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The emergence of ‘Piecemeal Pedagogy’: a case study of selected South African grade 4-7 English and Social Studies teachers' positions and practices toward Learning and Teaching Support Materials



Hannchen Elizabeth Koornhof

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

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Abstract

This thesis is located in the area of the enactment of learning materials. It examines the thinking and practices related to Learning and Teaching Support Materials (LTSM) of a small sample of South African teachers in Gauteng, across different school sectors, who work in the Intermediate Phase and taught English and/or Social Sciences. Most international research, conducted in relatively homogeneous environments show how teachers' enactment of learning materials always varied (from teacher to teacher) and was variable (within the practices of a single teacher). A gap in international research exists in the narrow interpretation of LTSM and assumptions that learners in a class had similar language facility and backgrounds. In this thesis, learning materials were of necessity interpreted more widely than textbooks, and the research also spanned diverse social, linguistic and economic teaching environments for comparative purposes. The policy context of South Africa comprises multiple curriculum changes and a socio-political context of vast inequalities between schools. In a conceptual framework, devised for this research, the intersections in the teacher-learner-LTSM classroom triad were examined. This framework targets three central areas: how the affordances of materials were used, how coherence was achieved in lessons and across the curriculum, and how each of the triad's elements contributed to the overall impact of LTSM delivery and reception. The main findings from 26 classroom observation sessions, 18 interviews and an analysis of textual artefacts (LTSM) are that textbooks were rarely used and that teachers' discourses about LTSM are of two kinds: a classroom management discourse (using a variety of materials can combat boredom / arouse interest) and a teacher professional identity discourse (teachers as materials developers). The result was that learners in all schools received a piecemeal exposure to the curriculum, through visual media and teachers' handouts in the form of worksheets. There were differences in how the teachers enacted these LTSM, indicating differences in teaching philosophies: some teachers aimed at making learners participants in the learning process, whereas others wanted to control the transmission process. Worksheets were mainly limited in content and made few demands on the learners and teachers. In this small-scale research study, the limited exposure that learners received to reading texts and related writing opportunities were linked to the kind of LTSM that were used and the teachers' enactment of these materials. Many of the teachers acknowledged that this situation has had a pronounced impact on learners' abilities to interpret texts and to express themselves adequately in class and during assessments. However, according to the teachers interviewed, the limited English proficiency of some learners, the density of the curriculum, the lack of confidence of some teachers and their sometimes difficult working conditions, all militate against changes to their practices.

Keywords:

LTSM/ LSM; enactment; textbooks; curriculum; curriculum change; worksheets; visual teaching materials; South African education; language of instruction.

DECLARATION

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

Hannchen Elizabeth Koornhof

day of August in the year 2017

This thesis is dedicated to all those teachers who work relentlessly and courageously, sometimes against considerable odds to improve the lives of their learners through education. A number of them gave me entrance into their classrooms and thinking. Such extraordinary commitment and effort is cause for hope for the future of South African education.

It is also dedicated to my father, Hendrik Koornhof, who served as a life-long inspiration in all ways, but especially in terms of what it means to do research.

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Table of Abbreviations

ANA	Annual National Assessments
BCC	Boston City Campus
BICS	Basic Interpersonal Communicative Skills
CALP	Cognitive Academic Language Proficiency
CAPS	Curriculum Assessment Policy Statement
CEP	Comprehensive English Practice
DBE	Department of Basic Education
DoE	Department of Education
ECM	Educative Curriculum Materials
ELL	English Language Learning
ESL	English as a Second / Additional Language
FAL	First Additional Language
GDE	Gauteng Department of Education
GPLMS	Gauteng Primary Language and Mathematical Strategy
HL	Home Language
HOD	Head of Department
IQMS	Integrated Quality Management Systems
LoLT	Language of Learning and Teaching
LSM	Learning Support Materials
LTSM	Learner and Teacher Support Materials
MEC	Member of the Executive Council
MKT	Mathematical Knowledge for Teaching
MT	Mother-tongue
NGO	Non-Governmental Organisations
OBE	Outcomes Based Education
PDC	Pedagogical design capacity
SACE	South African Council of Educators
SER	School Effectiveness Research
SES	Socio-economic situation
SOC	Sense of coherence
SS	Social Sciences
TG	Teachers' guides
TIMMS	Third International Mathematics and Science Study

Chapter 1 Introduction

Background

When Curriculum 2005 was introduced in South Africa in 1997, the rug was pulled out from under almost every teacher in the country. The dramatic pedagogical changes the new curriculum demanded stood in sharp contrast with what most teachers had practised until then.

'Although there may have been some teachers whose practices could be characterised as autonomous or even collegial (Hargreaves, 2000), by far the majority of teachers in South Africa operated within what he terms the "pre-professional" sphere' (Taylor, Muller, & Sithole, 2013). Hargreaves describes this category as follows: "The basic teaching methods of mass education were most commonly ones of recitation or lecturing, along with note-taking, question-and-answer, and seatwork" (Hargreaves, 2000, p. 154). Central to such teaching was a textbook on each desk (in well-resourced schools) or textbook notes on the board (in under-resourced schools), borne out by the figures on expenditure on textbooks for different race groups under apartheid (Land, 2003). At the heart of the method of teaching described above lie two important factors: "…the teachers' predominant practical concern…with the overall instructional 'flow' of the lesson – with how well it is proceeding to its intended conclusion; and maintaining order as it does so" (Clark & Peterson, 1986 cited by Hargreaves, 2000, p. 155). In other words, the teacher is the central factor in knowledge transmission and her transmission method is designed to achieve coherence and effective classroom management.

Curriculum 2005 specifically set out to overturn such practice. As Chisholm (2003, p. 3) explains:

> As the guiding philosophy of C2005 in 1997 it was, for its initiators, the pedagogical route out of apartheid education. In its emphasis on results and success, on outcomes and their possibility of achievement by all at different paces and times rather than on

> a subject-bound, content-laden curriculum, it constituted the decisive break with all that was limiting and stultifying and in the content and pedagogy of [apartheid] education. OBE [Outcomes Based Education] and C2005 provided a broad framework for the development of an alternative to apartheid education that was open, non-prescriptive and reliant on teachers creating their own learning programmes and learning support materials (Department of Education [DoE], 1997a, b and n.d.)

Very few teachers in South Africa at the time either understood such a pedagogical shift, or, even if they did, had the knowledge and skills required to make such a shift. This was recognised by the DoE and various education Non-Governmental Organisations (NGOs) in several ways: from the intensive training and many interventions that were introduced to explain OBE; to the distressing learners' results in various large-scale testing situations; and, to the eventual revision of the curriculum to provide greater guidance and support for teachers (Taylor, 2007).

Curriculum 2005, introduced gradually from 1997 onwards was not the only new policy that required great adjustments in practice from teachers: "…over 160 policy texts were produced over about a 16-year period (although many of the policy texts were linked)" (Nkomo, Sayed & Kanjee, 2013, p. 3). Examples of new policies included "The South African Schools' Act" in 1996, which demanded a serious revision on how discipline needed to be maintained in schools. Another policy was the "Norms and Standards for Educators" in 2000, which demanded that teachers expand their roles into curriculum developers, researchers and knowledge creators among other roles. There was also the "Integrated Quality Management Systems" (IQMS) in 2003 that imposed performance management processes on teachers. The newly formed South African Council of Educators (SACE) in 2000 introduced the points system, which made Continuing Professional Teacher Development mandatory. Finally, there was the Annual National Assessments (ANAs), introduced in 2011, which evaluated schools on their learners' performance[1]. All of these policies combined aimed to pressurise teachers into greater

[1] According to a draft report on the ANAs by the DBE (2016, p. 6): "In 2015, there was an impasse with teacher unions on the writing and impact of ANA. The ANA programme is currently under review and there has been extensive consultation with the Teacher Unions to establish suitable models that are fit for purpose."

efficiency and efficacy. Simultaneously, other major changes relating to language and integration issues were also taking place in schools.

This thesis will argue that teachers, in an attempt to establish some foothold amid the avalanche of changes over the last two decades, have used Learner and Teacher Support Materials (LTSM) as one way to assert their centrality in the teaching process. In addition, LTSM is used as a means for classroom management. When Hoadley (2012, p. 11) in her review of the classroom-based literature research in South Africa finds that one of the dominant descriptive features of primary schools is "a lack of print materials in classrooms, especially textbooks", this finding may well be because of teachers' choices rather than a lack of textbook provision. It gives rise to a pedagogy, which I term a *piecemeal pedagogy*, where teachers withhold materials from learners in order to provide "worksheets" in line with what they want to teach. In addition, these worksheets (when pasted into learner books) serve as evidence of the work done in the classroom to government officials. But worksheets are also a testament to a way of teaching that has become entrenched in South African schools. This is a result, in part, of ideological and identity issues; a defence mechanism against managerialist policy; and, to provide learners with a constant variety of materials. Teachers also see technology, and the way fragmentation is part of digital experience, as attractive to the learners. They perceive technology to be in competition with "school" experience. Teachers will select or create materials that have the power to entertain and hold the learners' attention and most of these LTSM appear to be in the mould of materials that mimic digital forms of learning. Such materials have the following characteristics: a strong visual component; they rely on a mediation style that is heavily dependent on aural and oral input; and, a frequent change of focus. The need to provide edutainment is one of the reasons teachers in well-resourced schools give for learners not being given textbooks. It seems that learners do not suffer adverse effects from the lack of books, if test results are used as a measure (Department of Performance Monitoring and Evaluation, 2012). Two of the reasons for this situation are due to the teachers' skills and pedagogical knowledge, and access to better resources. There is also a greater uniformity in classroom composition (as far as class and language is concerned) and smaller class sizes in these schools.

This thesis also draws a distinction between "variation" and "deviation" as the defining difference between LTSM enactment that is cohesive or not. In attempts to create multi-

modal and multi-faceted approaches to the curriculum's topics, I observed multiple shifts in the way LTSM were used and presented in the classrooms. These shifts could take the form of deviation from a teaching topic, or of variations on the topic. Furthermore, the way in which LTSM are used, suggest strongly that many teachers seek materials that will enhance the learners' performance in the kind of ways formal testing requires. The testing format of the ANAs is mainly single-word answers, multiple choice or short phrases to test recall knowledge. This kind of format encourages the use of worksheets that demand the same kind of input as the ANAs.

Overwhelmingly, the teachers (across different school sectors, but especially in the public-school sector) in this research used visual materials to transmit information. This means that teaching is mediated by expecting the learners to look and listen, and worksheets are used for the purpose of "consolidation". The traditional triad of teacher, learner and textbook is diminished to a dyad of teacher and learner only. The teacher-created worksheets are an extension of the teachers' domain, and the textbook, as a third and partially independent element, has been largely removed. Taylor (2007) refers to worksheets as a "disease", and here are his reasons:

> …we hardly ever see textbooks now in most subjects, and what little textual material the children see is mainly in the form of worksheets. The aversion by South African educators to textbooks is a huge problem, because a good textbook contains, in a single source, a comprehensive study programme for the year: it lays the whole curriculum out systematically, providing expositions of the concepts, definitions of the terms and symbols of the subject in question, worked examples of standard and non-standard problems, lots of graded exercises, and answers. There certainly are examples of bad textbooks in the country, but there are many good textbooks, and these provide the single most valuable teaching and learning resource. In the absence of textbooks children only see fragments of the curriculum, presented through stand-alone worksheets or isolated, short exercises written on the board" (Taylor, 2007, p. 7).

Teachers opt for worksheets because it solves or disguises a number of problems, while simultaneously allowing the teachers to maintain a semblance of compliance with the curriculum's demands. By filling in single-word answers or short phrases, this means that the learners need hardly read or write, and the worksheets are easy and quick to mark.

Learners (or their peers) can correct the answers, and this creates the appearance that the work has been understood or covered. In addition, teachers do not risk learners' boredom (one of their greatest fears because of the implications it has for classroom management) by having to do lengthier exercises of work in the classroom. If worksheets are not done for homework, then they can be filled in quickly before school or during break, so worksheets absolve both the learners and their parents from having to grapple with more complex tasks. Most important of all, worksheets mean that the teachers control what is provided to the learners, and they do not have to contend with the prescriptions of a systematic textbook. This means that teachers do not have to engage with difficult sections of the textbooks for themselves or their learners. If they did so, then this would slow down the teaching process. The teachers are afraid of falling behind in the pursuit of coverage, which is prescribed to them by the curriculum and intervention programmes like the Gauteng Primary Language and Mathematical Strategy (GPLMS) that sets teaching activities in time units.

Textbook nostalgia

Despite the move to materials assemblage and away from formal textbook use, many teachers (as well as public institutions and the media) regard textbooks with both nostalgia and as an important component of the learning process.

Judge Tuchten, in his judgement of the case on the non-delivery of textbooks in Limpopo, pronounced as follows:

> 47. Textbooks have been part of the stock in trade of the educator for centuries. There is something special about a book. It has a very long life, far longer than that of the individual reader. It is a low tech (nology) device. It is accessible to anyone who can read the language in which it has been written. During the hours of daylight it can be read (accessed) without any other supporting technology at all. It needs no maintenance except the occasional strip of adhesive tape. It can accommodate the reader's own thoughts in the form of jottings and emphases, it can accompany the reader wherever she goes, even to prison, to war and into exile. At night, it can be accessed with the help of the simplest technology, like a candle. What is written on one of its pages can readily be compared with what is on other pages by simply using

bookmarks. It is always available, without mediation: a book in the hands of a reader cannot be censored or altered to distort what is written in it by anyone trying to exercise power over the reader. Books are the essential tools, even weapons, of free people. That is why tyrants throughout the ages have sought to restrict and even deny the access of their subjects to the written word and to burn and otherwise destroy the books of those whose cultures and ideas they seek to suppress.

48. Perhaps one day, books will be superseded by other stores of information. But that day has, in my judgment, not yet arrived. The dictum of Kollapen J to which I have referred is binding on me unless I find it is clearly wrong. No such argument was addressed to me. I think, with respect, that the learned judge was right. Textbooks are essential to all forms of education. Textbooks are therefore a component of basic education….

50. It is argued by the DBE [Department of Basic Education] that the teacher can fulfil the functions of a textbook. This is of course true up to a point. But again, the resources are complementary. What a teacher tells her class is ephemeral and subject to the perceptions, preconceptions and world view of the individual teacher. An inattentive pupil may miss entirely what the teacher is saying, with no way of retrieving the information being imparted. Notes prepared by teachers will vary in quality from one individual to another. The absence of textbooks places an additional workload on the teacher. And there is evidence before me that in some schools in Limpopo, there are no copying facilities (Gauteng High Court, 5 May 2014).

This is a lengthy and extensive quotation, but it captures a great deal of how textbooks are remembered by those who experienced them at school and by those who have a strong faith in and affinity for "book" learning, or simply books. It speaks to the very serious current problem of the unavailability of knowledge sources for learners outside of what the teachers provide. However, it also does a number of other things.

First, it presupposes the longevity of books and the ideas they contain. The most radical disruption brought about by digital technology is the doubt that it has sown about the truth of the presupposition stated in the previous sentence. There are millions of sites that are available to an internet searcher looking for information. However, there are difficulties

associated with using the Internet: the variability (and often contradictory nature) of the information contained in sites; the opportunity for information manipulation; and, the rapid changes that seem to happen in the fields of knowledge development. These difficulties cast doubts on the value of a book that "has a very long life, far longer than that of the individual reader". This is because a single source, specific to a particular time, appears outdated and without nuance to modern learners and readers. In elevating "book" knowledge, judge Tuchten stands at the polar opposite of where many teachers and learners stand. However, at the same time, he refers back to an era where "book" learning was seen to be the route to upward mobility, to greater intellectual access to cultural and scientific understanding, and to personal satisfaction that could be expressed and discussed with similar-minded peers. The notion of the "book" as a symbol for "knowledge" hooks directly into a general perception of many parents and learners in South Africa that education could be the pathway out of poverty and hardship, for which many poor people are happy to sacrifice a great deal.

Second, it assumes a high level of interaction with texts in the form of "jottings and emphases" – a practice that requires a great deal of reading sophistication and that needs to be taught. "Reading" is an ever-expanding exercise in gaining deeper and better interpretation skills. The kinds of practices described in the passage above, include comparison, reflection, cross-referencing, and making inferences. University students, professionals in different scientific and commercial fields and, indeed, teachers, often lack these very skills. Speed reading, a superficial understanding of issues, text talk, tweets, power point slides (as a substitute for explanatory text), YouTube and the rapid movement from site to site make careful, reflective and analytical reading a rare exercise.

Third, it romanticises the book as a "weapon of free people". This is decidedly true, when readers are able to read analytically and understand the subtexts and meta-levels at which texts operate and can discern bias and inaccuracy. It is entirely untrue where readers are uncritical and accept what is provided as the basis from which they will progress and achieve success. This is one of the criticisms levelled at apartheid textbooks, and part of the reason why it was easy to build resistance to textbooks in the early part of education reform in South Africa.

Fourth, the undertone of judge Tuchten's thoughts on books is the satisfying and pleasurable experiences that proficient readers have while reading. It is very distant from those readers who have problems with the language in which the texts are written. These readers often have limited decoding skills which makes reading onerous and slow. They also lack knowledge of reading conventions, and this could lead to both frustration and misunderstanding. For such readers, "mediation" of texts is essential and it is not necessarily true that "a book in the hands of [such] a reader cannot be censored or altered to distort what is written in it...". Misinterpretation or a half-understood interpretation of a text can sometimes be as detrimental as blatant propaganda.

Fifth, Judge Tuchten expounds on whether a teacher can fulfil the functions of a textbook. He points out the limitations of such a position and then refers directly to the preferred LTSM of teachers, namely, notes. Then he pinpoints one of the drawbacks of this kind of LTSM, namely, the variable quality of teachers' notes. What clearly underlies his argument is the need for some kind of uniformity to what learners are exposed to in the classroom. He argues that this can be accomplished through the judicious use of textbooks.

Working well with textbooks – and for that matter with any text, whether it is visual, auditory, digital or a worksheet – needs the kinds of knowledge and skills promoted by curriculum 2005. This curriculum requires a critical thinker who is able independently to evaluate the merits of a text. These skills can only be acquired through a process of overt engagement with the elements that make up text and through the constant interrogation of texts. Most of the teachers who participated in this research do not engage with this task in an overt or covert way.

In general, this research found that teachers seldom use textbooks in the two learning areas examined in this study, namely English (both Home Language and First Additional Language) and Social Sciences. It was far more common for teachers to use materials from a variety of sources and worksheets. LTSM, also called Learning Support Materials (LSM) or curriculum materials in much of the international literature, refer to textbooks plus other materials used to facilitate the learning process. Textbooks are books that are specifically designed to be the primary text used in a classroom for a particular learning area and grade. Workbooks are a different kind of learning material, because they denote

books designed for learners to fill in exercises, although they may include occasional short information or reading texts.

Many schools in better resourced urban areas appear to have built up a resource bank of materials for teacher to consult and to make use of when they put together worksheets to fulfil ostensibly their learners' needs. Not one of the teachers interviewed for this research complained about a lack of materials. Indeed, most were enthusiastic about the readily available materials at their disposal. This is despite considerable problems that exist in procurement processes and textbook production.

