning theories; academic literacy, thus offering limited support for the extension of readers’ theoretical learning and academic reading and writing. *Language in Learning and Teaching* (LILT) weaves together what is foregrounded and backgrounded in the other two sets of materials and acknowledges readers’ pedagogic experience by suggesting broad strategies rather than detailed guidance for teaching in particular ways.

From her study of the English language learning experiences of a group of immigrant women in Canada, Norton (2000) concluded that the women were likely to be less invested in learning English if they were resistant to the identities being imposed on them by teachers and others. In similar vein, I suggest that language teachers are more likely to invest in their studies and to adopt the classroom practices advocated in the materials, if they identify with the subject positions constituted by materials designers through the content selected. For example, readers who consider that they need detailed guidance for enacting teaching strategies are likely to be responsive to the *Language, Literacy and Communication* materials while those for whom the identity of competent reader and writer of “academic” texts is more important, are likely to engage more fully with what is offered in *Learners and Learning*.

Analysing in-text activities

Guidelines for designing distance education materials emphasise the key role(s) of in-text activities in enabling learning (for example, Lockwood, 1994; Moon, Leach & Stevens, 2005; NADEOSA, 2005). From a review of local and international teacher education materials, I identified five categories of “activity purpose” and have used these in conjunction with Lockwood’s (1994) three models of activity types (tutorial in print; reflective action guide; dialogue) to identify the dominant purposes and types evident in the three sets of materials. By way of example, Tables 3.1 to 3.3 in the Appendix enable the identification of very different activity patterns in the unit on Reading in the three sets of materials analysed. The activities in *Learners and Learning* focus on understanding content about what is involved in becoming a reader (many of them involve answering “reading comprehension” questions). By contrast, those in *Language, Literacy and Communication* focus on teaching reading in the classroom and on finding and using resources to support such teaching. The designers

of *Language in Learning & Teaching* have included activities which address all five activity purposes, while privileging reflective action. For each set of materials it can be hypothesised that readers are more likely to invest in the activities – as students and/or as classroom teachers – if they value what these activities foreground.

Analysing cases or pedagogic episodes

Shulman (2004) advocates the use of cases as one way of representing knowledge to teacher education students and argues that while a case is itself a way of mediating knowledge, it must in turn be mediated by being “explicated, interpreted, argued, dissected and reassembled” (2004, p. 209). Loughran (2006) suggests that cases create opportunities for questioning the taken-for-granted and “invite inquiry into the diversity of possibilities and responses inherent in the problematic situations that arise in teaching and learning” (2006, p. 33). In a subsequent publication, he argues that teacher educators should offer “pedagogic episodes” (cases), to “students of teaching” for the purpose of informing their “developing views of practice” (2008, p. 1180). CPA is interested in the kinds of cases that materials designers select and in how they position readers to respond to them.

In the materials that I have examined, analysis of the cases/pedagogic episodes related to reading and the teaching of reading suggests that each design team’s main purpose is the transformation of teachers’ knowledges and practices. The dominant “message” in these episodes is that teachers should act in “new” ways in their classrooms and communities – ways that make learners excited about reading and that encourage multiple responses to texts (*Learners and Learning*); ways that result in the preservation of traditional tales and their use in the classroom for “whole language” activities and for affirming the isiXhosa language (*Language, Literacy and Communication, Umthamo 2*); ways that result in the establishment of parent-child reading clubs or other community literacy projects (*Language in Learning & Teaching*). The pedagogic episode depicted in Figures 2 and 3 is discussed in the final section of the article.

Analysing the scaffolding of course readings

While noting that “scaffolding” is a contested concept, I find useful Gibbons’ (2002) description of scaffolding as “the temporary assistance by which a teacher helps a learner know how to do something so that the learner will later be able to complete a similar task alone” (2002, p. 10). I suggest that it is important to understand how designers constitute students as particular types of reading subjects and teachers when they offer support for reading extracts from the work of authorities in a particular field. While the designers of *Learners and Learning* include questions to their readers such as “What do you think?”, their insertion of sub-headings into extracts from the work of internationally recognised theorists and empirical researchers, together with their commentary on the extracts, position readers to accept the designers’ interpretations of these extracts as in this example of commentary on an extract from Bettelheim and Zelan’s *On Learning to Read*:

In order to teach reading, teachers need to start by actively extending their own reading activities. They should read *more*, read *different kinds of things* and then communicate this personal world of active reading to learners. This will encourage

children to see reading as something that is pleasurable and useful beyond the classroom walls. (Gultig, 2001, p.126)