In his 2010 State of the Nation address, President Zuma announced that the state would "assist teachers by providing detailed daily lesson plans [and] to students... easy-to-use workbooks in all 11 languages." Since then, this promise has been repeated several times. In addition, there is a claim that the three T's (teachers, textbooks and time) are a substantial part of the solution to South Africa's education problems. In the last few years, there has been an increasing discussion in both academic and media circles about the need for teaching and learning materials to become a central part of South African classrooms. The current emphasis on textbooks generally takes a "rights" form and the underlying assumption is that the availability of textbooks in classrooms will result in improved learning outcomes.

Contextual issues

Although there is no disputing the importance of materials for classroom use, there are a host of complex issues and dynamics, which influence the way in which these materials may be enacted by teachers and interpreted by learners. This complexity also affects the possible results of such an enactment and interpretation.

The ways textbooks are used and how teachers think about them is largely unknown in a South African context. This is true for teachers and classrooms across the wide spectrum of South African society – from quintile 5 (least-resourced) to quintile 1 (well-resourced) and independent schools.

This thesis examines three distinct, but interrelated ideas: that teachers have a way of thinking and ascribing meaning to LTSM; that the enactment of LTSM in the classroom

may or may not correspond to the way teachers articulate their understanding of the use of LTSM; and, that LTSM are designed with a particular agenda for the way they should be used. Insights into classroom practice and teachers' thinking about materials have significant implications for textbook development, education policy, and for teacher training.

The main research question aims to address how South African teachers understand and use LTSM. This thesis focuses on intermediate phase schoolteachers, because textbooks are generally introduced more systematically into this phase. Four schools in Gauteng, in three different social sectors, namely, urban township, ex-Model C and upmarket independent, were selected for this research. The selection was based on convenience, in the sense that schools within the sectors mentioned above that made themselves available during the time-frame I had for data collection were selected. The data were collected in 2014. I focused on two learning areas at these schools: English (both Further Additional Language and Home Language) and Social Sciences. The reason for this selection is that both of these subjects require a high degree of reading, and LTSM-use is at the heart of these learning areas. My purpose was to study the patterns and variations that emerged and how they presented themselves.

The sub-questions looked at the following:

1. What are the various ways in which teachers talk about LTSM?
2. What distinct patterns of LTSM enactment can be observed?
3. What are the underlying assumptions embedded in the LTSM that teachers use?
4. What are the implications of the discourse and enactment patterns for policy development and teacher training?

I used three methods to investigate these questions: twenty-two interviews to examine sub-question one, twenty-eight classroom observations for sub-question two and focused textbook and worksheet analysis for question three. Sub-question number four was addressed by using a combination of all the data. I devised a framework which focused on the various intersections between the teacher-textbook-learner triad, and I used it to examine the data.

Teacher discourse and practice

Discourse is defined as the way in which communication takes place within a field, which indicate how ideas and language has been shaped by experience, ideologies and policy, amongst other factors. The way teachers talk about LTSM reveals the discourse that they have constructed for themselves around the role LTSM play in the pedagogical process. In order to explicate the relevance of teachers' discourse, it is useful to draw on phenomenographic theory. Whereas phenomenology focuses on direct experience, phenomenography deals with "both the conceptual and the experiential" (Marton, 1981, p. 181). Richardson (1999) uses the work of Prosser (1993) to define phenomenographic research as interested in the multiple interpretations people give to a particular phenomenon. Rogoff and Lave (1984) make a distinction between experience and understanding, by using the example of the colour "blue": it may be understood in relation to how a viewer experiences blue in art; and, it may also be understood as a chemical composition that reflects a particular wavelength of light while absorbing all others. Applying this distinction, allows us to make perceptual judgements, which may be different to our conceptual judgements and theoretical propositions. This distinction helps to explain how teachers may have perceptual judgements both about the content in textbooks and the way in which they could be used, while simultaneously holding different conceptual or theoretical positions from their perceptual judgements or those that they use in practice.

Enactment implies more than practice. Definitions of enactment refer to three different fields: law, psychology and the stage (Oxford English Dictionary, online). These three fields come together in a classroom context: how policy is understood and interpreted; the intricate psycho-social dynamics between teachers, learners and texts; and, how the teacher, who is usually the central interpreter of the texts, presents them. All of these ideas are interwoven in the notion of LTSM enactment (Ciborowski, 1995; Ornstein, 1994). Many studies on teacher enactment hint at the notion that the kinds of LTSM used have a strong influence on pedagogical practice (Cohen, 2011). This study confirms that this is not only the case in the classrooms under discussion, but also that the kinds of LTSM have a profound effect on what and how teachers teach.

Studying the events that surround the use of LTSM in classrooms, as well as the teachers' presentation of them, creates a relief background against which to view teachers' discourse on LTSM. This approach is based on the understanding that it is possible (and likely) that discourse and enactment inform one another, but sometimes they are contradictory. It is clear that LTSM-use will also differ according to different learning areas and grades. Sosniak & Stodolsky (1993) discuss how factors such as subject matter, personal style, class composition, assessment imperatives, school culture and community involvement all have an impact on the way teachers use textbooks and other materials. In addition, teacher training/education plays a role as well (Valencia, Place, Martin & Grossman, 2006), which makes for a complex and highly differentiated field of investigation.

The analysis of the LTSM links to what teachers say about their understanding of LTSM, how they enact these, but is in large measure about the way texts make assumptions about what teachers require for classroom use. It looks at how texts have changed to accommodate modern ways of enactment, in line with curriculum requirements, and the implications this has for teacher and learner engagement. This means that my analysis is not strictly a content analysis or one that only examines the effects of text, but one that also includes classroom dynamics that will intersect with the mediation of texts.

Rationale

The word "crisis" is readily used to describe the South African education system, because of the poor performance in both national and international assessments of learners across the school system. After the gradual introduction of C2005 in 1997, the Revised National Curriculum Statement (RNCS) came into being in 2003. Since 2011, various interventions were introduced by education departments and education organisations to address the deeply structural problems that underlie the education system. For example, there was another revised curriculum in the form of the Curriculum Assessment Policy Statement (CAPS) document, which was intended to script closely how implementation ought to take place (CAPS, First Additional Language (FAL) Intermediate Phase, 2011, pp. 16-103). The introduction of CAPS emphasised the use of textbooks and coincided with the introduction of government-produced workbooks. In addition, there were two significant developments: the introduction of annual assessment nationally for grades one

to six and nine; and, the production of government workbooks for primary school classrooms in Mathematics and Literacy either in Home Language (HL) or FAL from grades one to six, with the view to extending these workbooks to grade nine.

The subtext of all these interventions is the same: there needs to be more support as well as control over what teachers and learners are doing in their classrooms. The line these forms of support and control follow is from the curriculum to LTSM to testing. LTSM are generally viewed by both curriculum developers and textbook producers as the vehicles that enable curriculum implementation. Testing – where the results are used to rate schools and teachers, regardless of whether this is done internally or externally – is the way to prod teachers into an efficient use of LTSM.

There is a swing from "own materials" to the recent (since 2011) call to use textbooks/workbooks to solve learners' performance problems. This swing to textbooks is linked to an emphasis on tighter prescription and testing. This dramatic shift in education policy shows a change in the government's philosophical and pedagogical thinking, where the LTSM adopted gives an important insight into how this thinking translates into practice. A result is that teachers are expected to examine and revise their teaching practices and find ways to enact the LTSM sent to their classrooms. Many of these teachers have materials that they have worked with before. This raises questions about classroom practice concerning the teachers' use of LTSM: what are the materials that teachers use? Are they still using their own materials in the classroom? Are teachers using their own materials in combination with the government workbooks? Finally, are these workbooks viewed as sufficient LTSM on their own? These questions addressed when teachers spoke about their reasons for using specific kinds of LTSM and also during observations that revealed the teacher-enactment patterns of LTSM-use.

There is a paucity of research into the area of LTSM enactment in the South African context. In this thesis, I argue that there is much to be learnt by research into this topic. It raises important questions: what is the interface between policy and teachers' practice? Are there ways in which LTSM's use can alter teachers' beliefs and practices? Can LTSM provide an indirect remedy to improve the way learners learn? How best can LTSM be conceptualised so that teachers are able to implement this tool? It is impossible for a thesis to answer all of these questions. Investigating some of these questions may help to

uncover aspects of the ideas that inform the pedagogy adopted by the teachers who participated in this research.

This pedagogy is the consequence of a number of historical, contextual and policy factors. All these factors inform a way of thinking about education and teaching that is common across all kinds of South African schools. How this pedagogy is enacted varies, but there are similar principles which seem to guide the teachers' thinking.

Working with textbooks: a personal account

Learning materials under apartheid education were suffused with ideological content that was utterly repugnant. This applied particularly to the subjects based on language and the humanities, but the sciences, mathematics and commercial subjects were not exempt.

As a new teacher in 1978, with only an arts degree and without any professional training, the high school classroom was an intimidating space. As part of a progressive community, some its members were teachers, and I was in the fortunate position of being able to share interesting materials, based on popular print media, that friends had sourced from overseas in the classroom.

I soon learnt that good materials were the key not only to satisfying teaching, but also to classroom management, which was a problem that cropped up almost from the first day. This meant that I spent considerable amounts of time preparing interesting (but not necessarily good) materials. I also searched for materials to keep a class occupied and stimulated. All the learners had textbooks, but I chose to ignore these books as far as possible. I followed the prescribed syllabus, so that I could legitimately show its coverage through self-sourced or self-created reading passages and written exercises. In order to do this, I had to study the prescribed textbook and make adjustments to existing activities and exercises. This meant a careful examination of the ways in which questions and exercises were set. I developed a growing recognition of how difficult it was to set meaningful exercises and activities for the learners. Sometimes when I felt overloaded or exhausted, I used the least obnoxious bits of work from existing textbooks. It was a relief to know that the standards and quality would approximate what the school department expected.

In some schools where I taught, the teachers were expected to work in teams and to devise materials on themes. This was a fashion meant to enrich teaching and encourage learning across the curriculum. But the quality of materials that many colleagues and I produced was strikingly problematic. One of the problems was the use of overly ambitious activities that were unworkable in a classroom context. Another problem was that the materials were so out of line with expected standards they were hardly worth presenting to a class. Teachers often found reading materials that were on interesting and relevant topics, but the passages would be either too difficult or too simple for the learners.

When I started teaching matriculation learners (in their final year of school), I found that I could not avoid using textbooks and past papers. For the first time in my teaching career (still without a professional qualification), I started to rely on the systematic way in which a textbook led teacher and learners through the required materials. It was a revelation. Not only was my workload reduced, but I could rest assured that the exact standards were being met and that what I was doing was in line with what other teachers were doing, too. Another revelation was that I could work productively with materials that had some offensive content and use them by questioning and problematising the content as we encountered it in the classroom. In many ways, this was far more interesting and better for raising the learners' awareness. Technically, I found that the textbook was indispensable, and it was always possible to supplement it with other materials.

I taught mainly languages – both English (HL) and Afrikaans (SL) – where much of the learning is cumulative and fairly unsystematic. This meant that building upon prior knowledge and working towards higher levels of proficiency was important, but only certain parts of the syllabus required careful, systematic and sequential teaching. A great deal of the syllabus could be taught in a fairly fragmented way and would be relatively useful to learners, such as vocabulary-building exercises, parts of speech, poetry, literature and the different forms of writing. A language specialist would have made an effort to synthesise and integrate elements, but often the syllabus and practitioners presented language elements in discrete ways. Understanding how to create coherence and integration is a skill that needs to be taught or, as in my own case, it comes with a great deal of experience and is the result of trial and error. I shudder to think of the teaching I subjected my learners to as an inexperienced teacher. The teaching of content

subjects relies far more on systematising the work, and finding ways to present it using a clear and coherent framework. In the spells when I was required to teach History and Geography, I learnt something about how to work systematically.

As a school principal in 1991 and 1992, I never thought that the materials teachers used were part of the equation of sound teaching and learning. The teachers ordered (and used) textbooks and issues surrounding management, results and the administration dominated the running of the school. Where teachers or learners had problems, these related to socio-cultural, socio-economic or socio-psychological issues, which were mostly extremely complex.

On 1993, I left high school education to work on materials development in adult education. The organisation where I worked was meticulous about conceptualising learners' books, trialling and rewriting them. Fortunately, this was a well-funded non-governmental organisation. The work happened in teams, where the emphasis was on quality and sound pedagogy, and not profit or speed, so work happened at a pain-staking pace. There was little understanding of the commerce of publishing at this organisation. But there were gains made via uncovering the many layers demanded by materials development: an understanding of the two diverse audiences (teachers on the one hand, and learners on the other hand); the constraints presented by time, language and socio-structural issues; the accreditation process; and, what counted as necessary and useful knowledge. All of these factors required analysis and experiments with their implementation.

Next (in 1996), I worked for commercial publishers – first as a commissioning editor and later as a free-lance editor, writer and project manager. In this context, I learnt about the processes that dictated how work happened in cost-effective ways with impossibly tight deadlines. By working with different teams of writers and designers, I began to cultivate an understanding of the thinking that is required to create a product that will appeal to submissions committees and learners.

My entry into the publishing world coincided with South Africa's entry into democratic governance. As the new curriculum was being designed, many publishers were trying to second-guess the curriculum to gain a competitive advantage. This led to books being

written and revised many times. The first curriculum (C2005), provided publishers with a monumental headache, because the curriculum documents almost defied interpretation. There were a number of different outcomes (general and specific), and assessment standards that needed to be listed and shown to be covered at the beginning of chapters (or integrated within the chapters). This led to workshops and long meetings to find ways to produce acceptable textbooks and to reassure teachers that the curriculum was covered. The skills-based approach led to books that focused heavily on activities which demonstrated an application of knowledge and skills. Many innovative ideas were introduced into textbooks, and these were entirely foreign to the kinds of books teachers had experienced under apartheid education. In addition, colour and a lot of illustrations and photographs filled pages to assist with overcoming possible language problems. The textbooks tried to create more palatable ways to work with a curriculum that was in many ways technical and mechanical. It was during this time that Teachers' Guides entered the stage. Teachers were strongly encouraged (to little or no avail) to use these guides as complementary to the learners' books, because the latter could not contain all the information based on the curriculum.

With every revision of the curriculum (1997, 2003, and 2011), new and more textbooks were produced. The industry worked at an extraordinary pace and it took substantial financial risks in order to be at the forefront of education change in South Africa. Big international publishing houses were subsidised by their counterparts in other countries, but the local companies found it hard going. Buying patterns became unpredictable and it was clear that the way materials were used in schools had changed from the steady day-by-day use of the textbooks to their sporadic and fragmented use. It depended on what teachers liked and/or decided to use, and photocopied worksheets took over from the textbook-on-every-desk approach. Many publishers tried to combat this trend by creating photocopiable sheets, and they tried to put a halt to the wholesale copying of textbook materials. Some publishers also started to produce workbooks in concert with learners' books.

It was mainly as a textbook writer that I learnt about criteria that inform quality materials design and evaluation. You develop a hyper-awareness of how teachers and learners might experience the product. This criterion is always uppermost in a writer's mind, and

it leads to aiming for the goals of clarity and captivating content, which are also in line with the curriculum's requirements.

It was commonly accepted in the publishing world that good textbooks were a bonus: a good teacher could produce excellent teaching despite poor materials and a poor teacher would produce dismal teaching despite excellent materials. This meant that publishers, writers and designers acknowledged the importance of a teacher's enactment and mediation of the materials. Teachers' Guides, workshops and videos were developed by publishers in an attempt to show teachers how to work with specific materials.

I learnt a very valuable lesson about the enactment and mediation of materials when Boston City Campus (BCC), a tertiary institution that provided students with video and actual lectures for both in-house courses and UNISA courses, approached me in 1998 to produce materials for them. In addition to comprehensive course materials, BCC required that these materials were presented using video to imaginary students. The presenter is meant to cover content, to anticipate problem areas, possible questions and to raise interesting points for reflection. This filming of my materials was an intense and difficult experience. But it also made clear where materials needed to be expanded, how they could be misinterpreted, and whether the tasks were useful. During this time, I was asked to present a course that I had not written in a subject area (banking laws and financial regulations) which was unfamiliar to me. Initially, I resisted, but was eventually persuaded on the proviso that I would be extensively briefed by the author, and was given additional materials to consult. I did far more preparation than for an exam before the filming took place. While I found that I was able to cover the content, it did not mean that I was able to teach the course. It was impossible to gauge where possible problem areas could arise or where contentious legislation might present dilemmas. In other words, although I was able to do a robotic enactment of the curriculum, it was impossible to mediate it in ways that would have been useful to students.

Having taught students, from 2010 onwards, who are training to be teachers, I find it striking how little attention is given during their degree to their use of formal or commercial materials in classrooms. In line with what international literature reveals of teacher education elsewhere, there is a strong emphasis on the students selecting and

creating their own materials at the University of the Witwatersrand (Wits). In addition, there is a mistaken assumption that working with textbooks requires no training.

This study draws on the different experiences I have had in working with materials over many years. Doing research with teachers in their classrooms and in interviews has added immeasurably to my understanding that working with LTSM is neither simple nor a strategic solution to the problems experienced in the field of education in South Africa.

The structure of the thesis

The thesis follows the conventional structure whereby the first chapter provides a background against which the research questions were posed and explains how and why these questions were chosen for investigation. The second chapter provides a literature review depicting the way in which international and local research has thought about the research issues and what current thinking about these issues suggest. In the third chapter, the research methods to be used are set out. The fourth chapter provides a detailed exposition of the conceptual framework that was devised for this thesis. In this chapter, which is pivotal to the understanding of the rest of the thesis, significant extension of current analytical tools in relation to LTSM-use is proposed and demonstrated to be useful. Chapters five, six, seven and eight present the observation data in a variety of ways: a fine-grained analysis of two lessons for comparative purposes, establishes some of the key concepts developed for discussion in this thesis, namely piecemeal pedagogy and how deviation (versus variation) serves to undermine coherence. This is done in chapter five. The value of books, especially textbooks (as a way of providing access to the curriculum to learners and stakeholders other than teachers only) is discussed in chapter six. The use of front-of-class presentation of visual material and the way in which the thoughtful use of the affordances of the material can enhance knowledge and ideas transmission is the focus of chapter seven. In chapter eight the data is analysed in relation to the patterns that emerge per grade, subject matter, and type of school. Chapter nine presents the interview data, and in chapter ten the implications of the all the data are discussed.

Conclusion

This chapter has sketched the background against which this study was undertaken. This included a turbulent policy arena, which made the working lives of teachers difficult, on the one hand, but also required a great deal of thinking about their practices, on the other hand,

as curriculum policies demanded different pedagogical strategies and philosophies had to be embraced. At a time when politicians and policy makers are now advocating a return to a prescriptive curriculum, together with the use of textbooks and substantially more testing of learners, it is unclear how teachers are negotiating these directives. Public discourse, which frames textbooks as a rights issue, which is infused with textbook nostalgia, and notions of textbooks as a remedy for poor performance of learners, cloud the realities of classroom practice and dynamics. South African classrooms are subject to dramatic inequalities and differences. This small-scale study, based on the Gauteng urban environment, in which four different kinds of schools participated, tries to uncover some of the ways in which teachers think about and use LTSM. The next chapter deals with international and South African literature and research on LTSM-use.

Chapter 2 Literature Review

Introduction

This review is structured in the following way: the first section discusses the international literature, and provides a brief summary of the various kinds of studies on textbooks; then it homes in on textbook enactment research. Related areas, such as the characteristic ways in which textbooks are written and presented, are also briefly discussed. The possibilities are explored of how these materials can be part of professional development. Next, a section on the South African context examines language issues and the availability of resources. The discussion section draws out (and pulls together) some of the strongly pertinent issues related to this study. In the final section, the position of this study is located in the field of textbook research.

International research

There are a number of traditions of research on the role of textbooks in education. Many studies examine the ideological content and the role of textbooks as an agent of socialisation and propaganda (see Wallace & Allen, 2008; Engelbrecht, 2008 for a South African perspective). A popular and related approach to textbook study looks at textbook discourse, examining how themes such as nationalism, gender relations, class and race are embedded in textbook content – either overtly, or, more often, covertly (Provenzo, Shaver & Bello, 2011). Another tradition examines the pedagogical features of textbooks, such as the ways recall, comprehension, application and creative types of activities are presented and integrated (Stacey & Vincent, 2009; Catley & Novick, 2008). Some of the School Effectiveness Research (SER) literature, which also examines the role of textbooks as an effective investment strategy in developing countries, falls into this category (Fuller & Clarke, 1994; Fuller & Heyneman, 1989; Hanushek & Woessmann,

2010; Lockheed & Verspoor, 1991; Spaull, 2012; Westbrook et al., 2013). A few studies have examined the philosophical and theoretical underpinnings that govern textbook analysis (see Nicholls, 2005 for an overview). An increasing number of research studies look at multimodality in textbooks, especially in relation to the role of technology as a substitute or complementary source of LTSM (Bezemer & Kress, 2008; Jewitt & Kress, 2003).

LTSM for English Language Learners is another area which has a rich tradition of research, and I include a review of some of these studies. Some of the literature in the traditions mentioned above may be tangentially relevant to the questions examined here, such as, teacher thinking about, and teacher enactment of LTSM. However, the literature chosen for review focusses mainly on how textbook use impacts on teachers and their teaching.

The literature reviewed for this study follows a particular line of thought: the intentions of curriculum developers are supposedly captured in textbooks, yet the teachers' enactment of textbooks is highly unpredictable. Nevertheless, the literature also claims that textbooks have an effect on the way teachers teach.

Textbooks as central tools for curriculum coverage

Publishers of textbooks use a curriculum as the basis for producing textbooks. It is instructive that an alternative term to textbooks, used in much of the literature, is curriculum materials. Teachers usually attach enormous importance to the covering of the curriculum, and according to Remillard and Bryans (2004), textbooks are more for the use of teachers than learners. Indeed, a study done in the United States of America (Stodolsky, 1988) claims that learners read very little of the textbook, estimating about a half a page for every five the teacher may read. However, this information needs to be viewed in the light of US textbooks that often run into hundreds of pages (Chavez Lopes, 2003).

Curricula differ, but as Valencia, Place, Martin and Grossman (2006), point out, a primary intention of a curriculum is to set standards and goals. These are translated into textbook format, by including activities or exercises, narrative or instructional text, and performance expectations or assessment tasks – sequenced in a way that corresponds to curricular guidelines (Valverde, et al., 2002). The textbook authors and publishers aim to

provide teachers with a helpful teaching tool, and the security that they have prepared their learners adequately for promotion or standardised testing by covering textbook content.

However, curricula are usually far more than a set of standards and goals developed to cater for specific age groups. Curricula reflect education policy, the philosophical/pedagogical thinking of the developers and typically content suggestions or prescriptions. From a policy perspective, textbooks are often used to create uniformity and to set in motion ways to improve education standards in a variety of ways, ranging from providing content knowledge to setting standards for testing (Crossley & Murby, 1994). This is particularly true in many developing countries where the textbook has been described as the "definition of the curriculum" (Westbury, as cited in Crossley & Murby, 1994; Lockheed & Verspoor, 1991). Sophisticated curricula make explicit a vision of learning and teaching. Shkedi (2009, p. 835) distinguishes between "two kinds of curriculum narrative: the curriculum frame narrative and the curriculum task (activities) narrative". The curriculum frame provides the vision where curriculum developers insert suitable topics, tasks and assessment criteria. It is mainly through an interpretation of the curriculum frame that ideological factors come into play and find their way into the presentation and enactment of materials. Although it is usually possible to find overt evidence of the stance taken by curriculum developers, such a stance may also be tacit. For example, in South Africa, C2005 made explicit that it provided teachers with almost unlimited freedom and autonomy to determine what they wanted to do with the structure of the curriculum. Sometimes, Shkedi (2009, p 835) claims, the frame and the activities lack congruence and this leads to both textbook writers and teachers having to create that congruence through the provision of their own (meta-) narratives. C2005 suggested that the professional status of teachers equipped them to be co-developers of the curriculum. The current CAPS curriculum positions teachers to be compliant and close followers of a clearly defined and highly detailed curriculum. It calls into question their autonomy and professionalism. As Anyon (2011, p. 110) points out contextual and ideological factors reflect the structural and power relations operating in a society where the presentation and enactment of materials takes place. What is taught in schools reflects the interests of certain powerful groups, such as the state and policy makers; how teachers enact these directives reflect the specific interests (in both senses of the word) of teachers.

A discussion of the ideological and political economy of curriculum and its material representation in textbooks leads to Apple's (1988, p. 32) analysis of curricula (and textbooks) as inherently "reductive" and "behaviourally based". Furthermore, he argues that they are designed to reduce the autonomy and independent thinking of teachers and learners: Through "intensification" (p. 41) of workload, teachers are reduced to technicians rather than professionals. In his later work, Apple (1995) expands this analysis to include the resistance and alternative implementation strategies used by teachers to counteract such disempowerment. The notion of the textbook as an instrument that deskills teachers has been widely debated and largely discounted (Ball & Cohen, 1996; Davis & Krajcik, 2005; Forbes & Davis, 2010; Grossman & Thompson, 2008; Hutchinson & Torres, 1994; Kaufmann, 2002; Valencia et al., 2006), especially with regard to beginning teachers who establish and refine their practice consistently through the use of textbooks. Nevertheless, the possibility of deskilling teachers through curricula and textbooks remains a concern. Crawford (2004), Hart (2002) and Stoffels (2005a; 2005b) demonstrate that textbooks are frequently used as a prop in South African classrooms, where reliance on materials for activities as proof of curriculum coverage is the operating principle of teacher use.

Curriculum developers have a social agenda, usually determined by specific social and historical factors. Table 1 in Smith (2000) provides a neat summary of four philosophical / pedagogical approaches that inform modern curricula, where he distinguishes between the liberal educators, the scientific curriculum makers, the developmentalists, and the social meliorists. This does not imply that these are the only approaches, but these classifications are useful when applied to many curricula, and they specifically help to understand South African ones.

A desire for social redress dominated the agenda for curriculum makers in a newly democratic South Africa, which was informed by a need to undo the harm done by apartheid education. A sophisticated approach that combined three major approaches to curriculum construction, namely, a scientific, a developmental and a social amelioration approach were adopted (Revised National Curriculum Statement (RNCS), 2003; Smith, 2000). Curriculum developers envisaged that through a skills-based approach, learners could be prepared for the international and national economic pressures that would require self-starters and entrepreneurs. Hand in hand with this idea, the curriculum

developers recognised that there were considerable developmental gaps to fill. Given the complexity of South African society, these gaps would need to be negotiated strategically. The principles of egalitarianism, democracy and social responsibility featured very strongly in the formulation of all the curriculum statements that emerged over the last few decades (C2005, RNCS, 2003, CAPS, 2011, Chisholm, 2005a). As Botha (2002) put it: "The new curriculum contains elements of almost every innovation that has ever been tried in the educational field."

Four philosophical / pedagogical approaches that inform modern curricula devised by Smith (2000)

	THE LIBERAL EDUCATORS	THE SCIENTIFIC CURRICULUM MAKERS	THE DEVELOP-MENTALISTS	THE SOCIAL MELIORISTS
Orientation	Guardians of an ancient tradition tied to the power of reason and the finest elements of the Western cultural heritage	Human life consists in the performance of specific activities. Education that prepares for life is one that prepares definitely and adequately for these specific activities	The natural order of development in the child was the most significant and scientifically defensible basis for determining what should be taught	Schools as a major, perhaps the principal, force for social change and social justice
Curriculum	Systematic development of reasoning power and the communication of "the canon"	Influenced by the rise of scientific management and notions of social efficiency. Focus on setting objectives (the statement of changes to take place in the students) and the organisation of schooling to meet these objectives	Sought a curriculum in harmony with the child's "real" interests, needs and learning patterns	Corruption and vice, inequalities of race and gender, and the abuse of privilege and power should be addressed directly with the aim of raising a new generation equipped to deal effectively with these abuses
Key thinkers	Charles W. Taylor	Franklin Bobbitt and Ralph W. Tyler	G. Stanley Hall	Lester Frank Ward
Linked to	transmission	product	process	praxis

Table 1 Four philosophical / pedagogical approaches that inform modern curricula devised by Smith (2000)

Selection committees and catalogues which list suitable textbooks are indicative of a belief that even highly sophisticated curricula (South Africa being a case in point) can be

captured in textbooks. These textbooks will suffice for the learning of a subject area at a particular level, as long as these textbooks provide enough variation to accommodate different learner constituencies and multiple narrative inputs (Koornhof, 2011). Part of the debate around the effectiveness of textbooks centres on the use of a curriculum as the template for learning, because learning is acknowledged to derive from a far larger pool of resources – including teachers' expertise (Charalambous & Hill, 2012; Remillard, 2005). Ideally, as researchers (Crawford, 2004; Davis & Krajcik, 2005; Forbes & Davis, 2010; Remillard, 1999; Valencia, et al. 2006) point out, there is a dialectical interplay between teacher knowledge and experience, which supplements, questions and adapts what happens in a classroom where learners and LTSM influence lessons. There is also an intersection between teacher knowledge and experience and the textbook, which provides structure, sequence, ideas and information, and this interaction shapes teaching.

In their extensive study on the way in which mathematics and social science materials were used in grade four classrooms, Sosniak and Stodalsky (1993) make a number of important observations: aside from the distinctive ways in which teachers use materials, the pattern of textbook use across subjects is not consistent even for a single teacher. A great deal depends on the subject that is being taught, as well as the "multiple influences operating in the teaching environment" (Sosniak & Stodalsky, 1993, p. 271). Especially at primary school level, teachers make selective and variable use of textbooks and the assumption that "teachers are instructional managers, shepherding students through materials" (Sosniak & Stodalsky, 1993, p. 251) appears to be baseless. Even where teachers display similar practices, these are underpinned by different thinking; the same is true in cases where similar thinking translates into different practices (Sosniak & Stodalsky, p. 259). In contrast, Valencia et al. (2006) in their examination of beginning teachers who were teaching reading found that while differences in teaching practices were evident, these differences were procedural, rather than conceptual. The use of textbooks among insecure teachers was "mechanistic" (Valencia et al. p. 106). They concluded that it is essential for pre-service courses to teach future teachers how to use LTSM and that this training continues with in-service teachers too. Forbes and Davis (2010, p. 822) in their study of pre-service science teachers show that teachers "prioritise the investigative dimensions of inquiry at the expense of explanation-construction" – a practice, they claim, which is not restricted to pre-service or beginning teachers. When

confronted with either new material or new content, teachers expend energy on the presentation of this new material, rather than its explication. Thus, they agree with the findings of Valencia et al. (2006).

Another suggestion made in the research conducted by Forbes & Davis (2010) is that LTSM almost inevitably require some measure of modification for classroom use. As Grossman and Thompson (2006, p. 2023) put it: "The limitations of curriculum materials, if not addressed by teachers, thus become limitations in what students are able to learn from the enacted curriculum". Schmidt, Porter, Floden, Freeman and Schwille and Stodolsky 1989 (as cited in Sosniak & Stodolsky, 1993, p. 250.) identify the patterns of textbook use: conscious attempts at fidelity to the textbook; selective use influenced by the students that are being taught; and selective use in support of curriculum objectives. It is probably fair to say that whether or not a specific teacher has a leaning towards one or another of these forms of textbook usage, there are invariably times when determinants like student population or pressure to conform to curriculum objectives will lead to some modification – in other words, where the teaching environment shapes textbooks use (Crawford, 2004; Kauffman, 2002; Remillard, 1999; Stodolsky, 1988; Valencia, et al., 2006). The ability to create focused improvisation of LTSM presupposes a high level of subject knowledge and teacher expertise. It also requires an astute evaluation of LTSM – all of which needs to be built into the pre-service teacher education curriculum (Kaufmann, 2002; Valencia et al., 2006). Nicely (1985) comments on the remarkably low proportion (10 - 15%) of higher order processes demanded in both the mathematics and social science textbooks that formed part of his investigation. It is true that textbooks with more high-order activities may result in these demands being met in the classroom (Stodolsky, 1988, p.110). But it is also true that teachers may avoid activities that they believe to be too difficult – either as a result of their own limited understanding or because of the problems they anticipate their learners will have (Stoffels, 2005b; Kariem, Langhan & Mpofu, 2010).

The nature of textbooks

Luke (1987, p. 246) talks of textbooks as: "potentially agents of mass enlightenment and/or social control" and this is shown in a brief reflection on the nature of textbooks. Traditional textbooks aim to present themselves as the bearers of culturally significant knowledge, in ways that create the impression of neutral objectivity. Olson (1987) explains how this is achieved partly through the use of certain linguistic structures, such as, explicit declarative sentences that do not invite criticism and are presented with what he terms "transcendental authority". Another way is through a process of dissociation of reader from a personable writer, who appears as a sage with universal knowledge and insights. This impression of neutral objectivity is derived from a long tradition established during the European Enlightenment. In form and style, these textbooks conform to what Foucault (1977, p. 126) describes as part of the seventeenth- and eighteenth-century conception of "scientific texts" that were "accepted on their own merits and positioned within an autonomous and coherent conceptual system of established truths and methods of verification. Authentification no longer required reference to the individual who produced them; the role of the author disappeared as an index of truthfulness". This was achieved through the explication of premises and the adoption of logical structure. However, de Castell, Luke, A. & Luke, C., (1989, p.251) also point to the rich diversity of a parallel tradition which produced satire and humour and a flexible prose. This resulted in a wide range of literary and journalistic prose styles that found their way into textbooks.

Teachers may be aware only subconsciously of the underlying authorial principles of textbook design. When evaluating textbooks, teachers consider other factors. In well-resourced contexts, high on the list of teachers' criteria for a textbook, is the need for it to appeal to learners. Other criteria are that the textbook is in line with curricula and exams, as well as being a time-saver (Sosniak & Stodolsky, 1993), These factors suggest that some teachers pay careful attention to content, activity variety, and layout of textbooks. Because publishers find themselves in competition with the Internet and other digital materials (Jewitt, 2006; Gueudet & Trouche, 2008), they attempt to reproduce the excitement and multimodality of digital media in some textbooks through use of colour, talking heads, a variety of fonts and text types and other techniques. Textbooks can range visually from being extremely dull to very exciting; the same applies to content, but this

might not necessarily be discernible from appearance. Generally, though, Valverde et al. (2002) distinguish among five types of textbooks in the typology they developed as part of the Third International Mathematics and Science Study (TIMMS) study done in the nineties on 630 mathematics and science textbooks from thirty-eight countries. The characteristics of the five groups are captured in the following table:

Typology of Mathematics and Science textbooks investigated in the TIMMS study, Valverde, et al., pp. 158-159

	Group 1	Group2	Group 3	Group 4	Group 5
Size (format and number of pages)	Moderate	Small	Large	Moderate	Very large
Information presentation	Mainly exercises and problem sets	Mainly narratives	Mainly exercises	Mainly narratives	Mainly narratives
Level of cohesion	High: small number of strands on "world core" topics	High: small number of strands on a small number of "world core" topics	Moderate to low: moderate number of topics, fragmented content themes	Low: many thematic shifts	Low: many topics, cumbersome, fragmented
Level of complexity	High	Moderate to low	Moderate to low	Low	Low
Learning area	Mathematics	Mathematics and science	Mathematics	Science	Science

Table 2 Typology of Mathematics and Science textbooks investigated in the TIMMS study, Valverde, et al. pp. 158-159

According to the typology presented above, neither an emphasis on exercises nor on the narrative presentation of content is a factor that makes for superior textbooks. However, the size of the book and level of cohesion of the content appears to make a considerable difference. These findings are significant, given the weight placed on variety and extension in teacher education programmes and espoused by teachers themselves (Ball & Cohen, 1996; Crawford, 2004; Shkedi, 2009; Stoffels, 2005a; Valencia et al., 2006; Torres & Hutchinson, 1994). Sosniak and Stodolsky (1993, p. 264) conducted a study where teachers described their frustrations with textbooks, and these mirror the findings of Valverde et al. (2002). Some of the problems identified were the length of the textbook,

and the coverage of too many topics and themes, especially when these bear little relation to each other.

Educative Curriculum Materials (ECM): pre-set and in-set value

Ball & Cohen (1996) enter the "deskilling" debate set in motion by Apple (1986), by making a strong case for educative LTSM being able to promote the professional development of teachers. In other words, textbooks have the potential for in-built training depending on how the content is structured and laid out and when accompanied by Teachers' Guides (TGs). Subsequent empirical studies are divided on the issue with important distinctions made among pre-service, beginning and experienced teachers, a subject to which I will return.

Embedded in the majority of teacher education courses is the notion that "packaged" materials are inferior to what a "good" teacher can produce when considering the specific needs of their learners. This notion is fuelled in modern economies by access to materials available from countless internet sites, which allow teachers to make choices that are supposedly more in tune with the topic and the constituency they are working with (Bezemer & Kress, 2008; Selander, 2008). Teacher education courses usually make materials development part of their programmes. Student teachers are assessed on their ability to integrate pedagogical knowledge, which embrace a wide set of techniques based on particular philosophies, with content knowledge. This is well described in a number of studies (Ball & Feiman-Nemser, 1988; Crawford, 2004; Grossman & Thompson, 2008; Kauffman, 2002; Spielmann & Lloyd, 2010).

In the Crawford study (2004), the story of "Marla" is both evocative and illustrative of the experience of idealistic new teachers who have internalised the notion of a "good teacher": by employing a host of progressive strategies learnt at college to her teaching and designing her own materials. In interviews, after two months into her position as a beginning teacher, she lamented the highly-structured nature of the department and school (semi-rural, working class) that she was working in and the expectation that she used a particular set of materials. But eighteen months later, Marla was effusive in her praise for the programme that used set materials, and that it made her feel safe and helped her to be efficient. Crawford's most significant finding based on this research is how the use of set materials had not only transformed her views on good pedagogical practice, but also the

nature of her students – from ones who "had huge potential" to ones whose deficits required highly directive instruction (Crawford, 2004, pp. 208-209). Further, Crawford (2004) concluded that a high degree of deskilling had taken place in Marla's case, and that her altered perspective of the students was a direct result of the placing of packaged materials at the centre of her teaching. It is perhaps worth bearing in mind that a significant aspect of the use of textbooks and LTSM is for testing purposes and uniformity – in other words the grading of student performance based on a small and very specific sector of book knowledge at the expense of all kinds of alternative and related knowledge that might be of as much consequence for 'knowing' about a topic.