The designers of *Language, Literacy and Communication, Umthamo 2* construct preferred reading positions for their readers by guiding them through a series of activities so that they experience a whole-language approach to literacy teaching before they read an extract which describes what they are likely to have just experienced and which affirms the value of this approach. The booklet (umthamo) concludes with this paragraph:

You will see that in this umthamo, we have tried to take account of much of what Kenneth Goodman advises. We hope you have enjoyed working through the activities and found them challenging. We also hope that you can see the way clear to making your classroom more of a whole language classroom and less of a “bit and pieces” place! (University of Fort Hare, Umthamo 2, 1999, p. 42)

Analysing linguistic choices

In his pioneering work in systemic functional linguistics, Michael Halliday (1978, 1985) describes language as “meaning potential”. When designers of distance learning materials make lexical, grammatical and sequencing choices, they realise this potential in particular ways (Janks, 2010). Table 4 in the Appendix lists the linguistic features that I have used for CPA of teacher education materials. It should be noted that the relationship between designers and readers is not only constituted through such discourse features as modality and pronoun choice, but also through the overall structure of the discourse. Writing that is “dense, structured and productlike” and writing that is conversational and “processlike” (Halliday, 1994, p. 70) mediate knowledge differently and the differences may influence how readers process and use this knowledge for a range of purposes, including identity construction.

In each of the quotations in the previous section on scaffolding, the designers’ choices of pronouns, of modality, of lexical items and of punctuation contribute to the constitution of readers as particular kinds of teachers: those who “need to” change so that read more texts (and more varied texts) as an example to children (*Learners and Learning*) or those who “will see” value in making their teaching more coherent and will not be offended by the designers’ negative construction of their current ways of working (*Language, Literacy and Communication*).

Analysing images and other aspects of visual design

Kress and van Leeuwen (2006) acknowledge the influence of Halliday’s work in systemic functional linguistics on their conceptualisation of a “grammar of visual design”. They argue that

[I]f we are to understand the way in which vital text-producing institutions like the media, education and children’s literature make sense of the world and participate in the development of new forms of social stratification, a theory of language is no longer sufficient and must be complemented by theories which can make principles of the new visual literacy explicit (2006, p. 179).

In distance learning materials, the designers' choice of cover design and their use of diagrams, drawings, photographs, access devices (such as icons and margin boxes), fonts and layout on the page or screen, all contribute to the constitution of readers as particular "types" of student and, in the case of materials for teacher education, as particular types of teacher. In the study drawn on for this article I have used Kress and Van Leeuwen's (2006) grammar of visual design to inform the CPA of the covers of the materials listed above and of elements of the visual designs "between the covers" (see Reed, 2008, for an analysis of the cover designs). Here I insert just one example of two image choices from the same page of *Language, Literacy and Communication, Umthamo 2* and comment briefly on their potentials for shaping readers' subjectivities.



Figure 1. Zozo Figlan drawing



Figure 2. Mrs Zenani photograph

The open spaces of rural, traditional communities behind the powerful, central figure suggest that these are the sources of the stories that Zozo Figlan performs energetically for the multicultural audience of urban children at her feet. In the slightly blurred photograph, below the drawing, children also gaze at the storyteller (and direct the gaze of the viewer to her), but this storytelling is presented to readers as a very different event. Firstly, it is located in an evidently rural setting and in the past: Mrs Zenani “told” her tale – in contrast to Zozo Figlan who is “telling” hers. Secondly, the caption positions the reader to respond with admiration: Mrs Zenani is a “gifted iinstomi teller” and she told an “epic” tale. The adjectives amplify the positive attitude of the designers to the event (Martin & Rose, 2003). The placement of the drawing above the photograph and its greater sharpness make it the more salient (Kress & van Leeuwen, 2006) of the two images. It could be argued that this greater salience contributes to what the designers are offering teachers: as collectors and performers of traditional stories they have an important role to play in bringing what is admirable in the local and traditional past into contact with the local and global present.

Analysing organisation and other aspects of layout

In order to encourage their interest and investment in learning, distance education materials need to be accessible to students. Rowntree (1994) groups access devices into three categories: beginning, during and end. He advises that the beginning should include an explanatory title, contents list, a “route map”, overview/introduction, links with other materials, objectives and guidance on using the materials. “During” the materials there should be headings, numbering systems, summaries, instructions about what to do next, verbal signposts and graphic signals such as “white space”, reader stoppers, icons, bulleted lists, tints and boxes. An index is an example of an end point device. CPA is interested in which of these devices are used by designers and in how they use them. For example, in the materials I have analysed, the use of margin boxes constitutes readers in significantly different ways. In *Language, Literacy and Communication, Umthamo 2*, the margin boxes focus on teachers’ pedagogy with the designers prescribing actions for teachers to take in their classrooms. For example:

Don’t try to impose or push your ideas onto your learners’ story. Remember, you are developing a learner-centred way of working. (University of Fort Hare, *Umthamo 2*, 1999, p. 35)

By contrast, in *Learners and Learning* the designers focus on readers as students and on the extension of their academic literacy. The margin boxes repeat key ideas from the main text, scaffold the completion of reading-based activities and give bibliographic details of texts on which the designers have drawn. For example:

This phrase is from the article by Freire on page 133 in your reader. Paulo Freire was a Brazilian educator who lived from 1921 to 1997. His ideas were very influential in South Africa, first in radical Christian groups and the black consciousness movement and then in the development of people’s education in the late 1980s. (Gultig, 2001, p. 141)

BRINGING TOGETHER SEPARATE ELEMENTS OF CPA IN ORDER TO IDENTIFY CONSTRUCTIONS OF KNOWLEDGE AND POSITIONS OFFERED TO TEACHERS

In this final section of the article I return to the key questions raised about constructions of knowledge and positions offered to teachers in distance education materials. I use a pedagogic episode from *Learners and Learning*, presented in the form of a cartoon strip, to illustrate that bringing together separate elements of a CPA framework can be productive for identifying what is offered to readers as teachers and as students. The episode is introduced with the following statements:

Not all of us who read, however, *enjoy* the experience. Reading is hard work and can be exhausting, especially if our experience of the world is very different to the world of the text we are reading. (Gultig, 2001, p. 119; italics in the original)

The second of these statements is made more salient by its repetition in the white space of the page margin where it is printed between quotation marks in large font. This feature of the page design, in conjunction with the high modality of the statements, the emphasis given to the affective word “enjoy” through the use of italics, and the choice of inclusive pronouns throughout (“us”; “our”; “we”), positions readers, of both the materials and other texts, as “members” of a reading community who can expect to experience difficulties at least some of the time. The cartoon and the information and activities which follow it offer readers particular positions as both readers and teachers.

The facial expressions, body language and words of teenage Mike and the facial expressions and body language of the teacher (Figure 3) all offer readers what Adams (2008) terms “an authentic vicarious experience” as a result of which they are expected to identify with the learner and to be critical of his teacher’s pedagogy. The high modality statement immediately below the final frame supports this positioning: “For many learners reading **is a struggle**” (Gultig, 2001, p. 121, bold type added). It is likely that the previous reading experiences of many learner-teachers and teacher-learners educated during the apartheid years in South Africa were constrained by inadequate textual resources and limited teacher or lecturer mediation. The pedagogic practice, evident in the chalkboard instructions in the background to the first two frames of the cartoon, is likely to be familiar to many of them and may be a naturalised aspect of their own classroom practices as teachers and/or their experiences as learners. It is a practice in which teachers assume that learners know how to read chapters and how to answer questions without any support or guidance. While the teacher is recognisably male, he is a “type” and not an individual and has been drawn so that he cannot be identified as a member of any particular “racial” category. However, it is not the teacher on whom the designers focus in the first part of their explication of this case. Instead, as shown in the text box below (Table 3), they direct readers to reflect on their own reading experiences as learners at school.

In mediating knowledge about reading and the teaching of reading, the designers work with two of the analytically distinguishable strands of activity which are constitutive of academic practice: distantiation and appropriation (Slonimsky & Shalem, 2004). Distantiation “calls upon students ...to make the familiar or taken-for-granted strange” (Slonimsky & Shalem, 2004, p. 43). By requiring readers to engage



Figure 3. *Learners and Learning: The story of a struggling reader* (Gultig, 2001, pp. 120-121)

Stop. Think.

- Think about your own experience of reading at school. Was it similar to Mike's experience? What was different?
- Did you ever experience reading as difficult, *but worthwhile*? If you answer yes, what made it worthwhile? If no, why do you think reading isn't worthwhile? (Gultig, 2001, p. 121; bold type and italics in the original)

Table 3. Text box inviting teacher reflection

with Mike's experiences as a reader, to reflect on their own reading experiences at school and to work with input on factors that promote successful reading experiences before they respond as teachers, the designers encourage them to distance themselves from their naturalised practices and then to appropriate new knowledge.