In contrast, an extensive research study was conducted in 2012 in the US with mathematics teachers, and the results were different. They were tested on their mathematical knowledge and then observed in classrooms while working with specific materials. The researchers concluded as follows:

> The analysis also helped develop three tentative hypotheses regarding the joint contribution of MKT [Mathematical Knowledge for Teaching] and the curriculum materials: when supportive and when followed closely, curriculum materials can lead to high-quality instruction, even for low-MKT teachers; in contrast, when unsupportive, they can lead to problematic instruction, particularly for low-MKT teachers; high-MKT teachers, on the other hand, might be able to compensate for some of the limitations of the curriculum materials and offer high-quality instruction. (Charalambous & Hill, 2012, p. 559)

These findings are significant in any context where teachers do not have sufficient subject and/or pedagogical knowledge for teaching. The emphasis on materials that have inbuilt support is significant. Following materials closely is a skill and it requires knowledge of both how and why materials are constructed in a particular way. Teachers have to adopt those materials and be motivated to render the content faithfully while ensuring that learner understanding is constantly monitored and nurtured – perhaps with supplementary or complementary materials. Importantly, the findings above also make distinctions between the requirements of different kinds of teachers.

Beginning teachers almost invariably use LTSM extensively, even when they have negative attitudes towards them (Ball & Feiman-Nemser, 1988; Valencia et al., 2006). Several studies show how the materials used by first-time teachers have a 'powerful

moulding influence on them' (Valencia et al., 2006, p. 114), a view echoed by Grossman and Thompson (2006, p. 2020). Researchers call repeatedly for far more considered training, especially at pre-service level, but also through in-service training, and for collegial, principals' and departmental support (Ball & Cohen, 1996; Forbes & Davis, 2010; Grossman & Thompson, 2006; Kaufmann, 2002; Valencia et al., 2006). The learning how to use LTSM is "fundamentally intertwined with their developing identities as teachers" (Forbes & Davis, 2010, p. 823). But the opposite is equally true: in the study conducted by Valencia et al. (2006), the four beginning teachers all chose, as far as possible, materials that matched their personalities and interests. In appealing for better and more sustained training on the use of LTSM at pre-service stage, Valencia et al. (2006, p. 117) stress the importance of teaching several approaches to the use of materials and not just the "fashionable or politically correct one". Davis and Krajcik (2005, p. 8) are emphatic about the importance of "the presence of multiple sources for professional development" – a position favoured by outcomes-based education.

Teachers' guides (TGs)

An important and sobering thought for publishers and policy developers is that few teachers read TGs (Stodolsky & Sosniak, 1993; Shkedi, 2009; Koornhof, 2011), which is often the location of more explicit curriculum content. Policy makers argue that textbooks (and especially TGs) are able to fill the knowledge gaps for teachers, as well as provide teachers with "tips" on how to teach particular content (DBE, 2011, p. 49). Ball and Cohen (1996), Collopy (2003), Davis and Krajcik (2005), and Hutchinson and Torres (1994) all argue (and in some cases, demonstrate) that textbooks have the potential to be "educative", because teachers learn both content and pedagogy as they work with materials. Publishers generally embed the overtly educative elements of their programmes in TGs or Manuals. These become "critical" when teachers have to implement new education policy (Valverde et al., 2002). Torres and Hutchinson (1994) make a number of strong claims: it is not possible to grow and develop as a teacher without the initial security and confidence that a textbook provides; the textbook becomes the springboard from which new and other ideas can be brought on board, and which gives these ideas a context; in a climate of educational change, policy implementation is almost impossible without the security that textbooks provide.

Policy change is most strongly mediated through the use of textbooks, according to Valverde et al. (2002, p. 170) and TGs. Research shows that teachers tend to be dismissive of TGs and rely on textbooks only (Sosniak & Stodolsky, 1993; Valencia et al., 2006). Ball & Feiman-Nemser (1988, p. 116) found that elementary teacher education students, without exception, were taught that good teachers avoid following textbooks and relying on TGs. Yet, as a result of lack of experience in terms of how to approach the curriculum, and also because of departmental imperatives to use specific textbooks, these beginner teachers were using not only textbooks, but also TGs regularly in their first teaching positions. They conclude that TGs "may provide a helpful scaffold for learning to think pedagogically about particular content", but are mainly sceptical about the usefulness of TGs that "are often not clear enough" and that "need to go well beyond simply giving directions".

Experienced teachers often turn to textbooks and TGs when policy revisions come into play, and they have to make substantial adjustments to their practice (Forbes & Davis, 2008, p. 928). Another reason is when they have to teach in content areas that are new to them (Davis & Krajcik, 2005). Generally, however, experienced teachers serve as "significant narrators" for new teachers in that they work with LTSM with facility. Sfard and Prusak (2005) examine how beginning teachers construct their teaching identities by appropriating those of influential, experienced teachers. These teachers become important role models – both as practitioners and as selectors of materials (Forbes & Davis, 2008, p. 912). What new teachers witness is the "framework that more experienced teachers have for organizing new ideas about teaching... [as well as] the knowledge that allows more experienced teachers to imagine how a lesson will play out" (Davis & Krajcik, 2005, p. 9). An implication of this comment means that experienced teachers think about textbooks in planning instruction, rather than thinking about textbooks as a tool to follow with learners (Sosniak & Stodalsky, 1993, p. 250).

Most research focuses on what teachers do in the classroom. Any discussion of textbooks with participants is related to the practices that were observed. In general, according to Sosniak and Stodolsky (1993), teachers are not particularly interested in talking about materials. Teachers tend to view materials as a small part of the mix of student interaction, classroom dynamics and conditions of work. Certainly, Sosniak & Stodolsky (1993, pp. 265-266), conclude that LTSM are "not driving forces in teachers' work" but "tools, often

with limited influence". Even though teachers acknowledge the importance of LTSM, when asked what they would request if they had an unlimited budget for additional resources, the teachers in the Valencia et al (2006, p. 117) study were unanimous: "someone on-site to help".

Most of the studies referred to in this section were done in contexts where resources were easily accessible. Teachers, even beginning teachers, had extensive training and a theoretical grasp of many important pedagogical principles, and they worked in classrooms that appeared relatively homogeneous. These studies provide many valuable insights, but it needs to be borne in mind that the specificities of a South African context may distort how the ideas in these studies apply to this context.

The South African environment

The use of materials in South African classrooms has hardly been studied. As is the case in international research, most of these studies look at the use of mathematics or science textbooks. Valverde et al. (2002) speculate that this is because mathematics and science are the least context-specific of all the learning areas. Despite this supposed feature of mathematics and science, the South African studies point to issues and problems that are a direct result of historical factors, linguistic dilemmas and policy results – all part of an explicitly South African context. These issues are: the haphazard use of materials and the insecurity that teachers feel in relation to their own teaching strategies and the role that LTSM could or should play in this (Adler, 2000; Hart, 2002; Koornhof 2011; Lemmer, Edwards & Rapule, 2008; Stoffels, 2005a; 2005b); the unavailability of suitable LTSM (Adler 2000; Fleisch, 2008; Fleisch, Taylor, Heroldt, & Sapire, 2011); and, the difficulties teachers (and learners) have in reading materials (Edwards & Ngwaru, 2011; Fleisch, 2008; Kariem, Langhan & Mpofu, 2010; Koornhof, 2011; O' Connor & Geiger, 2009).

The studies, cited above, are mainly on the work teachers do in classrooms other than Social Sciences. In a special edition of the journal *Yesterday and Today* (2015) on the way in which teachers in various African countries work with History textbooks, teachers talk extensively about the problem of having a single source as the authoritative one on the interpretation of history and the need to expand the range of material required for a broader, more critical and nuanced view of how the events of the past are selected, emphasised and presented. In other African countries, the issue of the

accessibility of language was also presented as an issue that required a revision of the textbooks by teachers. This was true of teachers in Kenya (Akidiva, 2015), Rwanda (Tuyisenge, 2015 and Umugwaneza, 2105), Swaziland (Zubuko, 2105), and Tanzania (Rushohora, 2015). Although most teachers had a central text, these were supplemented by additional materials, either in the form of notes, videos or other textbooks. The South African teacher, who teaches in an all-girls suburban public high school in Kwa-Zulu Natal, supplements a central textbook with additional, notes, worksheets, youtube and other videos, and excursions. She speaks of how she teaches 'textbook skills' and visual literacy.

An important problem with History textbooks according to Bertram & Wassermann (2015, p 167) is:

> "…that there is very little work on the historiography of the knowledge that appears in the textbooks. The research community does not seem to be asking: "Where do the textbook writers/producers find their sources?" and "Who is writing/ producing textbooks"? Nishino's chapter (2008) on the influence of Theal's settler historiography actually names textbook authors, while the majority of studies use the name of the publisher to identify a book. In this way, authors become invisible, and the role of the textbook can be reduced to simply how compliant it is with the current curriculum requirements."

MacKenzie and Steinberg (2015, p 148) in an analysis of grade 10 History textbooks in South Africa reframes this problem as follows: "a tension or misalignment between the political project in CAPS that promotes multi-perspectivity through a focus on democracy and diversity, and how it is recontextualised in the textbooks".

This critique of textbooks can usually be applied to other subject areas as well. In South Africa, the introduction of Curriculum 2005 was a radical departure from carefully constructed syllabi, and it was formulated in a language which was difficult for teachers to understand. Nevertheless, both publishers (in LTSM) and teachers (in their teaching) have made attempts to foreground many of the curriculum principles, but sometimes in very uneven ways (Koornhof, 2011). Despite calls from the education department for teachers to create their own materials, this directive was interpreted very loosely and circumvented by teachers who had access to textbooks. They devised "worksheets" by

drawing from activities found in a variety of different textbooks. In many instances, teachers became heavily dependent on textbooks, but only insofar as these could provide ready-made worksheets for learners to fill in (Stoffels, 2005b). Taylor & Vinjevold (1999, as cited in Fleisch, 2008, p. 132) observed that "very few teachers are using textbooks in classes in any systematic way. This is even the case when textbooks are available at school". The key word here is *systematic*. In the international literature, there was consensus on the variation and modification that takes place when teachers used materials. Studies showed that textbooks were valuable to teachers, because of the systematic way the curriculum was set out: "Use of textbooks in their designated sequence was, typically, a teacher pattern, largely independent of the materials themselves, the subject, or the culture of the school" (Sosniak & Stodolsky, 1993, p. 259). Valverde et al. (2002, p. 10) reported "statistically significant relationships... between textbooks and classroom instruction. This is true both in terms of the percentage of a country's teachers who cover topics promoted in the textbooks and also in terms of the average proportion of instructional time devoted to each topic."

However, South Africa presents a complex picture where schools vary dramatically. The majority of South African learners are educated in schools that perform poorly in literacy and numeracy achievement studies, which was evident in the results of the ANA held in 2011: "[G]rade 3 learner averaged scores of 28% and 35% for numeracy and literacy respectively. The grade 6 scores averaged 28% and 35% in mathematics and language." (Department of Performance Monitoring and Evaluation, 2012, p. 4). A small percentage of learners are schooled in institutions that are well-resourced in material and human terms. These schools produce learners who will become the graduates and professionals that constitute the middle-class (Fleisch, 2008, p. 2). It is unclear how and which LTSM are used in different schools, how they are used and whether this is a significant factor in learner performance or teacher presentation of curriculum content.

Under apartheid education, the use of textbooks held a central position in white schools – both for educational and ideological reasons. The meticulous use of textbooks, together with tightly constructed syllabi, made for a highly structured and regimented system. This measured to an extensive degree what teachers taught, and how learners internalised the specified teaching (Stoffels, 2005b). It is interesting to note that this is the model followed in schools in Hong Kong with reportedly good results (Ying & Young, 2007). Under

apartheid, in schools of other race groups, textbooks were in scarce supply and in African schools it was not unusual for there to be almost no textbooks at all. Those that were available had to be shared, but were often antiquated. In addition, teachers used the textbooks to provide notes on a blackboard for learners to copy (Christie, 1993; Stoffels, 2005b). The legacy of these two strands of textbook use is that teachers in high functioning schools have developed particular strategies that rely heavily on consistent and systematic textbook use with concomitant assessment. In most South African schools, little or no knowledge developed of the possibilities of textbook use. In 1997-2005, the introduction of a "contentless" curriculum and the expectation that teachers would develop and choose their own materials soon led to the realisation of the unworkability of such a directive. After several revisions which included the major revision of 2003 in the form of the RNCS (Chisholm, 2005a), South Africa has returned to a curriculum that is both prescriptive and very clear about content, namely CAPS (DBE, 2011). In addition, to complement the CAPS document, there are government-produced workbooks, which are intended to be available for every teacher and learner for use in public school classrooms. According to the Department of Performance Monitoring and Evaluation (2012), "[t]he printing and distribution of 24 million workbooks in all official languages for grade 1 to 3, and in English and Afrikaans for grade 4 to 6, is a major achievement by the DBE. In 2012, workbooks will be extended to grade 9, increasing further access to quality written material. The development of a textbook catalogue is also a step in the right direction to ensure that learners are exposed to material that is compliant with the curriculum".

At present, there is very little knowledge of how textbooks (either the new workbooks or other LTSM) are being integrated into the programme of a new curriculum. The few studies conducted in South African classroom on textbook use suggest a great need for teacher training and development in this area. Stoffels (2005a, 2005b), Hart (2002) and O'Connor and Geiger (2009) describe problematic classroom practices that are indicative of "defensive teaching" (Stoffels, 2005a, p. 536), considerable language-related problems (O'Connor & Geiger, 2009) and unreflective teaching where "teachers lack awareness of learning processes" (Hart, 2002). Most South African publishers report that TGs are scarcely used – even when these are made freely available as part of a package of materials (Koornhof, 2011).

In the School Development Project done by the Maskew Miller Longman Foundation, it reported that teachers generally avoided TGs and chose only those activities that required minimal effort – both for the learners and the teachers. Part of the reason was that teachers found the materials 'unfriendly', too dense, and difficult to read (Kariem, Langhan & Mpofu, 2010). However, with methodical training on TGs, there were changes in teacher practice and they acknowledged the usefulness of these TGs. The evaluation done by Fleisch et al. (2011) which compared the use of custom-designed workbooks to a conventional textbook in grade 6 classrooms in mathematics showed a marked improvement in post-test scores of all participant learners. Although the authors concluded that a significant factor in the improvement was the greater availability of materials, it might equally have been due to the training of teachers on the use of LTSM during the study. This training could have been as influential than the materials themselves.

Aside from greater knowledge and better understanding of how to use LTSM, there is evidence that a shift in teacher attitude is also necessary. Stoffels (2005b), in a study on how two science teachers use LTSM, discusses the contradictory dynamic that plagues South African teachers. In the context of the implementation of C2005, these teachers believe that textbooks carry authority and have many benefits, such as, saving time, reducing workload, creating uniformity, fulfilling parental expectations and providing valuable content. Simultaneously, they also believe that it is unacceptable for them to use textbooks. It appears that by either consulting the textbook in planning and/or by selecting worksheets from textbooks, teachers felt they had achieved a satisfactory compromise. A further finding is that teachers do not read textbooks interpretively (Stoffels, 2005b p. 535), which is worrying. It seems that teachers use worksheets to engage in "defensive teaching", because they have difficulty in engaging with the curriculum (Stoffels, 2005b, p. 536). This is in line with the findings of Hart (2002) who, in her study on grade 7 classrooms, found misconceptions of what the curriculum requires, because teachers claimed: "We're doing it already", (p. 88). Despite available resources, these "are not exploited because teachers' conceptions of learning do not allow them to recognise the need for a wide variety of information and learning resources" (Hart, 2002, p. 92).

Recent studies have found that whereas some teachers may work with LTSM, South African learners seldom work with books. Hoadley (2016, p 25) refers to the Khanyisa Education Support programme's baseline study that looked at twenty-four primary schools in Limpopo province:

> One of the most startling findings of the Khanyisa project was that in only 3% of literacy classrooms and in no mathematics classrooms did students interact individually with books. Not unlike practices in the past, and consistent with other studies, the most common form of reading consisted of the teacher writing up three or four sentences on the board and the students chorusing these after the teacher. Similarly, very little writing was done in these classes, and when writing was done it generally consisted of writing lists of isolated words rather than sentences. (Taylor and Moyane, 2004)

The lack of use of textbooks with individual learners suggests that they are significantly disempowered. In conjunction with teaching practices that undervalue reading and writing, the learners have little opportunity to develop the very skills that are needed for academic success.

The issue of English as a Second / Additional Language

The vast majority of South African teachers are not English HL speakers. They teach learners for whom English is often a third or fourth additional language. There is evidence that a large proportion of teachers in township and rural schools, and across grade levels use vernacular languages to teach, while learners are expected to write tests and exams in English (Hugo & Nieman, 2010). In multi-lingual classrooms, there are occasions where learners and teachers can only understand each other through English, although it is a language that neither party is able to use competently (Brown, 2007; Fleisch, 2008; Heugh, 2005; Hugo & Nieman, 2010). Issues of language proficiency and multilingualism become pertinent in terms of LTSM enactment. In a school environment, the experience of both teachers and learners may be restricted to that of words alone. When encounters with curriculum are purely in the realm of the linguistic, and divorced from experience, emphasis falls on knowledge of language, rather than any other topic or concept under discussion (Rogoff and Lave, 1984)

Language policy in schools is problematic and policy makers are caught between the difficult dynamic of wanting to promote both African languages and English as languages of learning, (Chetty & Mwepu, 2008). Deeply rooted inequalities between English language resources and African languages resources exist (Chetty & Mwepu, 2008). With CAPS in 2011, the DBE policy was revised with regards to the introduction of English to children, who do not speak English as a HL. English is now introduced from grade one, along with a HL. LTSM in both languages need to be used alongside each other, until grade four, when the Language of Learning and Teaching (LoLT) becomes English. A significant disadvantage many FAL learners experience is that the time assigned to HL is curtailed and that limited time is given to FAL. This means that it is very possible (and likely) that skills in both languages programmes are underdeveloped:

> In Languages 10 hours is allocated in Grades R-2 and 11 hours in Grade 3. A maximum of 8 hours and a minimum of 7 hours are allocated for Home Language and a minimum of 2 hours and a maximum of 3 hours for Additional Language in Grades R – 2. In Grade 3 a maximum of 8 hours and a minimum of 7 hours are allocated for Home Language and a minimum of 3 hours and a maximum of 4 hours for First Additional Language (CAPS FP FAL, 2011, p. 4).

Followed by:

> In schools where children will use their additional language, English, as the LoLT from Grade 4, it is important that a substantial amount of time is devoted to learning English in the Foundation Phase. However, in schools with the same LoLT throughout the grades, this is not the case. In these schools, many children who are learning English or Afrikaans as a Home Language do not speak these languages as their mother tongue, and as much time as possible should be devoted to this task (CAPS FP FAL, 2011, p. 8).

Cummins (2000) shows that inasmuch as there are several debates and promising experimental methodologies and practices relating to the implementation of L2 teaching, it is the relationships between teachers and L2 students, the educational environment and the validation of L1 in minority language speakers (in the US, the UK and European countries) that are the most significant determinants of success.