The presentation of what might be new knowledge for at least some readers begins under a bold type sub-heading **Why is Mike struggling to read?** The use of bullets, of italics for key words and phrases and of repetition of the key message in large font in the right hand margin, all reiterate one of the main ideas communicated in the cartoon by Mike's words, facial expressions and body language: "Our attitude to reading is very important to the reading process" (Gultig, 2001, p. 121).

In the next sub-section, under a bold-type sub-heading **Important factors for a successful reading experience**, the designers again use bullets and italicised key words to construct a preferred reading. In some of the bulleted points they begin to constitute readers as teachers ("we") rather than as learners ("they"), but in the final bullet they position themselves as teachers and the readers as learners:

Making meaningful *links* between the text and our existing knowledge will influence how successful the reading experience will be. (This is why we have tried to use familiar analogies in this text but, more importantly, why we have asked *you* to constantly relate ideas to your lives and practices as teachers.) (Gultig, 2001, p. 22)

This is one of a number of instances in *Learners and Learning* where the designers make their own pedagogy explicit and present it as a model to the reader. In the explication of the case of Mike's reading experiences, there is an example of another recurring meditational strategy, that of revisiting content. The designers use questions in some of the small blocks in the page margins to recycle the content of earlier pages and to introduce new content:

Do you notice how similar the prerequisites for successful reading are to the prerequisites for successful learning? What does this tell you about the relationship between reading and learning? (Gultig, 2001, p. 121)

The first question uses a grammatical metaphor in which a question disguises a directive: notice the similarities and, by implication, if you do not notice them, revise the previous section (on "school learning"). The second serves to prepare readers to engage with the diagram of "a reading-learning cycle" on the next page of the *Learning Guide*. The designers return to the case of Mike's reading experiences in order to mediate this diagram.

I suggest that the designers' decisions to use (i) a pedagogic episode with which they imagine readers are likely to identify, (ii) a cartoon in which the gaze and words of the struggling reader in the foreground and the construction of the "bad" teacher in the background are designed to elicit an empathetic response, (iii) particular design features on the page (for example, textboxes, headings, bold type and bullets), (iv) language in particular ways (for example, high modality statements, adjectives which amplify attitude, grammatical metaphor, both inclusive and exclusive pronouns) and (v) their own pedagogic practice as a model (the use of supposedly familiar analogies) work together to position readers as students with a responsibility to take reading seriously and as teachers with a responsibility to support learners' development as successful readers.

CONCLUSION

In describing the elements of a critical pedagogic framework that I have identified thus far, I am not claiming that these are the only possible elements. Nor am I claiming that using the framework to analyse language teacher education materials will answer all the questions that materials designers or evaluators may have. What I do argue is that CPA affords designers and evaluators the critical distance needed for evaluating the mediation of knowledge(s) and the constitution of readers' subjectivities. As an alternative (or in some circumstances, as an addition) to reader feedback, the framework has the potential to inform redesigning for the original local contexts(s) of use or reversioning for use in broader regional or global contexts in ways that may encourage greater investment of readers in their studies and in improving their classroom practices.

Teacher education at a distance is being promoted as a solution to the alarming shortfall in teacher supply throughout Africa and elsewhere (UNESCO, 2009; Danaher & Umar, 2010). As open and distance learning initiatives in general, and the Open Education Resources (OER)⁶ movement in particular, gain momentum, there are greater opportunities for materials designers to collaborate in sharing materials, to comment on each other's materials, to redesign and to "share back" their redesigns – all with the goal of contributing to improved quantity and quality in teacher education. I suggest that in response to these greater opportunities, critical reflection on the selection and mediation of content for courses becomes increasingly important for designers of materials for both page and screen and that critical pedagogic analysis can make a contribution to such reflection (and subsequent actions).