There is consensus among researchers that effective teaching of an additional language (especially in the formative years) requires teachers who are specifically trained in this area, and are proficient in the second language of the learners. Another requirement is that specialist materials are written for an ESL market (Brown, 2007; Gandara, Maxwell-Jolly & Driscoll, 2005; Hugo & Nieman, 2010; Kasule, 2011; Sheldon, 1988)

Hugo and Nieman (2010) citing Aukerman (2007, pp. 627 & 634) states that "English language learners often receive decontextualized language from teachers and text." In a questionnaire completed by eighty-four South African teachers, they state their frustration with their own lack of understanding of English, which makes their use of materials problematic (Hugo & Nieman, 2010, pp. 65-66). Strategies that may assist in making texts more accessible to both teachers and learners are: the use of content maps; clear outlines of each teaching unit; guiding questions that make teaching intentions clear; and, simpler versions of standard textbook language (Brown, 2007). The presupposition that underlies the strategies needed to address learners' problems with using textbooks, is that teachers are able to diagnose problems and evaluate textbooks.

Sheldon (1988) creates an extensive checklist for evaluation by teachers, and includes the following criteria: understanding whether the principles of ESL were used by the textbook writers, detecting whether language levels are appropriate for learners, assessing whether the use of apt graphics and text layout develops understanding; examining whether the linkages between units and exercises are clear; and, checking whether all new linguistic terms are explained. In addition, the teacher needs to feel comfortable with the materials in terms of her own understanding, as well as to assess how interactive and appropriate the materials are for her environment. Sufficient guidance must be included, so that teachers know how to use the textbook, and the curriculum should be covered (Sheldon, 1988, pp. 243-246).

The language and visual methods used by LTSM to present the curriculum are interwoven with complex human rights as well as educational issues that require of teachers a great deal of consideration and knowledge in the way they select and present materials.

Textbook availability

Historically in South Africa, LTSM, especially in the form of textbooks, were often accessible only to teachers. Hutchinson and Torres (1994, p. 320) claim that the

availability of a textbook gives a learner (where that learner can comfortably relate and interact with the textbook) stakeholder power in their education. Independent and joint access with teachers to textbooks mean that learners can engage with topics from a more informed perspective, and also that the worry about not having the content available could mean that learners listen and engage differently. It means they might listen to understand rather than to gain access.

With the introduction of materials produced by the DBE since 2011, many South African learners have access to workbooks – somewhat different to textbooks, but nevertheless a very precise guide to what teachers are expected to cover within specified periods of time. As has been described, workbooks have as its main aim, activities and exercises on topics already taught. They do not set out, as textbooks do, to 'co-teach' a topic by providing background information and examples. According to the DBE (2013), the aims of the workbooks are manifold, for example, they will help teachers to cope with multi-lingual classes as well as acting as diagnostic tools. The DBE website states:

> They will provide organised work in the form of worksheets for every child in mathematics and language. The aim of the workbook project is to provide every child with two books of worksheets – one for numeracy/mathematics and one for literacy/language in the child's mother tongue. Each book contains 128 worksheets (two pages each) – one a day for four days of the week. In the third term, learners will be provided with another two books – one for mathematics and one for language. Learners will use the books to do written exercises in language and mathematics.
>
> They will be a great help to teachers. The worksheets are also intended to assist teachers who have large classes and who won't necessarily have resources like photocopiers or stimulating reading materials for children to read.
>
> The workbooks will also be helpful for teachers who have to teach more than one grade in a class. Because the workbooks are available for learners from grade 1 to 6, it is possible for the teacher to work separately with different grades in the same classroom – giving each grade its own grade specific workbooks. They will also be useful for teaching mixed ability groups – with each group working on a different worksheet.

> They will assist the teacher to manage teaching time and to monitor the tasks that children do in the workbooks. (http://www.education.gov.za/WorkbookDownload/Workbooks/tabid/535/Default.asp)

The DBE's final word on the workbooks is that they are teaching aids and not substitutes for textbooks. In a sense, this is a mixed message, because of the claim to comprehensiveness of the workbooks. However, it is also in line with curriculum principles that encourage the use of a wide range of materials (CAPS, FAL, Intermediate Phase, 2011, p. 22). Given the introduction of Annual Assessments in Grades 3, 6 and 9, many teachers are feeling the pressure to cover the required work. The methodical following of the workbooks may have an effect on the way teachers understand content and how they teach it. For some teachers, these manuals may be irrelevant, as they continue to use alternative materials for reasons that would be interesting to explore.

According to Provenzo Jr, Shaver & Bello (2011, p. 1), the use of textbooks is a "highly political act" that starts with the production of textbooks by either the commercial or government sector. These sectors produce books whose content has been deliberated over extensively: from curriculum designers, to authors interpreting the content, and to designers presenting the content in a particular way. Next, the books are chosen by schools or departments and distributed in a particular way. Finally, these books arrive in the hands of first teachers, and then learners. There are multiple entry points for each of these constituencies to these books, and these factors are all socially constructed.

Despite the intricacy of textbook production and eventual reproduction, researchers often point out that textbooks are the one stable factor in the fluid and unpredictable world of the classroom (Valverde et al, 2002). For some teachers, this provides the very means through which structure can be created; for others, the multi-layered and dynamic nature of classroom interaction indicates that textbooks cannot possibly be the mainstay of the teaching process.

In examining the way in which teachers understand and make meaning from textbooks, the questions that arise touch on almost every sphere of education. These range from how teachers understand the way in which textbooks link to the curriculum to how teachers link textbook use to learners' performance. Teachers may also have views on whether

textbooks are instrumental in their own professional and academic development. The issues of language in a multi-lingual society necessarily impinge on the use of textbooks and this might be expressed by how teachers believe textbooks have an influence on the way learners develop social, as well as academic, understanding, as well as how teachers choose the materials they work with and what value they place on materials in the teaching process. Another important and interesting aspect of LTSM-use is their role in classroom management and discipline. Sometimes LTSM contrast strongly with the world view of a teacher, and becomes an area of internal frustration, debate and conflict. How teachers deal with such issues is another area which is significant in how and why teachers use LTSM in particular ways. Finally, the question needs to be asked whether there are textbooks, or ways of working with textbooks that foster critical thought since for the curriculum developers and many educationists this is perhaps the most fundamental purpose of education.

In the South African context, the geographical location, the historical background, the social, linguistic and economic conditions of schools and teachers, the policy environment and political situation guide any understanding of such questions. This means that there can be no generalised answers to any of the issues raised for investigation, and that one might expect a large degree of variation.

Discussion of the literature

Textbooks, it is said repeatedly in the literature, are a central part of the teaching process (Collopy, 2003; Davis & Krajcik, 2005; Grossman &Thompson, 2006; Hutchinson & Torres, 1994, Valverde, et al., 2006; among others). They stand between teacher and learners, and vice versa, usually as a stable and widely acceptable classroom artefact. As Sosniak and Stodolsky (1993, p. 249) claim, they are seen by stakeholders as 'both villain and cure', because much is expected of them in terms of through curriculum coverage, a substitute for poor teaching, a tool that remedies gaps in teaching, etc. (Stoffels, 2005a; 2005b; Valencia et al., 2006; Valverde, et al. 2002, among others). Yet, in many instances, little appears to be delivered, or what is delivered is either problematic or vastly variable (Provenzo, Shaver & Bello, 2011). Researchers find it necessary to use multiple angles to look at the possibilities of textbook use.

The textbook, itself, is subject to problematic features: these range from the selection of content, to the presentation of such content, to levels of support built into the way developers envisaged enactment, and to the format selected. Content is always contestable, and yet as Olson (1989) points out, entrenched in the conventional ways of textbook writing is a style (or, more accurately, discourse) of an all-knowing, yet unknowable, not-to-be-questioned, yet always questioning author(s) that has its roots in the use of religious texts of early schools (Provenzo, Shaver & Bello, 2011, pp. 1-3). Another root for this discourse is the ostensibly neutral scientific texts of seventeenth century enlightenment, which featured pioneering scientists like Copernicus, Brahe, Kepler, Galileo Galilei, Bacon, Descartes, Newton and Leibniz (Foucault, 1977). The august nature of God and the giants of the Enlightenment conferred on the textbook an authority that is not easily breached by teacher or learner, and this often led to the close and uncritical following of its structure and content. Textbooks have within them both authority and authorisation for what needs to be accepted, internalised and reproduced by learners. Modern theories of learning emphasise learner participation and learner-centred teaching, where "critical thinking" is encouraged. This usually takes the form of group discussions of concepts, and skills-based learning, where learning to access knowledge and applying it is considered more important than the presentation of knowledge itself. Textbooks present these conventions in ways and in language that have standardised how these ideas, which fall largely outside traditional textbook format and presentation, are used in the classroom (Cazden, 1989). It is important to bear in mind that the relationship between textbook and textbook enactment is a dialectical one, and one which often reinforces the "school" discourse embedded in textbooks. Luke, C., De Castell, & Luke, A. (1989) demonstrate how teachers imprint the ethos and conventions of teaching and schooling on the way in which they interpret, present and reproduce classroom texts. Baker and Freebody (1989), in a study conducted in early reading classrooms, demonstrate a variety of strategies used by teachers to impose a "school" reading of text. These strategies include a façade of incorporating the background and external knowledge that learners bring to text, where the teachers constantly modify and bring any such ideas into line with what they believe is the "correct" and "only" way of addressing the content, so that it can be used for testing learners' knowledge. Learner input is sought, almost as a pretence by the teacher, where the purpose is more about the building of

rapport, rather than an engaging with the knowledge and ideas brought by learners to texts. Teachers use sentences and phrases, such as, "That is interesting, but…" or "Do you mean [supplies "right" answer] …" are interspersed with "Yes, you are right", when the answer corresponds with what the textbooks says. (Baker & Freebody, 1989, pp. 267-279). Underlying this process of teaching is a constant flow of "meta-textual commentary" about textbooks that has mostly to do with the creation of uniformity, compliance and an understanding of the culture of schooling.

Between the two powerful pillars of textbook authority and school culture, teachers and learners insert themselves. Davis and Forbes (2010) following a tradition of research that examines teacher enactment of LTSM, suggest that even where the teacher attempts total fidelity to the textbook, there are a variety of factors that interfere with the process, and this forces the teachers to adapt the textbook. Sosniak and Stodolsky (1993) show how when the *same* teacher is teaching, her style and levels of adaptation change when she teaches different subjects. It is not in dispute that adaptation and variation happens during the implementation of LTSM. From the perspective of international research, though, there may be more desirable enactment practices where teacher education and educative textbooks foster particular ways of enactment. At present, there is no evidence that more sophisticated and deliberate enactment practices have a direct bearing on learners' results, but such practices have a decided impact on learner engagement. Stodolsky (1988, pp. 94-96) discusses, at some length, that there is a direct and "completely consistent relationship between student involvement and cognitive complexity in both Maths and Social Sciences. As the cognitive complexity increased, so did children's average involvement", regardless of socio-economic background. However, there was no evidence that learner involvement necessarily led to improved learner performance, although materials, that included higher order activities, could make a difference to the learning experience itself. In textbooks with a predominantly "right/wrong" approach to content – often evident in science subjects (Stodolsky, 1988, p. 127), and also symptomatic of the workbook/worksheet format, learners develop notions of those subjects as either easy or difficult. This is because, Stodolsky (1988) argues, of a long and unvaried exposure to a limited instructional approach.

In the various studies conducted on LTSM enactment, the focus was predominantly on levels of deviation from and kinds of variation on the LTSM that teachers adopted

(Crawford, 2004; Forbes & Davis, 2010; Grossman & Thompson, 2006; Kauffman, 2002; Remillard, 1999; Shkedi, 2009; Sosniak & Stodolsky, 1993; Valencia, et al. 2006; Ying & Young, 2007) and whether LTSM can change teacher approaches (Collopy 2003; Spielman & Lloyd, 2004). Much of this research is within the framework of the deskilling/reskilling debate. In other words, understanding the possibilities of LTSM-use in modifying and shaping teacher practice underlies this research: it is clear from the overwhelming consensus in the researchers' conclusions that teachers, especially student teachers, need to be explicitly trained to understand LTSM and how these materials may be enacted in the classroom (Collopy, 2003; Crawford, 2004; Forbes & Davis, 2010; Grossman & Thompson, 2006; Kauffman, 202; Remillard, 1999; Shkedi, 2009; Sosniak & Stodolsky, 1993; Spielman & Lloyd, 2004; Valencia, et al. 2006; Ying & Young, 2007). Such training would need to demonstrate the interplay between teaching and learning dynamics in the LTSM, as well as the dynamics in the classroom, so that teachers understand their own motivations and the possible impact that resides in the selection and enactment of materials.

In all the studies discussed, the traditional textbook formed the central LTSM. This is because using a textbook is the standard accepted practice in schools across the world, and alternative or supplementary materials are rarely rated. One hypothesis is that supplementary materials are often teacher-centred and teacher-controlled. A major assumption in the research on textbooks is that both teachers and learners have equal access to common materials. Alternative materials, in the form of posters or digital material, which are used by teachers to demonstrate content, or worksheets, which are used to provide exercises, seem to be either an unusual or an unremarkable pedagogical practice. However, there is an increasing body of research on the use of technology in the classroom (see Fetaji, 2008 for an overview).

The notion that the textbook can be a substitute for a lack of teacher knowledge and skill, is often the basis for investment strategies by donor agencies in developing countries. The underlying assumption is that teacher enactment is either immaterial or of relatively minimal importance (Crossley & Murby, 1994). The results of studies on textbooks as an investment strategy for improving learner results are mixed: the most convincing is that unless learners are able to engage with textbooks independently, that is, they have the language facility and are already embedded in the subject issues, textbooks are of limited

benefit (Kremer & Moulin, 2007). Recent evidence has also called into question the assumption that there is a relationship between textbook availability and improved learning outcomes (Glewwe, Kremer & Moulin, 2009; Kuecken & Valfort, 2013). The results of both studies show that textbook use only has a positive impact on learners with higher socio-economic status. Thus, the message is that teachers matter and their expertise usually matters more than LTSM.

This evidence may be clouded by findings that many teachers do not use available textbooks for fear that the books will be damaged. Milligan (2011) conducted research in Uganda where many of the secondary schools had received a shipment of core curriculum textbooks funded by the World Bank, but there was little evidence that the books were used. Three principals explicitly stated that they were keeping the textbooks safe and clean in their delivery boxes rather than allowing teachers and learners to use them. In such cases, it seems clear that teachers are relying either on their own presentation skills or on notes from textbooks that they write on the board or photocopy. This means that the nature of the materials that learners are exposed to differs, but the teacher is engaged in a variety of enactment strategies.

While there is agreement that socio-cultural, socio-economic and socio-political factors have an impact on teacher enactment of LTSM, such impact cannot be quantified or even adequately described. Research studies, which examine such impact, are tentative and inconclusive in their findings (Apple, 1988; Crossley & Murby, 1994, Provenzo, Shaver & Bello, 2011; Valverde, et al., 2002). Nag et al. (2014), in an extensive review of interventions in developing countries, propose that there are two important factors that may influence improved outcomes in relation to LTSM: reading interventions and the development of teacher-support materials that allow for easy and close implementation.

South African studies inevitably sketch the socio- cultural, socio-economic and socio-political factors in some depth, since, for historical reasons, these are such a pronounced part of the education landscape**.** Additionally, the formidable divisions and stratifications in South African society make such definitions an important qualifier to all findings and conclusions. The focus of South African research is almost inevitably trained on areas in South African education that present problematic practices, and showcase the ways in which history and policy decisions have had strongly adverse effects on classroom

routines and methods (Bloch, 2009; Christie, 2008; Fleisch, 2008; Taylor, Muller & Vinjevold, 2003). The use of LTSM is in the spotlight, due to attempts to find practical interventions that may begin to reverse systemic problems that undermine good performance of both teachers and learners in South African schools.

The location of this study in the field

The South African education landscape contains several worlds in one. The term "bi-modal" has been coined to describe South Africa's education system (Spaull, 2012). This term refers to the legacy that apartheid created in stratifying schools in two ways. The first is along the lines of some schools that are privileged, advantaged, well-resourced and generally populated by able teachers who are relatively well trained. While the second way refers to many schools that have few resources, are poorly managed, have low teacher morale and where effective education hardly takes place. Historical, as well as current, factors play a continuous role in modifying both positively and negatively what happens in all classrooms. The current interventions proposed by national and provincial departments, which aim to reverse the poor achievement levels of the large majority of learners, are potentially far-reaching. The DBE, schools and teachers are all under pressure to perform well in annual assessments. Learner access to carefully scripted resources that are meant to become their property, so that they write in these workbooks and use them as the texts from which to prepare for assessments, has consequences. The message that these workbooks are supplementary may create confusion, inertia, and/or indifference.

It is the aim of this study to use concepts and findings from international research, which show the extent to which LTSM are viewed as central, accessible and varied, adaptable, and educative by teachers. It would then be important to test whether these views are made visible in practice and apply these concepts and findings to an analysis of what happens in the various teaching situations and contexts of South African classrooms. It is particularly pertinent at a time when policy change and the wide-scale introduction of government-produced materials are taking place.

Conclusion

The literature review creates the backdrop against which the following chapters need to be read. It is one in which a great number of both interrelated as well as divergent issues arise. What is clear is that LTSM, as part of the teacher-learner-triad that operates in almost all lessons, play a fundamental role in shaping the outcomes of those lessons. The LTSM that is chosen (with the underlying issues of how and why), the enactment of that LTSM (bearing in mind the multitude of issues that relate to the school environment as well as the teacher profile and learner constituencies) and the reception of the LTSM (in relation to matters of access, language proficiency, and sociological and other factors) are areas rich in questions and problems that warrant investigation. How these areas intersect, exposing the relationships between LTSM, teachers and learners, have the potential to throw light on how certain pedagogical patterns evolve and are shaped.

The following chapter will describe the research methods used, and thereafter, the conceptual framework will be presented.

Chapter 3 Research Methods

Introduction

This qualitative research study consists of a number of case studies in four institutional settings in Gauteng. Four schools were purposively selected in three separate categories (see table 3). These categories were schools in a township area, public schools in an urban area and private/independent schools. Each of these categories presents a constituency that is usually markedly different from the rest. In general, schools in urban township areas have mainly African learners, who are sometimes, but not always, from low income families, and are often culturally fairly diverse (Chisholm, 2005b, pp. 217, 218). The learners are multi-lingual, and they are taught in large classes. In contrast, public schools in suburban areas (colloquially known as ex-Model C schools) vary considerably – both from school to school and in terms of learner constituency. They are generally characterised by learners who are linguistically and culturally diverse, and are drawn from a variety of different income groups. These schools still bear the hallmarks of privilege established under apartheid, because they have good resources and relatively well-trained teachers. Upmarket independent schools specifically cater for moneyed learners. They aim to provide elite education that allow for maximum exposure to a variety of learning experiences in classrooms designed for small groups, so that the teachers can give individual attention to the learners. Many of these classrooms are multi-lingual and multi-cultural, but the language of instruction takes place exclusively in English (Chisholm, 2005b).

Gauteng was the geographic location used in this study. On the one hand, this choice was due to convenience, but on the other hand this province has the largest number of urban

learners in the country. This kind of demography means that classrooms generally have learners that are both multi-cultural and multi-lingual.