⁶ "OER are teaching, learning and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use or re-purposing by others. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials or techniques used to support access to knowledge." (William and Flora Hewlett Foundation, quoted on the OER Africa website, retrieved August 9, 2011)

REFERENCES

- Adams, J. (2008). The pedagogy of the image text: Nakazawa, Sebald and Spiegelman recount social traumas. *Discourse: Studies in the cultural politics of education*, 29(1), 35-39.
- Alexander, R. (2008). *Essays on pedagogy*. New York, NY: Routledge.
- Banks, F., Leach, J., & Moon, B. (1999). New understandings of teachers' pedagogic knowledge. In J. Leach & B. Moon (Eds.), *Learners and pedagogy* (pp. 89-110). London, England: Paul Chapman & The Open University.
- Bernstein, B. (1996). *Pedagogy, symbolic control and identity: Theory, research, critique*. London, England: Taylor & Francis.
- Bernstein, B. (1999). Vertical and horizontal discourses: An essay. *British Journal of Sociology of Education*, 20(2), 157-173.
- Bezemer, J., & Kress, G. (2008). *Gains and losses: A historical study of textbook design for secondary education*. Paper presented at the AERA conference, New York. March 2008.
- Canagarajah, A. S. (1999). *Resisting linguistic imperialism in English teaching*. Oxford, England: Oxford University Press.
- Canagarajah, A. S. (2005). *Reclaiming the local in language policy and practice*. Mahwah, NJ: Lawrence Erlbaum.
- Chisholm, L. (2004). Introduction. In L. Chisholm (Ed.), *Changing class: Education and social change in post-apartheid South Africa* (pp. 1-28). Cape Town, South Africa: HSRC Press.
- Danaher, P., & Umar, A. (Eds.) (2010). *Teacher education through open and distance learning*. Vancouver, BC, Canada: Commonwealth of Learning.
- Darling-Hammond, L. (2006). *Powerful teacher education – Lessons from exemplary programmes*. San Francisco, CA: Jossey-Bass.
- Droga, L., & Humphrey, S. (2002). Getting started with functional grammar. Berry, NSW: Target Texts.
- Evans, T. (1994). *Understanding learners in open and distance education*. London, England: Kogan Page.
- Evans, T. (1995) The potential of research with students to inform development. In F. Lockwood (Ed.), *Open and distance learning today* (pp. 67-75). London, England: Routledge.
- Fairclough, N. (1989). *Language and power*. London, England: Longman.
- Gee, J. P. (1996). *Social linguistics and literacies: Ideology in discourses* (2nd ed.). London, England: The Falmer Press.
- Gibbons, P. (2002). *Scaffolding language, scaffolding learning*. Portsmouth, NH: Heinemann.
- Gore, J. M. (1993). *The struggle for pedagogies*. New York, NY: Routledge.
- Gultig, J. (Ed.) (2001). *Learners and learning*. Johannesburg, South Africa: SAIDE & Oxford University Press.
- Halliday, M. A. K. (1978). *Language as a social semiotic: The social interpretation of language and meaning*. London, England: Edward Arnold.
- Halliday, M. A. K. (1985). *An introduction to functional grammar*. London, England: Edward Arnold.
- Halliday, M. A. K. (1994). Spoken and written modes of meaning. In D. Graddol & O. Boyd-Barrett (Eds.) *Media texts: Authors and readers* (pp. 51-73). Clevedon, England: Multilingual Matters.

- Holland, D., Lachicotte, W., Skinner, D., & Cain, C. (1998). *Identity and agency in cultural worlds*. Cambridge, MA: Harvard University Press.
- Inglis, M., Thomson, C., & Macdonald, A. (2000). *Language in learning & teaching (LILT)*. Pietermaritzburg, South Africa: University of Natal Press.
- Janks, H. (2010). *Literacy and power*. New York, NY: Routledge.
- Kress, G., & van Leeuwen, T. (2006) *Reading images: The grammar of visual design* (2nd ed.) London, England: Routledge.
- Lantolf, J., & Thorne, S. (2006). *Sociocultural theory and the genesis of second language development*. Oxford, England: Oxford University Press.
- Lockwood, F. (1992). *Activities in self-instructional texts*. London, England: Kogan Page.
- Lockwood, F. (Ed.) (1994). *Materials production in open and distance learning*. London, England: Paul Chapman Publishing.
- Lockwood, F. (Ed.) (1995). *Open and distance learning today*. London, England: Routledge.
- Loughran, J. (2006). *Developing a pedagogy of teacher education*. London, England: Routledge.
- Loughran, J. (2008). Toward a better understanding of teaching and learning about teaching. In M. Cochran-Smith, S. Feiman-Nemser, D. McIntyre & K. Demers (Eds.), *Handbook of research on teacher education* (3rd ed., pp. 1177-1182). New York, NY: Routledge.
- Luke, A. (2008). Pedagogy as gift. In J. Albright & A. Luke (Eds.), *Pierre Bourdieu and literacy education*. (pp. 68-91). New York, NY: Routledge.
- Martin, J., & Rose, D. (2003). *Working with discourse*. London, England: Continuum.
- Mills, R., & Tait, A. (Eds.) (1996). *Supporting the learner in open and distance learning*. London, England: Pitman.
- Moletsane, R. (2003). Teacher identity and the need for curriculum reconceptualisation in South African teacher education. In K. Lewin, M. Samuel & Y. Sayed (Eds.), *Changing patterns of teacher education in South Africa* (pp. 323-326). Sandown, Johannesburg, South Africa: Heinemann.
- Moon, B., Leach, J., & Stevens, M. (2005). *Designing open and distance learning for teacher education in sub-Saharan Africa*. Washington DC: The World Bank.
- Morrow, W. (2007). *Learning to teach in South Africa*. Cape Town: HSRC Press.
- NADEOSA. (2005). The NADEOSA quality criteria for distance education in South Africa. In T. Welch & Y. Reed (Eds.), *Designing and delivering distance education: Quality criteria and case studies from South Africa* (pp. 18-43). Johannesburg, South Africa: NADEOSA.
- Norton, B. (2000). *Identity and language learning: Gender, ethnicity and educational change*. London, England: Longman.
- Polias, J. (2001). *The application of systemic functional linguistics in educational contexts*. Unpublished course book for a systemic functional grammar course presented at Rhodes University, Grahamstown, 26-29 June 2001.
- Race, P. (1989). *The open learning handbook: Selecting, designing and supporting open learning materials*. London, England: Kogan Page.
- Reed, Y. (1996). *Theory and practice of English language teaching*. Johannesburg, South Africa: University of the Witwatersrand.
- Reed, Y. (2005a). Using students as informants in redesigning distance learning materials: possibilities and constraints. *Open Learning*, 20(3), 265-275.
- Reed, Y. (2005b). Something new and different: The key roles of imithamo and abakhwezeli in the University of Fort Hare's B Prim Ed Programme. In T.

- Welch & Y. Reed, (Eds.) *Designing and delivering distance education: Quality criteria and case studies from South Africa* (pp. 102-108). Johannesburg, South Africa: NADEOSA.
- Reed, Y. (2008). Making meaning with cover designs. *Per Linguam*, 24(2), 45-61.
- Rowntree, D. (1990). *Teaching through self-instruction: How to develop open learning materials*. London, England: Kogan Page.
- Rowntree, D. (1994). *Preparing materials for open, distance and flexible learning*. Londod, England: Kogan Page.
- SAIDE. (2002). SAIDE, 10 years on, 1992-2002. *Open learning through distance education (OLTDE), Tenth Anniversary Edition*, July 2002.
- Shubani, J., & Okebukola, P. (Eds.) (2001). *Guide to the development of materials for distance education* (3rd ed.). Ibadan, Nigeria: UNESCO-BREDA.
- Shulman, L. S. (2004). *The wisdom of practice: Essays on teaching, learning, and learning to teach*. San Francisco, CA: Jossey-Bass.
- Slonimsky, L., & Shalem, Y. (2004). Pedagogic responsiveness for academic depth. In H. Griesel (Ed.), *Curriculum responsiveness: Case studies in higher education* (pp. 81-101). Pretoria, South Africa: SAUVCA.
- Thomson, C. (2001). *Writing experiences of BEd Honours students registered for the Language in Learning and Teaching (LILT) module: A case study*. Unpublished master's research report, University of Natal.
- UNESCO. (2009). *Projecting the global demand for teachers: Meeting the goal of universal primary education by 2015*. Paris, France: UNESCO Institute for Statistics.
- University of Fort Hare Distance Education Project. (1998-2000) *Language, Literacy and Communication, Imithamo 1-6*. Alice, South Africa: University of Fort Hare.
- Unsworth, L. (2001). *Teaching multiliteracies across the curriculum: Changing contexts of text and image in classroom practice*. Buckingham, England: Open University Press.
- Vygotsky, L. S. (1978) *Mind in society: The development of the higher psychological processes*. Cambridge, MA: Harvard University Press.