The four schools visited provided sufficient similarity (in terms of curricular, language and assessment constraints) but also considerable contrasts in terms of socio-cultural and socio-economic factors, as can be seen in the description in the following table:

School visited	**Most relevant contextual factors**	**Teacher profiles**
School 1	Urban township school with average facilities, the learner: teacher ratio was about 45:1 on average, all learners were African language mother-tongue speakers, and the school qualified as a no-fee school	Four teachers were observed and five teachers were interviewed. All the teachers had a professional qualification in the form of a teachers' diploma, and all except one teacher had more than ten years' teaching experience.
School 2	Suburban, previously model C school, with good facilities, the learner: teacher ratio was about 40:1 on average, most learners were African mother-tongue speakers, and the school employed additional teachers from School Governing Body (SGB) funds. As a quintile 5 school, parents were expected to pay fees	Five teachers were observed and interviewed. All the teachers had a teaching degree, and experience ranged from two to twelve years. Most teachers had less ten years' experience and the staff had a distinctly youthful and modern feel at this school.
School 3	Independent school with excellent facilities, the learner: teacher ratio was about 25:1 on average, most learners were not English first language speakers, but they were completely fluent	Two teachers were observed and interviewed. Both had teaching degrees and both had close on

	in English, and the fees were high (even for an independent school)	twenty years' teaching experience
School 4	Independent, religious school with excellent facilities, the learner: teacher ratio was about 37:1 on average, about half the learners were African mother-tongue speakers but they were fluent in English, and fees were moderately high (for an independent school)	Six teachers were observed and interviewed. All except one teacher had a teaching degree. The exception was in the process of obtaining a degree. All the teachers, except one had more than ten years' teaching experience. One was in his second year of teaching.

Table 3 Description of the four schools used for data collection

As can be seen, although there are differences between the four schools, there are also interesting similarities. These similarities relate to not only the learner: teacher ratios, but also to language profiles. Most markedly, the differences are manifest in the socio-economic backgrounds of the learner constituencies, the facilities at the schools and way in which language was used for instruction purposes (in other words, the FAL versus HL choices make by public schools and the decided HL ethos of the independent schools that participated in this study).

Intermediate phase (grades 4-7) was chosen as the level at which the study would be done, since there is an assumption that a sufficient degree of literacy would have been established by grade four for learners to work independently with learning materials and that reading to learn (as opposed to learning to read) would be the order of the day. In similar fashion, the subject areas were also selected because both English and Social Sciences rely predominantly on texts (rather than, for example, demonstration) as a central part of learning and a multitude of textbooks are available and accessible to teachers and learners in these areas.

Data was collected through semi-structured interviews and classroom observations and was analysed to ascertain how teachers understand materials and how they use materials in practice. These interviews and classroom observations took place during the second

and third terms when teachers were settled into the teaching programme for the year, and before end-of-year examinations.

An analysis of some of the LTSM used or recommended by participating teachers formed a third set of the data. The analysis of these texts was, in part, in relation to what teachers said about their understanding of such texts and how their expressed views correlated with the authors' intensions expressed in the texts. This analysis was also to establish how the texts mirrored the social trends and new ideas in education practice. This meant that the analysis was not only a content analysis, but also an examination of how these texts were constructed and what visual presentation and the structural composition of the texts suggested about the intention of authors and publishers.

The observations

Twenty-six lessons were observed, of which eleven were in upmarket independent schools. The following tables represent the grades and the subject areas that were observed:

Number of lessons observed per grade

Grade	No of lessons
4	8
5	3
6	9
7	6

Table 4 Number of lessons observed per grade

Number of lessons observed per subject

Subject area	No of lessons
English	17
Social Sciences	8

Table 5 Number of lessons observed per subject

Most of the lessons observed were grade 6 lessons, and a fair number of lessons were grades 4 and 7 ones.

Roughly two-thirds of the lessons were English lessons, whereas the rest were part of the Social Sciences. The reason for this discrepancy was the way teachers in the schools organised my classroom observations: there were particular time frames and Social Sciences is given less time in the time-table. It is also possible that teachers felt that there was more opportunity for them to display their work with materials in English, although this was not borne out by the data. In several instances, the same teacher taught both English and Social Sciences.

Several frameworks for the recording of the observation lessons were considered, but it was clear after the pilot lesson that an observation checklist recording which LTSM were used and for how long was not useful. This was because teachers moved back and forth between different LTSM and what constituted LTSM-use had to be newly defined in almost every instance. Instead, a detailed description of the sequence of the lesson, with special emphasis on how and where LTSM came into play, was more useful. As far as possible, some of the actual wording used by teachers was included in that description of the lessons. Some lessons were very full, and required a great deal of note-taking during the lessons. This meant a review of the lesson was necessary with the teacher as soon as possible after the lesson. Other lessons required far less note-taking as single or few activities took up almost an entire lesson. Although these lessons were also briefly reviewed with the teacher, it was usually a more cursory exercise. With the permission of the teachers, and an undertaking that no identifying features of learners would be revealed, photographs of LTSM in use were taken. In many instances, teachers made their worksheets available to me.

In all the schools, teachers were very keen to demonstrate their lessons and were happy and cooperative to share their views about LTSM. However, in school 1, one teacher requested to cancel an observation lesson. In many cases, I observed more than one lesson of a teacher. Learners, for the most part, were unfazed by my presence. Once I was established in the classroom, learners ignored me unless I asked to take a photograph of their books. As a result of the GPLMS[2], many teachers in public schools have become accustomed to the presence of observers in their classrooms. They even welcomed me

[2] The Gauteng Primary Language and Mathematics Strategy (GPLMS), was a large-scale literacy and numeracy four-year government-based intervention (2010-2014), targeting the improvement of teaching in underperforming primary schools. It consisted of some teacher training on specific topics, the provision of LTSM, scripted lesson plans for teachers and coaches which regularly worked with and observed them.

into their classrooms as they considered it “an opportunity for learning”. Indeed, many teachers asked for my feedback, which I restricted to a discussion of their choice of LTSM and how they used these materials.

The independent schools were very welcoming too. In school C, for example, I spent an entire day with each of the teachers I observed. In school D, the Head of Department (HOD) had drawn up a special schedule that allowed for a range of lessons to be observed in both English and Social Sciences. One lesson was repeated using the same material, but with different teachers, and this allowed for an interesting comparison.

Enactment strategies that predominated were:

1. Teacher talk
2. Learner response to direct questioning by teacher
3. Learner writing activity (reproductive)
4. Reading
5. Learner’s own writing (interpretive)
6. Learner questions and discussion
7. Learner talk / presentation
8. Teacher response to/ feedback on learner presentation
9. One-on-one teacher-talk with learners
10. Learner interaction on tablets
11. Listening activity

Forbes and Davis’ (2010) study was helpful, and it influenced the identification of the kind of teacher-mediation strategies that were used for comparison in this research. Their list of LTSM, that were used by teachers, was realigned to fit into the categories created for the analyses chapters. These were:

1. Images, posters, notes on board, flashcards, including different materials produced on a smart board – in other words materials that enable front-of-class teaching
2. Textbooks
3. Content resources, like reference books, dictionaries, etc.
4. Story books / stories

5. Investigation, experiment, or written or creative activities or projects produced by learners under the supervision of the teacher and for the purposes of presentation / discussion
6. Videos/DVDs
7. Technology, including cell phones, tablets and work done on computers
8. Student worksheets
9. Printed informational notes prepared by teacher for classroom use
10. Realia for demonstration purposes
11. Rubrics
12. Existing lesson plans
13. DBE workbook
14. Learner written response to teacher talk

The observation notes were classified into four categories: the first that worked with books (textbooks, story books, dictionaries and reference books); the second where the main focus was on materials used by the teacher and created specifically for teacher use during lessons; the third where teachers created materials for learners, which formed the core of the lesson; and fourthly, lessons where the learners prepared materials and these were the central part of the lesson. From these, two broad categories were defined: those strategies that generally encouraged passive learning; and those strategies that generally encouraged active learning[3].

Under strategies that encourage passive learning (and these is a clear recognition that it is not possible to generalise about these, but that passivity was what was observed for the overridingly largest part of the lesson) are the following: teacher talk; learner response to direct questioning by teacher for recall purposes; and, reproductive writing activities, for example, filling in short answers on a worksheet or copying notes. Active learning strategies included the following: learners' own interpretive and creative writing activities; learners' questions and extensive discussion; learners' talk / presentation and learners' interaction on tablets. The following activities fell between these two broad ones, and were dependent to a large extent on the lesson design as well as the teacher-

[3] Although there are various terms associated with different learning methodologies (e.g. Biggs (1987) which suggest deep and surface learning, the terms *active* and *passive* were chosen advisedly, and in relation, not to how, or how much learners were learning, but to what was observed in the classroom though the degrees of engagement of the various parts of the teacher-learner-LTSM triad.

learner dynamics. These included reading, one-on-one teacher talk with learners, listening activities and learners' written or drawn responses to teacher talk.

To establish how various enactment strategies could be interpreted, especially within given contexts, two lessons (which had some basis for comparison in terms of focus and structure) were chosen for very detailed analysis in chapter 5. This provided a shorthand for some of the analyses and thinking about the lessons in the following chapters. In other words, I could then assume in the later analyses, that the same depth was not necessary because interpretations of practices and concepts had been covered and would apply, without the necessity to repeat these.

In the second chapter on observation data (chapter 6), data were placed in one of three categories: front-of-class materials and how these were enacted; worksheets and other handouts produced by teachers, and how these were enacted; lessons where materials led to learner-led lessons. The description of all the lessons is assembled in Appendix A, while a brief interpretation and the implications of LTSM and/or enactment of some of these are discussed under the different categories in the chapter.

In a final chapter on observation data (chapter 8), all the lessons were brought together for a comparison of what happened in different subject areas, what happened at different grade levels and what happened in different kinds of schools. A discussion of the patterns, similarities and differences completes the chapters on observation data.

The interviews

Teachers were interviewed individually for the most part. In two instances, teachers chose to be interviewed together. These were the two teachers who had taught the same lesson on the same materials and they had devised these materials together too. The second instance was a Social Sciences teacher: he welcomed an older teacher who was acting as a kind of "mentor" to him and who was keen to be included in the discussion.

Interviews lasted between one and two hours. They were recorded, transcribed and then analysed for specific themes that emerged from the data. Most of these themes were clearly in relation to the nine interview questions which were:

1. What do you remember about the use of LTSM when you were at school?
2. Talk about any training you might have received on the use of LTSM.
3. Tell me about how you have used LTSM over your teaching career.

4. Are there any particular LTSM that stand out as being important to you as a teacher? Explain why.
5. Are there particular practices in relation to LTSM that stand out as being important to you as a teacher? Explain why.
6. What is the value of LTSM to learners, in your opinion?
7. How have the different curriculum changes affected your use of LTSM – if at all?
8. How do you choose / assess LTSM?
9. Talk to me about how important LTSM are as an element in the teaching process.

From the responses, additional themes arose, especially in relation to the creation of teachers' own materials and the reading and writing practices of learners.

Ethics clearance for this study was granted by both the University of the Witwatersrand and the Gauteng Education Department. The protocol number for this research from the university is 2013ECE092D and from the Gauteng Department of Education (GDE) is D 2014/173. All the teachers and principals of schools gave informed consent for the classroom observations and teacher interviews on condition of anonymity and confidentiality.

The case for case studies

Case studies lend themselves to research on LTSM-use in classrooms. Of the twenty-three studies on LTSM-use reviewed in the literature, eighteen took the form of case study research. The exceptions were the studies done by Kasule (2011) who did a readability assessment study; Fleisch et al. (2011) who did an experimental comparison; and Lemmer, Edwards & Rapule (2008) who did a survey. The conventional methods used were in-depth semi-structured interviews, and observation. In large-scale studies, which involved more that forty participants, the researchers used teams of assistants and questionnaires/survey instruments (Forbes & Davis, 2008 & 2010; Spielman & Lloyd, 2004). This enabled the required depth needed for case study research. In studies where twenty-three teachers were participants, up to twenty-three interviews could take place (Valencia et al., 2006). Typically, researchers used an introductory interview to establish biographical detail, as well teachers' views on the LTSM they currently used. In certain

instances, there was an extensive probe of teachers' beliefs about LTSM over a number of interviews (Collopy, 2003; Gueudet & Trouche, 2008; Kauffman, 2002; and Shkedi, 2009). Collopy (2003) added an interesting technique to her study, which involved the running of a pre-study workshop with participants. In instances where this was appropriate, interviews took the form of focus group discussion (O'Connor & Geiger, 2009; Valencia et al. 2006). After observation, it was customary for most researchers to discuss the lesson with participants, for the purpose of clarification, but also to raise emerging themes and patterns of practices (Stoffels, 2005a; Forbes & Davis, 2008; 2010). Field notes, relating to recorded interviews, informal interviews and observations, were almost always included in the data gathered. Observations were typically designed to focus on particular practices. For example, the schedule used by Stoffels (2005a) included teacher talk, learner activity, frequency and use of LTSM, frequency and use of other aids, the teaching method employed and the rationale of the lesson. Forbes and Davis (2008) looked specifically at the use of textbooks versus worksheets and other types of materials. In the studies done by Forbes and Davis (2008, 2010) and Gueudet and Trouche (2008), they requested that participants keep reflection journals. The scrutiny of others' research methods was helpful in establishing which methods might produce the richest and most productive data. It led to a decision that discussion (in the form of interviews) and systematic observation would be most likely to achieve this.

Thematic analysis was used by all the case study researchers. Kauffman's (2002) research most resembled the aim and methods of this study, because intermediate elementary school teachers were studied (albeit that his study was based on beginning teachers working in the field of mathematics). The aim of my research was also comparative one, but one which looked at what LTSM were used and how by English and Social Sciences teachers in the intermediate phase at four South African primary schools.

Case study research is useful, because when multiple cases are examined it helps the researcher to make comparisons, examining the complex, real-life activities and views of teachers in relation to the use of LTSM in the classroom, generates thematically-rich data. Through the categorisation, interpretation and explanation of this data, a fuller picture of LTSM-use in South Africa emerges. Although generalisation from case study research is not possible, by using analysis some trends may emerge that can be tested for replication. According to Johansen (2003), generalisations from cases though not statistical, are based

on reasoning. Looking at LTSM-use in particular schools with particular teachers fulfils the criteria for 'case' as put forward by Johansen (2003) namely that it is a complex functioning unit that is investigated in its natural context with a multitude of methods; and, it is contemporary. This research study included investigations into process and discourse. Because both these categories are fluid, I observed a great deal of variation and change.

Case study research serves a variety of functions. Yin (2012) outlines a number of functions, which include the following: exploratory (discovering variables that have an impact on LTSM-use within a contextual setting); testing or building hypotheses or theories; and, for policy analysis (whether policy can assist in making LTSM-use more effective). MacMillan and Schumacher (2010, p. 440) regard case studies as having the ability to "provide a more complete understanding of complex situations, identify unintended consequences and examine the process of policy implementation".

Crossley and Vulliamy (1984) discuss the need to "reaffirm that what goes on within schools (or other educational institutions) is by no means clearly understood, and... detailed research at the school level is a valid and worthwhile focus for comparativists". The limited number of studies in the field of LTSM-use in South Africa makes this statement pertinent. In the light of recent, urgent interventions based on the "triple T" slogan (**t**eachers in classrooms, **t**ime spent on teaching and **t**extbooks) to address poor performance of South African learners, it will be instructive to discover how teachers use and think about textbooks.

Validity and reliability

Qualitative research sets out to study subjective realities. This requires the researcher to examine constantly the ontological and epistemological foundations on which her own understanding and those of the participants rest (Åkerlind, 2007). In case study research, the aim is to establish, as far as possible, how well a process or situation has been captured and understood. Interpretive processes are subjective by definition, therefore, according to Åkerlind, 2007, citing Kvale, 1996, validity lies in how closely the research aims are reflected in the research methods and whether communicative and pragmatic validity can be claimed. If the researcher is able to present a persuasive and defensible argument for their interpretation, while acknowledging that results are always context and time

specific, then communicative validity is established. This means that researchers conduct a debate through publication to establish such validity. Pragmatic validity rests on the notion that research has usefulness to its intended audience: "Research outcomes may then be judged in terms of the insight they provide into more effective ways of operating in the world" (Åkerlind, 2007, p. 29). This means research may have an influence on the way teaching and learning takes place in an educational environment.

This study aims to provide some insight into the factors and reasoning that affect the way in which teachers use LTSM. The establishment of dominant patterns of use in the specific instances under investigation, as well as recognition of related issues should contribute to a new or an extended understanding of LTSM-use in the South African primary school classroom.

The use of suitable methodological procedures can be a plausible measure for the creation of reliability (Åkerlind, 2007). This involves coder reliability checks, where there is a comparison of categorisations with participants or a fellow researcher who has worked on a sample of the transcripts. In addition, there are dialogic reliability checks, where there is a discussion with fellow researchers that leads to consensus on the appropriateness of interpretive strategies. However, a more common and widely accepted practice is "fully detailing the [interpretive] steps and presenting examples that illustrate them" (Åkerlind, 2007, p. 33). An important reason for adopting the second strategy for establishing reliability is that it places considerable pressure on the researcher to document the critical perspective they intend to apply. This helps to point out possible presuppositions that may skew findings and how they may be circumvented. In the case of this study, my intention is to outline the interpretive steps, by illustrating through examples and the participants' accounts, so that it is clear how I arrive at a particular interpretation.

A measure of triangulation was possible through the availability of three different kinds of data sets. Although my observations and interviews examine two different factors, namely, teacher thinking/discourse and teacher practice, and learning materials fall within the ambit of textbook and curriculum designers, there is sufficient intersection among the three sets of data to support my conclusions about LTSM-use by the participants in this study.

Conclusion

This chapter has outlined the scope of the research project detailing the sites where the research would be done, the size and nature of the samples and how the various aspects of the research questions have been demarcated for examination. It has shown how these decisions were reached and then has given the rationale for selecting the particular methods to obtain data. Three sets of data where both separate (but related) as well as interlinking issues could be explored, have been described. Observations, interviews and textual analysis provided an opportunity to approach the questions from a variety of angles, while triangulating findings and foregrounding prominent ideas and patterns. These assist in the building of an argument based on evidence drawn on from a number of perspectives. The multi-layered nature of the research question which aimed to uncover both the understanding and the practices of a small sample of intermediate phase teachers required the use of methods that would enable the nuance and texture of their experience to be identified.

How the research methods described above relate to the conceptual framework will be become clear in the following chapter, after which the data will be presented.

Chapter 4 Conceptual framework

Introduction

The following framework was devised by combining the ideas of a number of theorists. These theorists are all educationists that have researched either the use of teacher enactment of the textbook in the classroom, or the dynamics between the teacher-learner-textbook triad. These researchers were briefly discussed in the literature review, but a number of others surfaced in the design of the framework which brought to the fore a number of issues or areas that required some further exploration of theory.

As was discussed in the chapter on research methods, three sets of data were examined. These were interview data, observation data and an analysis of LTSM. Because each set of data usually resides within a different framework for analysis, it was important to find a common basis to approach the main research question of how certain South African teachers understand and use LTSM. The data analysis uses the following approaches: the interview data relies largely on a thematic analysis based on the questions that were posed during the interviews; the observation data identifies tendencies and behaviours that appear repeatedly or that are out of the ordinary; and, the texts are subject to a close analysis of elements that provide particular kinds of affordances and significance. By affordance is meant 'that which can be gained from it'. All these forms of examination are necessarily embedded in theoretical positions which inform analysis. Although I felt that a socio-cultural approach could unlock the complexity of the many layers of meaning and interpretive strategies that the research question would require, the different sets of data were not held together by a strong enough organisational principle.

The identification of the teacher-learner-LTSM triad by Ball and Cohen (1996), as the essential elements of lesson dynamics, makes it possible to conceptualise a framework where the intersections between these elements bring the different sets of my research data together. In examining the intersections between textbooks (or LTSM) and teachers, textbooks (or LTSM) and learners, and learners and teachers, a focus emerged. This

pointed to three major elements that needed to be considered: the issue of lesson and curriculum coherence; the issue of how affordances of how LTSM are both understood and used in lessons; and, the way in which learner participation is a pivotal part of how teachers shape and direct their teaching. The conceptual framework for this thesis is represented by the following two graphics: the first shows the elements of the triad and what these represent, and then the second shows the intersections among these elements and how these operate:

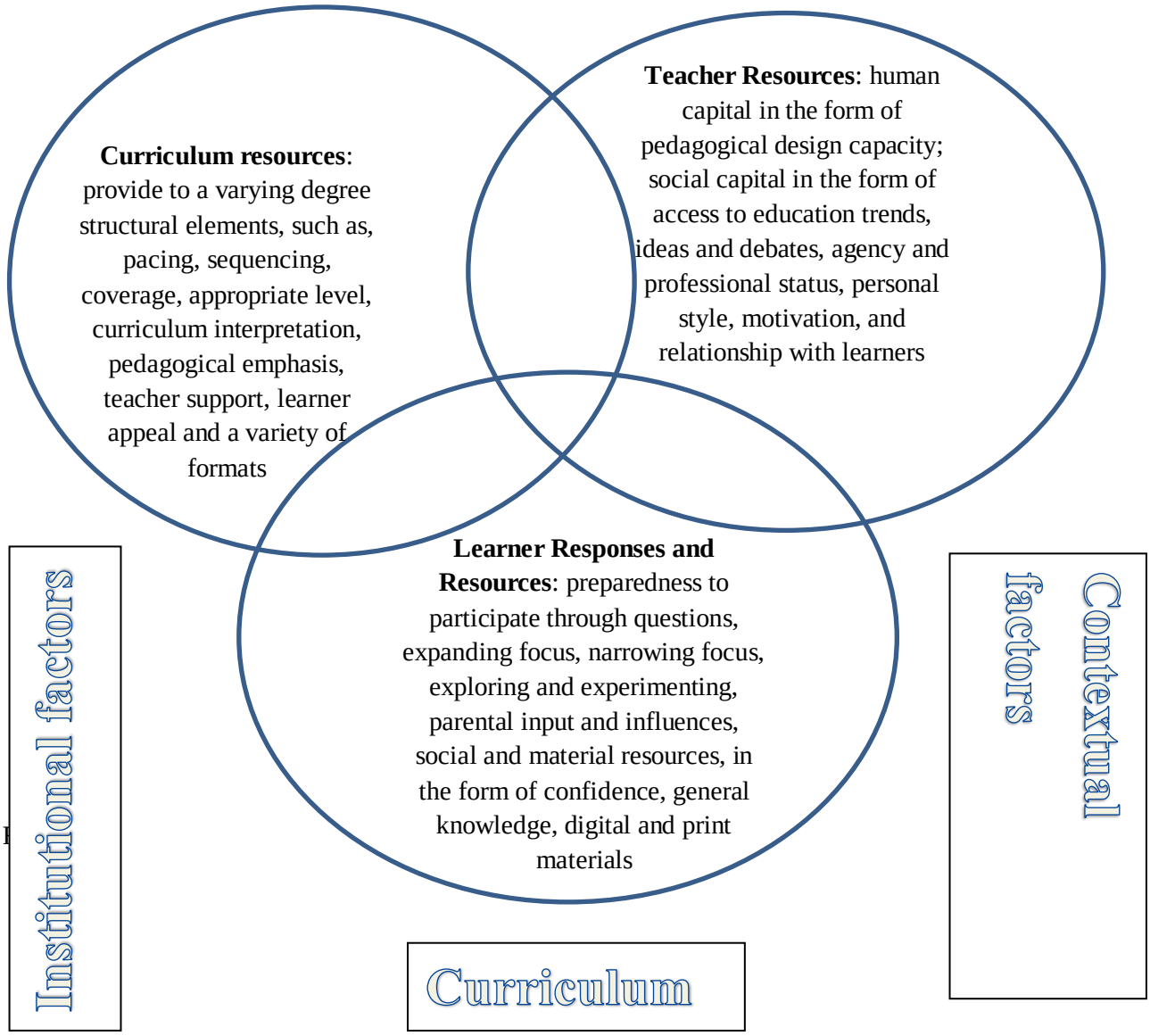


Figure 1 Venn diagram of the teacher-learner LTSM triad

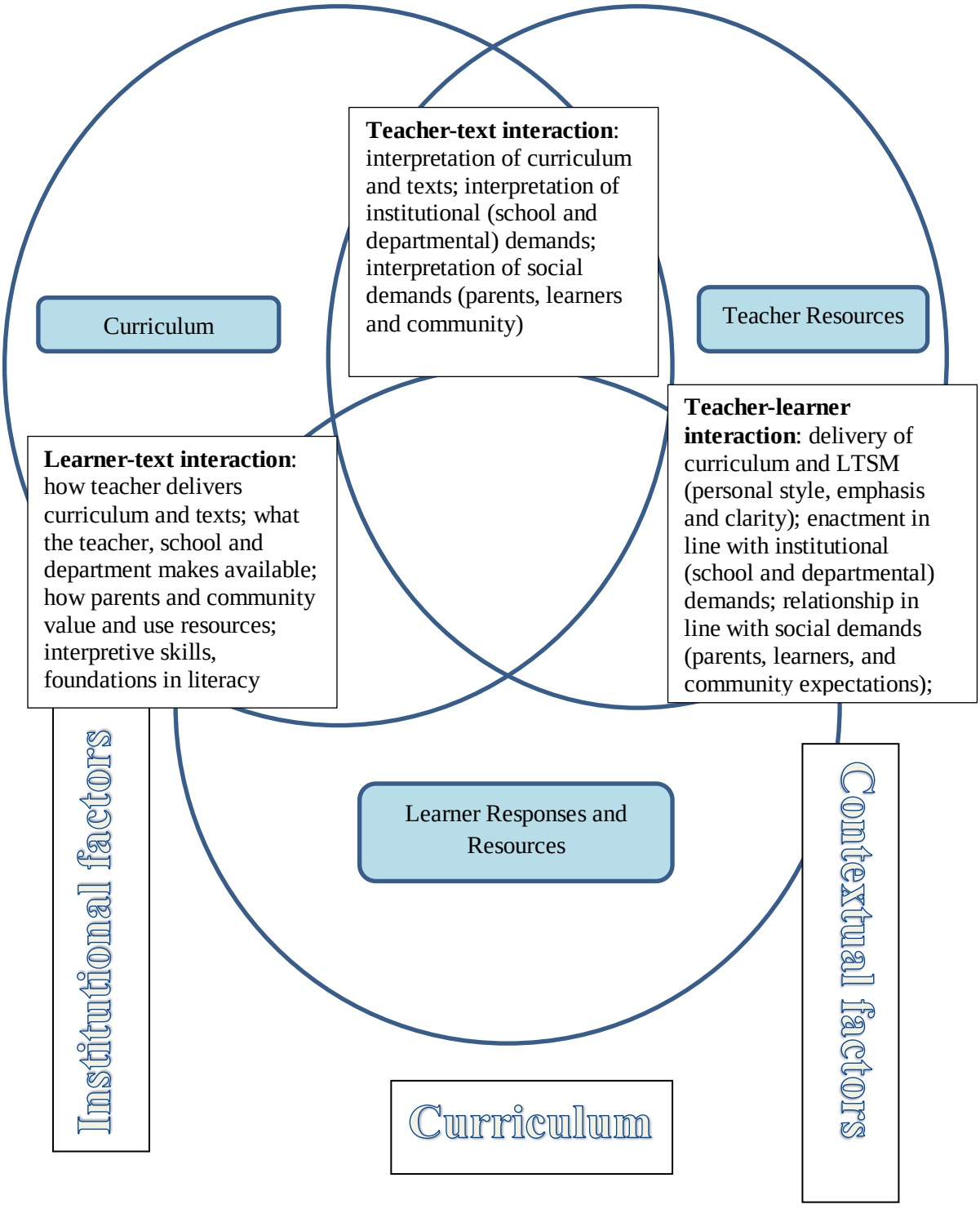


Figure 2 The intersections between the teacher learner LTSM triad

The following sections explain what the Venn diagram of the triad affords as a tool of analysis, as well as how the various elements are interpreted informed by an understanding of a variety of theorists.

That which lies outside the triad: contextual factors, institutional factors and the curriculum

The world of the classroom is embedded in a large range of contextual and institutional factors, and issues related to the curriculum. Contextual factors range from, among others, the geographical, linguistic, socio-economic, cultural and political. Geographical factors, such as, whether a school is in a rural or urban context, and the variations between, for example, highly industrialised, largely agricultural, genteelly suburban, or high-density sprawl, which is surrounded by vibrant and accessible cultural activities, has an effect on the classroom. Linguistic factors, such as, whether a school is mainly mono-lingual or multi-lingual, and the variations between relating to levels of proficiency and the abilities of teachers and learners to communicate effectively across language barriers has an impact on the classroom. Socio-economic factors, for example, where a school stands on the spectrum of human, as well as professional, capital and material resources affect its ability to negotiate the education system. The degree of cultural or religious homogeneity and how this translates in an educational situation has an influence on the classroom. Finally, the political factors which determine relations of power, such as, the status of unions, political parties, or education ratings which have an influence on national or international perceptions, has an effect on the classroom. All these factors (in various combinations) are instrumental in determining how teaching and learning takes place in the classroom. And the factors described above are by no means a complete list of all possible contextual factors that could have a bearing on classroom dynamics.

Institutional factors have a direct and immediate influence on the classroom: the school culture, which ranges across a spectrum from rigidly conservative to excessively laissez faire; and management, which spans an autocratic to anarchic approach at the school, has a bearing on the way teaching and learning are presented and received. Indeed, the very understanding of what constitutes *teaching* and *learning* (as separate concepts, as well as an integrated concept) are usually dependent on institutional factors. The institution is linked integrally to a larger education system that has strong mechanisms which influence the school's culture, via the curriculum, oversight structures, and assessment systems.

However, the internal culture of the school is equally influenced by the constituency that the school serves, as well as the calibre and kind of teachers and management team that is in place at the school. A teacher, as representative of the system as well as the institution, stands in front of the classroom with these constraints and freedoms. Both are open to a teacher's interpretation, but these constraints and freedoms can be difficult for the teacher to accept – for a variety of reasons, from lack of capacity to principled objections (Hargreaves, 2000).

The curriculum is meant to act as the backbone of what happens in the classroom. As described in the literature review, the curriculum is the carrier of both implicit and explicit content. Implicitly, it conveys the ideological and educational stance of the developers (Shkedi. 2009). In other words, the government's intentions are embedded in the curriculum through the ways it presents certain emphases and content. In South Africa, a strong remedial strand runs through the current curriculum (CAPS). There are also multiple ambiguities regarding global and national interests, as well as academic and skills-based education, which co-exist in the curriculum. Explicitly, the curriculum specifies content, time allocations and the level and depth to approach the content. The general nature and broadness of the curriculum requires a finer reinterpretation, which links this content to teaching methods and activities, so that its presentation makes the content palatable. As such, LTSM are supposed to make the curriculum accessible to teachers and learners (and often the caregivers of learners who oversee homework and study).

Every participant who enters the classroom does so with a considerable range of unique, as well as common, experiences, ideas, interests and knowledge. It is through the lens of these factors that the presentation of new ideas and knowledge intersect with and can shift the same factors. In other words, the presentation can consolidate, extend or confuse existing ideas or knowledge.

Teachers and learners are the live interpreters, whereas the materials (usually having undergone various processes of production, interpretation, modification and presentation – informed by a variety of people who may have been guided by numerous personal, corporate or political interpretations and agendas) stand as a third interpretive party (silent and material in all senses of the word) in the teaching-learning triad.

The triad:

Curriculum resources

This element is objectively silent, but it has perhaps the most to say about the topics to be taught. Its presence has the power and potential to put a variety of processes in motion – from the information it presents in a particular way, to the activities and exercises it suggests and puts forward. It is (potentially) a highly active part of the triad, but its 'action' is entirely dependent on the other two parties: teachers and learners. Of these parties, teachers have enormous influence on how or whether materials come into play, particularly at primary school level.

The materials function in numerous ways, but its usefulness to teachers and learners lies primarily in curriculum presentation and curriculum coverage.

LTSM: presentation

The presentation is important: the degree to which design is employed to appeal to the learners; the selection of a variety of formats, so that users become familiar with the multiplicity of modern communications and expression; the assumptions about the users that underlie any presentation; and, the degree to which the presentation attempts to mirror elements of the context which governs its own production. All of these factors are instrumental in creating LTSM, and ensuring that they will be received in a particular way. For the purposes of analysing and understanding the sophisticated interplay between presentation and reception of materials, Bezemer and Kress (2010) provide a framework that specifically examines textbooks.

Textbook designers, like teachers, have a large number of considerations to contend with when they design a textbook. Aside from the obvious ones, such as the curriculum requirements, price, whether the book(s) will be accepted by submissions committees, and the specific markets for which the book(s) are being produced, designers also have to give careful thought to the look and the tone of the content. Bezemer and Kress (2010) show that by studying the typography, image, writing and layout, in conjunction with the socio-cultural factors that surround decisions for such modes, it is possible to detect shifts in the way the concept of knowledge is understood. By implication, this shows how teaching and learning are conceived. Together with these shifts come new ways in which texts need to be treated. In their words: "For users of textbooks the changes in design

demand new forms of 'literacy'; a fluency not only in 'reading' writing, image, typography and layout jointly, but in the overall design of learning environments." (Bezemer & Kress, 2010, p. 10) They posit that the most significant change in design stems from how coherence used to be the exclusive domain of textbook designers. In modern classrooms, there is an expectation that readers/learners and teachers take responsibility for coherence by 'participating' in the design. There are far more open designs under the influence of modern media. Knowledge production, they claim, is done by the users of the textbook, rather than derived from the textbook as an independent and omniscient source. Through such analysis, they state it is possible to identify certain gains and losses: "Lost are certain forms of written complexity, stability, canonicity and vertical power structures. Gained are 'horizontal', more open participatory relations in the production of knowledge, blurring former distinctions within and across production and consumption, writing and reading, and teaching and learning" (Bezemer & Kress, 2008, p. 26).

Their framework assumes the skills of a reader who has been schooled in the multi-modal interpretation of imagery, layout techniques and non-linear reading, while maintaining a coherent sense of the content. Much of this kind of 'literacy' requires skilled teaching and knowledge of visual literacy, as well as an understanding of how to sustain a train of thought or argument. It needs the conscious efforts of a teacher to make learners aware of how texts have been shaped. By examining examples of materials, it becomes apparent how multi-modal literacy teaching needs to be introduced and taught.

The significance for this study is they demonstrate that creating coherence often relies far more on the user than what is embedded in the materials themselves. One of the manifestations of this idea is the far greater variety of formats introduced in the text to present information and ideas in ways that are more varied and multi-focal. When working with formats, an understanding of affordances becomes a necessary part of teaching. The differences between informational text, narratives (either personal or by third party, and presented in, for example, a journalistic, discursive, persuasive or emotive style) or graphics (and knowing how visual elements influence such a presentation) require a teacher to make these elements transparent to learners. This needs to be made explicit so that the learners gain the pedagogical point of such formats. The use of multifarious formats is the primary way in which modern texts sacrifice the kind of

coherence that characterised the previously 'omniscient' textbook (see the debate between Olson (1989) and Luke, C., de Castell and Luke, A. (1989)). Old-school textbooks often set out to create a strong linear presentation, which was interrupted only by exercises that promoted drill and recall.

The lack of linearity and coherence in modern materials is sometimes mitigated by principles of ESL design. There is a conscious attempt at clear lines of logic and internal content coherence to compensate for possible linguistic barriers.

LTSM: coverage

Curriculum coverage, the pedagogical emphasis, certain omissions and the way enrichment and extension are included, are all factors that determine publishers' attempts to appeal to teachers. In turn, they determine the reproduction by learners in the form of what they produce in tests, but more significantly, in the form that the content will be understood and used for further learning. Structural elements, such as pacing, sequencing, degree of coverage, appropriate level, curriculum interpretation and simplification, pedagogical emphasis, and teacher support become the basis from which teachers choose materials and then select from them. Teachers normally assume coverage is important, but especially in a situation where the curriculum is particularly dense, sequencing, pacing and emphasis become paramount.

LTSM act as both interpreter (of the curriculum) and that which has to be interpreted (the textbook). This dual position needs to be acknowledged and addressed by users in a way that reveals an awareness of the layers of interpretations that are present in materials. The work of Bezemer and Kress (2010), who are part of the New London Group, which is embedded in the Critical Language Awareness framework, is informative for this study. This group of theorists see the concept of literacy, texts (in all its various guises), and the acts of reading and writing as particular manifestations of time, place, power relations and a host of other contextual factors. All these factors shape thinking and understanding and what it means to be a learner and thinker. This framework underpinned the analysis of various LTSM used by teachers in this study.

Teachers

The role of teachers resonates with the sociological theory of Bourdieu (1977, 1984; Bourdieu & Passeron, 1977), where the extended notion of cultural capital, as something

possessed by individuals, in the form of knowledge, culture (in the sense that it represents a dominant, powerful culture) and social class that they use to further their social position and to gain greater advantages. Not only is cultural capital part of their own position, but it is also part of what they are attempting to produce (or reproduce) in learners. Some theorists, such as Kingston (2001), have posited alternative classroom criteria for how teachers promote learners in terms of levels of performance, obedience and compliance. However, teachers themselves are generally firmly bound to these abstract forms of capital, identified by Bourdieu, for success. In other words, their advancement as an educator relies on the kind of knowledge (both content and pedagogical) that they have as a result of various forms of privilege. Teachers' familiarity and comfort with the dominant cultural ways of using and exploring knowledge and learning, as well as their social class, allows for access to a variety of resources. They have at their disposal: new education trends; ideas and debates; agency and professional status; and, actual physical resources, such as, digital devices and print materials.

Access to the kind of capital described above may lead a motivated and creative teacher, who has a strong sense of autonomy and professionalism, to develop good pedagogical design capacity (PDC). This concept is described by Brown (2009, p. 29): "PDC represents a teacher's skill in perceiving affordances, making decisions, and following through on plans … It is the skill in weaving various modes of use together and in arranging the various pieces of the classroom setting that is the mark of a teacher with high PDC…".

Additional factors, such as, personal style, motivation, pre-disposition, field of teaching and the teacher's relationship with learners (either extrinsically- or intrinsically-fuelled) affect the way transmission and learning is accomplished. In other words, how a teacher thinks about teaching and learning and the way this translates into enactment reveals itself in the three central themes of the triad: creating coherence, using LTSM affordances and fostering learner input to shape teaching.