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APPENDIX

Elements of a knowledge base for teaching	<i>Learners and Learning, Learning Guide Section 4</i> pages 113-148; <i>Reader Section 4</i> pages 131-166	<i>Language in Learning & Teaching, Learning Guide Unit 2</i> pages 57-82 <i>Reader Chapter 4</i> pages 155-168	<i>Language, Literacy and Communication, Umthamo 2</i> pages 1-48
Subject/disciplinary knowledge	LG: Learning to read (114-115) LG: What kinds of reading support school learning? (128-9; 131-132); LG: Different levels of reading (134-135) Reader: The act of study (133-136); The magic of reading (137-144); Guided adventures in learning (145-153)	LG: Importance of reading/learning to read/reading theory (57, 59, 61-62) LG: Different genres for different purposes (76-79) Reader: Understanding the reading process (155-168)	Whole language: the easy way to language development (38-42)
Pedagogic knowledge	LG: Developing active and independent readers (132-134) Reader: Developing communities of reading and learning (154-166)	LG: Textbook survey (58); Teaching reading in grade 1 (65); Making reading a focus of content lessons (71); Designing and using a reading questionnaire (73-75); Strategies for teaching/encouraging reading across the curriculum (80-82)	Classroom management and timetabling (2 & 4-9; Collecting iintsomi: (16-24); Using iintsomi in the classroom (25-36); Appendix: Making a Big Book (43-48)
Knowledge of how learners learn	LG: Module title; LG: What happens when we read a book? (116-119); Why is reading so difficult? (119-123); What makes reading a meaningful experience? (124-126)	LG: Introduction of metacognition (59) Reader: Understanding the reading process (155-168)	Benefits for learners of an integrated curriculum (10-13)
Knowledge of the curriculum	LG: Languages Learning Area (137); OBE (144-145)		OBE: (2); Languages Learning Area (23)
Contextual knowledge	LG: EAL readers (117); EAL readers' homes (126); Literacy in Africa: (127)	LG: References to EAL readers (60, 64, 66-67); Reading contexts in SA (68); Resource constraints in schools (82)	Oral literature (2); Collecting an iintsomi: (16-18 & 25); An iintsomi presented in both isiXhosa & English (19-21); Giving status to all languages of our province (23)
Knowledge of self as learner and teacher	LG: Responses to "half-truths" about reading (113); Views on differences between spoken & written	LG: Reflecting on self as young reader and as reader of academic texts (59,60,63, 64); Reflecting on teaching (68);	Reflections on work experiences; position on school timetables: (4,6,8,12); Reflections on experiencing "whole

Elements of a knowledge base for teaching	<i>Learners and Learning, Learning Guide Section 4</i> pages 113-148; Reader Section 4 pages 131-166	<i>Language in Learning & Teaching, Learning Guide Unit 2</i> pages 57-82 Reader Chapter 4 pages 155-168	<i>Language, Literacy and Communication, Umthamo 2</i> pages 1-48
	language (115); Reflections on own experiences of learning to read/being a reader: (121 & 125); Own views on teaching reading (122, 126 & 143) Reader: Personal response to ideas in readings (144 & 150)	Reflecting on views on reading (72) Reader: Reflecting on self as adult reader (155)	language” (15-16); Reflections on story-collecting experiences: (24, 26); Reflection on using the stories in the classroom (28 & 31 & 33 & 35)
Academic literacy	LG: Note-making: (115 & 125); turning notes into academic discourse (125); Understanding text structures (139-141)	LG: Surveying study material (58); Previewing a text (59); making notes & scanning a text for specific information (68)	

Table 3. Designers’ content choices for a section or unit on Reading in three South African teacher education texts

Academic literacy	Reflection on experiences	Content knowledge	Pedagogic knowledge	Classroom resources
	Page 113 ⁷ (3)			
Activity 31 (1)		Activity 31 (1)		
		Activity 32 (1)		
		Page 118 (3/1)		
	Page 121 (2)			
		Activity 33 (1)		
		Activity 34 (1)		
Activity 35 (1)	Activity 35 (1)	Activity 35 (1)		
		Activity 36 (2)		
		Activity 37 (1)		
		Activity 38 (1)		
		Activity 39 (1)		
Activity 40 (1)		Activity 40 (1)		
Activity 41 (1)		Activity 41 (1)		
		Activity 42 (2)		
		Page 146 (1)		
	Page 147 (3)	Page 147 (2)		

(1): tutorial in print; (2): reflective action guide; (3): dialogue

Table 4. A classification by purpose(s) and model(s) of activities in *Learners and Learning, Section Four, “Text as a context for learning”*

⁷ The section on “reading” in *Learners and Learning* includes four unnumbered activities and these are referred to by page number.

Academic literacy	Reflections on experience	Content knowledge	Pedagogic knowledge	Classroom resources
	Activity 4 (2/1)		Activity 4 (2)	
	Activity 5 (2)			Activity 5 (2)
				Activity 6 (2)
	Activity 7 (2)		Activity 7 (2)	
	Activity 8 (2)		Activity 8 (2)	
		Activity 9 (1)		
				Appendix(2)

Table 5. A classification by purpose(s) and model(s) of activities in *Language, Literacy and Communication, Umthamo 2, A Whole Language Approach, Unit 3 “Experiencing a Whole Language Approach” and Unit 4 “Introducing a Literature-based Whole Language Approach in a Primary Classroom”*

Academic literacy	Reflections on experiences	Content knowledge	Pedagogic knowledge	Classroom resources
Activity 20 (2)				Activity 20 (2)
Activity 21 (2)	Activity 21 (2)	Activity 21 (2)		
Activity 22 (1)		Activity 22 (2)		
	Activity 23 (2)			
		Activity 24 (1)	Activity 24 (1)	
Activity 25 (1)	Activity 25 (2)	Activity 25 (1)		
	Activity 26 (1/3)	Activity 26 (1/3)	Activity 26 (2)	Activity 26 (2)
	Activity 27 (1)	Activity 27 (1)		
		Activity 28 (1)		
	Activity 29 (2)	Activity 29 (2)	Activity 29 (2)	
	Activity 30 (2)			

Table 6. A classification by purpose(s) and model(s) of activities in *Language in Learning & Teaching (LILT), Unit 2, “Teaching Reading”*

Linguistic feature	Explanation
Lexicalisation	This term refers to a speaker / writer’s choice or selection of words. Designers can use different words to construct the same idea differently
Pronouns	Speakers’ or writers’ pronoun choices position listeners or readers differently through (i) the use of first, second or third person; (ii) generic use of “he” or “she”; (iii) inclusive or exclusive use of “we”; (iv) distinctions between “us” and “them”
Transitivity	This term is used for referring to speakers’ and writers’ choices of processes (verbs) in a text. The main processes are: <i>material</i> – doing; <i>relational</i> – being or having; <i>mental</i> – thinking, feeling, perceiving; <i>verbal</i> – saying; <i>behavioural</i> – physiological; <i>existential</i>
Voice	Active and passive voice construct participants in a clause as active “doers” or passive “done-tos”. The agent (“doer”) of an action can be omitted when the passive is used: <i>The window was broken.</i>
Nominalisation	This process is sometimes referred to as “nouncing a verb”. A process (verb) is transformed into an event or object or state: <i>Environmentalists opposed</i> (verbal process) <i>the new dam. There was opposition</i> (nominalisation) <i>from environmentalists to the new dam.</i>

Mood	A clause can be a statement (declarative), question (interrogative), offer, or command (directive / imperative) which positions a listener or reader to interact in particular ways with a spoken or written text . “...questions assume that readers have answers, statements that readers need information, and commands presuppose the right to tell others what to do” (Janks, 2010, p. 78)
Modality	To express “degrees” of certainty / uncertainty or of social obligation, speakers or writers choose a particular modal (for example, may, should, must) or modal adjunct (for example, possibly, always). Modality may be high (certain), median or low (uncertain)
Polarity	Polarity is linked to modality. At one “pole” is definite “yes” and at the other, definite “no”: <i>This is a cat. This isn't a cat.</i> The present tense is used to indicate that statements are absolutely certain and true for all time
Theme in the clause	This is the first unit of meaning in a clause: <i>Our cat died last Saturday. Last Saturday our cat died.</i> Units of meaning are foregrounded by being placed in theme position
Rheme in the clause	This is the information that follows the theme.
Logical connectors	Writers use these words and phrases (often conjunctions such as <i>although, however, therefore</i>) to make connections in a text and to structure arguments.
Intensifiers, adjectives, adverbs	These are used to express attitude, judgement, strength of feelings, etc (as do choice of polarity and modality): <i>The engineer made a very (intensifier) serious (adjective used to express a judgment) <i>design error.</i></i>

Table 7. Explanation of the linguistic features used in a critical pedagogic analysis of teacher education texts⁸

⁸ Explanations derived from Droga and Humphrey (2002); Halliday (1978, 1985); Janks (2010); Martin & Rose (2003); Polias (2001); Unsworth (2001).