Learner responses and resources

Learners' preparedness to participate in the lesson ranges from quiet attentiveness (or inattentiveness) to vocal interaction (strongly relevant or purposefully distracting), and this variation makes particular demands on the teacher (Cohen, 2011). Positive learner

input varies from questions and comments which expand the lesson's focus, for example, by making connections across different knowledge fields to narrowing the lesson focus, for example, by referring to previous learning that has not been solidly embedded. They can also allow for exploration of a topic, for example, by examining the hypothetical or theoretical underpinnings of the topic, as well as experimentation, for example, through how practical applications of ideas might manifest or the kinds of skills required for working with a topic. Learners' input often depends on parental input and influences, and social and material resources. This may take the form of confidence, general knowledge, and access to digital and print materials (Christie, 2008). Negative learner input, which is designed to either limit or derail learning, may be a response to different forms of teacher management or personal motivation, although a multitude of external factors could also be responsible

Cohen (2011) reminds readers of a fundamental issue many teachers face: their success is dependent on learner cooperation. No teaching (regardless of the motivation, skills and expertise that reside in a teacher) can happen without such cooperation. Inasmuch as teaching involves teacher knowledge and effective organisation of the instructional discourse, teachers require an "acquaintance with learners' knowledge" (p 25). Unless the learners cooperate and participate, it becomes almost impossible for teachers to teach in ways that tap into how learners understand material and to establish where their gaps and misunderstandings lie. Without the learners' cooperation, teachers do not have opportunities to create connections for learners through probing their learning, discussion and learner presentations. At the same time, certain teaching practices may result in learner-passivity and undermine any willingness to participate. Cohen (2011) distinguishes between teachings practices in which teachers mediate knowledge, and practices that attempts to examine learners' knowledge/understanding. Cohen (2011) suggests that working with learner ideas (i.e. attempting to understand learners' knowledge) encourages the willingness of learners to participate.

The intersections: Teacher-learner interaction

Four factors are principally in operation at this juncture: the delivery of the curriculum and LTSM (dependent in large measure on Pedagogical Content Knowledge (as defined by Shulmann, 1986/87), personal style, emphasis and clarity); the calibration of the curriculum and LTSM with institutional demands (school and departmental); how the

relationship correlates with social demands (parents, learners, and the community's expectations); and, the level of learners' participation.

LTSM are an important management tool, which teachers use to garner learners' cooperation. The purpose of LTSM is to bring the learners on board during the learning process, by using materials that are powerful, entertaining or serve as a way to promote coverage of the content. The ways learners are exposed to materials will influence their level of participation and degree of learner independence from the teacher. Materials used in the classroom usually have an impact on materials used outside the classroom. Reading and writing in textbooks, as against an extensive use of technology, will in all likelihood shape learners' understanding of what is valued in learning and how to acquire it. Similarly, the filling in of worksheets and the listening to a teacher's explanation of visual materials, produce an understanding of how learning and knowledge is gained and evaluated. Although teacher mediation is of primary significance in the use of classroom LTSM, the way learners' engagement is established has a marked influence on learners' attitudes to learning.

Cohen (p 180) uses the notions of "fixed knowledge" versus "practices of inquiry". The former term refers to instances where teachers seek either to teach for congruence, which requires only that learners are able to reproduce what the teachers have presented to them, while the latter refers to instances where teachers "attend to signs of minds at work" (p 181), requiring teachers to fathom how/what learners understand and how they arrive at knowledge. Logically, these approaches lead to different teaching styles, and also teachers move from one approach to another depending on the specific goal they want to achieve. However, teachers usually adopt a style that reveals a particular disposition towards the way in which they believe knowledge is gained. In relation to the kinds of methods and interactions that derive from these dispositions, Cohen (2011, p. 182) compiled the following table, which is relevant to the exploration of teaching materials and the mediation of these materials:

	Explore in indirect interaction	Explore in direct interaction
View of knowledge as fixed and search for congruence	Use multiple choice tests, homework of seatwork hand-outs, checklists and similar devices to probe students' knowledge. Teachers and students cannot explore in depth because of constraints in knowledge, the mode of exploration, and the discourse. Students' probing of teachers' views is quite limited. Teachers require little interactive skill and little knowledge of exploratory techniques. Pre-packaged assessments are typical	Use simple question and answer techniques or formal recitations to probe students' knowledge. The depth and extent of exploration are limited, because constraints in the view of knowledge and mode of exploration. Although the discourse mode also restricts probing, it is less restrictive than indirect interactions. Students can probe teachers' knowledge in return, but usually not extensively. Teachers need some interactive skill and knowledge and some capacity to frame appropriate questions and quickly assess answers
View of knowledge as the outcome of inquiry, and search for signs of minds at work	Use essays, journal writing, and the like to explore what students know and how well they can explain it. Students and teachers can explore in considerable depth. Teachers may encourage students to probe teachers' knowledge in return, Teachers require little interactive skill and knowledge, but they need considerable specialized knowledge of the subject to ask good questions and respond thoughtfully to students' answers	Use discussions, debates, extended colloquies and other direct discourses to probe what students know. Students may be encouraged to challenge one another's knowledge and even that of the teacher. Teachers require considerable knowledge of the material, interactive skills, and ways to combine the two

Table 6 Cohen (2011, p. 182)'s table on how interactions among discourse organisation, views of knowledge, and acquaintance with students' knowledge bear on teaching

This table shows the striking differences in the kinds of materials that different teaching styles (and philosophies) inspire. The choices made by teachers have significant implications for teaching and learning: Notions of fixed knowledge require far less of both teacher and learner; whereas, the obverse is true for an understanding of knowledge as the outcome of inquiry. The central column lists the materials used by teachers to

ascertain the effectiveness of their teaching, and these are handed to learners to demonstrate what they have absorbed from lessons. The third column suggests how the materials are used by teachers to present that knowledge. It is significant that only learners' intervention can inject an inquiry process into the first style of presentation (simple question and answer or formal recitations).

The materials listed in the middle column make the interaction between teachers and learners on lesson content possible, because they examine how learners reproduce (or represent) their own interpretation of the content. The use of short and simple answers, as opposed to extended written work, reveals the learners' understanding and the ability to express that understanding in very different ways. These methods stand at opposing sides of a spectrum of how learners are taught to relate to knowledge and knowledge acquisition. As a result of the choice of LTSM, the way in which these are used and enacted, learners may learn that learning depends on either rote learning, or a critical thinking process of interrogating ideas and information.

Teacher notions of knowledge are often in line (or even the consequence) of institutional demands. The curriculum is foremost in the conscious determination of what should be taught and, especially, how it is taught. Shkedi's (2009) view of the curriculum frame which contains the meta-narratives that link to the ideological factors and pedagogical approaches that underpin the way more concrete ideas are chosen, apportioned and presented influences all aspects of what takes place in the classroom. The South African situation provides an interesting case study, because both Curriculum 2005 and the current CAPS curricula have remediation as part of their respective agendas. The earlier curriculum intended to remedy the damage done by apartheid education through a skills-based approach. It put remediation in the hands of teachers, and provided them with enormous autonomy, responsibility and freedom to choose materials and methodologies. However, the current curriculum (CAPS) is intended to remediate the poor performance of learners in international and national tests, and, by implication, the poor teaching that led to these results. That it is highly prescriptive, systematic and subject to close inspection of teachers' work is reflected in learners' workbooks.

In a school or education system, which places high value on recall or lower order assessment (in other words, that requires minimal input that reveals learner thinking), can

foster teaching associated with a fixed knowledge approach. The ANAs are an example of such assessment. In the light of an exceptionally full curriculum, the temptation to adopt the easier and faster teaching approach of fixed knowledge is also understandable. Bureaucratic pressures, the size of classes, the level of supervision of HODs on coverage of the curriculum – all these factors play a role in the way teachers approach teaching. In addition, collegial support, input and the degree of accessibility to and knowledge of a variety of resources also shapes teaching practice and teachers' thinking about knowledge. Added to this mix is pedagogical content knowledge (PCK): If teacher knowledge is restricted to the immediate demands of a lesson as presented in a textbook, scripted lesson plans or the curriculum, then this knowledge is too limited for the teacher to attempt an inquiry-based approach, because this exposes the fixity of the teacher's knowledge.

Broader social demands also have the power to shape the way teachers work with learners. The importance attached to the kind of curriculum knowledge taught at school is significant to parents, industry and other employment-opportunity institutions, tertiary institutions, religious institutions and political institutions. Encouragement from these sectors, through the way in which public discourse values knowledge and learning, determines in considerable measure how some schools and teachers see their role. For example, in South Africa (and in many countries) the beliefs that education provides a route out of poverty, and that certain kinds of knowledge – mainly scientific knowledge – lead to lucrative employment, encourages many learners and parents to make choices in line with such beliefs.

Finally, how and whether learners participate in the classroom is a powerful part of the teacher-learner intersection. While the teacher is usually in a position to direct the learners' participation, this does not necessarily translate into teacher-led versus learner-centred lessons. However, if the learners' input steers the way the teacher teaches (or whether the teacher allows learners to discover knowledge through peer and intertextual interaction), learner conceptualisation of knowledge as well as opportunities for learners to test and apply their understanding in more meaningful ways could make way for a greater sense of coherence on the part of the learners. If teachers consciously restrict learner interaction through closed questions or lecture-style teaching, which does not

invite interruption, then learners' "participation" is restricted to what the teachers see in the learners' written work or to teachers' guesswork.

The intersections: Teacher-text interaction

The teacher-text interaction involves mainly the following intersections: the interpretation of curriculum and texts; the interpretation of institutional (school and departmental) demands; and, the interpretation of social demands (including parents, learners, and community).

Remillard (2005) in her extensive review of the literature relating to LTSM-use distinguishes between "implementation" and "enactment" (p. 213, 214) of LTSM. Policy makers and textbook designers generally assume that teachers and learners follow the materials as closely as possible, that is, that they will implement the LTSM. Policy makers and textbook designers see LTSM as the vehicle for curriculum coverage and the creation of a measure of uniformity, which is conducive to standardised testing. However, such uniformity is seldom the case, and such rigid implementation is neither possible nor desirable, given contextual factors. Instead, teachers enact materials. This enactment reflects a host of elements specific to the teaching situation and the teachers themselves. Ball & Cohen (1996) posit the following five domains that influence teacher-text interaction: the way teachers see their students; teachers' own understanding of the material; the way teachers navigate the materials to suit their students; the class's intellectual and social environment; and, the views of the broader community, which includes policy and parental expectations. There are issues that are specific to the teachers, such as, PCK. Equally important, is the position they hold on the topic or subject area they teach, for example, how they view the importance, status or trajectory of the subject /topic they are teaching.

How researchers approach investigations of data relating to LTSM enactment depends on their theoretical position. This may range from a positivist one, which looks mainly at levels of fidelity to textbooks, to various interpretivist ones: these may look at the role of teacher agency; how the teacher 'co-designs' materials, the interpretations of the materials that the teachers have; and, how they arrive at these interpretations. An example of the interpretivist position is a socio-cultural one: it looks at the social and other factors that influence the enactment of materials; as well as the teachers' interpretations, as these

are derived from the material situations in schools, their personal backgrounds, and their teacher training.

In this thesis, the investigation and the analysis of the data gathered was framed by both an interpretivist and socio-cultural position, and included the ideas of Brown (2009) who built on Remillard's pioneering work in the field. Brown (2009, p. 24), who works from a mainly interpretivist perspective, posits three types of curriculum use: 'offloading', 'adapting' and 'improvising'. By offloading, he means the following of materials as presented in the LTSM, for example, the use of instructions, specific exercises, and parts that teachers expect learners to memorise. Some teachers choose to adapt materials in order to suit their own or their learners' needs or to accommodate specific factors, such as the environment or schedules. From time to time teachers improvise, so that the idea in an LTSM forms the basis for an activity or discussion, but it takes a considerably different shape in the classroom. Brown's (2009) proposition of PDC dovetails neatly with the model created by Forbes and Davis (2010). This model suggests that it is possible to look at how closely teachers follow selected texts – or improvise and adapt them in response to classroom dynamics. According to Forbes and Davis (2010), this creates opportunities for seeing and understanding how inquiry-based classrooms are built. In essence, they examine how coherence is forged through a considered use of LTSM. The considered use of LTSM is based on how teachers mine and exploit the affordances of different kinds of LTSM so that learners may benefit maximally from these. Also, through revealing and consciously discussing the affordances of different kinds of materials, learners become acquainted with different genres and formats which teach them how to present information and ideas in different ways.

In broad terms, Forbes and Davis (2010) built on Remillard's (1999) earlier work, which mapped the arenas of teachers' work, to show how they engaged with the curriculum. Remillard (1999, p. 322) looked closely at the process of curriculum enactment and constructed a model that includes three arenas: the design arena (where teachers interact explicitly with the textbook for the purpose of lesson design); the construction arena (where teachers interact with students on tasks selected from the textbook, so that the teachers improvise and adapt the tasks); and, the mapping arena (where teachers select materials for curriculum coverage). Figure 3 (below) represents these arenas and the relationships between them.

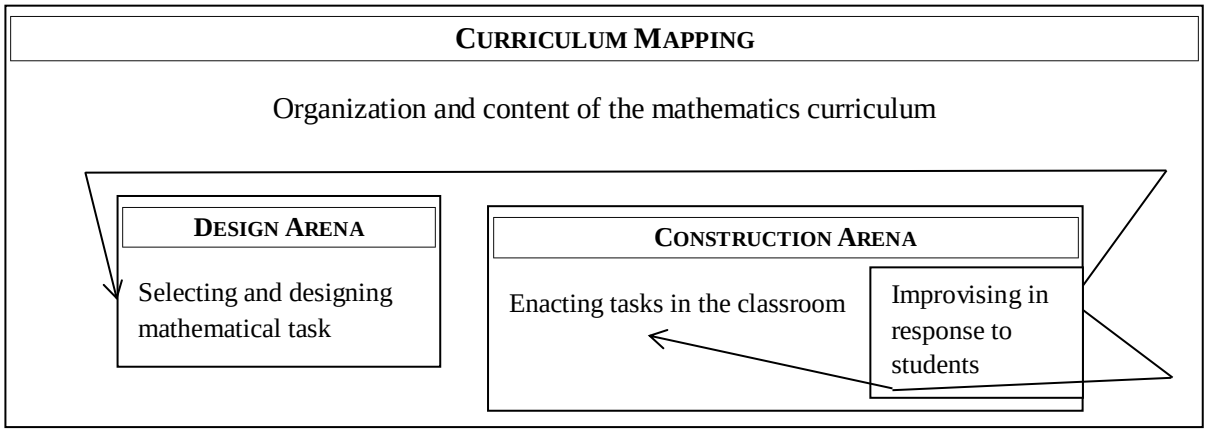


Figure 3 Overview of the Three Arenas and the Relationships among them (Remillard, 1999, p. 322)

Forbes and Davis (2010) extend these notions of selection and enactment (see figure 4). By allowing the intersection of "mobilisation" to show the degree of movement teachers undertake in their choice of different texts as well as an "adaptation" of such texts, they construct a much broader arena. On the one hand, focused work (whether it involves improvisation or offloading) speaks to the notion of coherence, namely, the integration of materials, teacher presentation and learner input about a topic under discussion. On the other hand, distributed work, creates a scattered or multi-focal approach to a topic. Unsurprisingly, their findings indicate that the environment most conducive to an inquiry-based approach is highly adaptive, but limited in terms of the numbers of materials used with learners in the classroom.

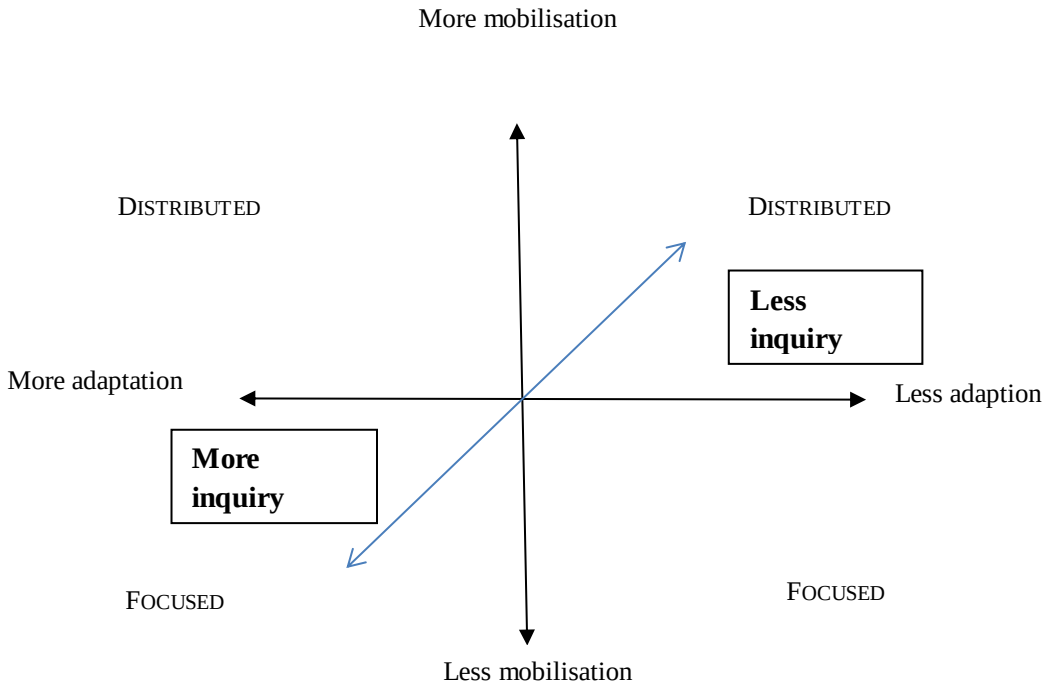


Figure 4 Forbes & Davis (2010, p. 823): Framework for teachers' curriculum design for inquiry

In working with LTSM, teachers need to consider both policy and institutional demands. The degree of openness of the system, at departmental or school level, is absorbed by teachers through the mechanisms put in place that foster particular approaches (Hugo 2013). There is a difference between a culture which insists on close work with specific materials versus a culture that encourages teachers to use multiple resources, and to combine them, so that they are tailor-made for learners. These different cultures have marked consequences for the teacher-text intersection. Simultaneously, parental and community expectations will determine aspects of this intersection, such as, whether there is a strong emphasis on technological expertise, a particular LoLT policy, with a preference for either mother-tongue or English HL, and moral/ideological positions that require the avoidance of certain materials.

The intersections: Learner-text interaction

For learners, texts (reading and producing them, or often simply reproducing texts) unavoidably determine their progress through the education system. The learner-text interaction is of crucial importance to both learners and teachers, because this intersection

is the way that academic success through written assessments is measured. Fundamental to learner-text interactive success is literacy and affiliated issues, such as, language proficiency and interpretive skills.

Language proficiency

International literature on the teaching of a language additional to HL makes it clear that, although it is a long and arduous process, it is possible to acquire proficiency on a par with HL speakers for the purposes of study and academic expression. A precondition for this acquisition is a strong and solid linguistic basis in HL, which allows for transfer of linguistic knowledge into the language that is being learnt. Another precondition is the recognition that acquisition goes through two phases. The first phase contains two aspects, namely, Basic Interpersonal Communicative Skills (BICS), which appears to be similar to proficiency, but is heavily dependent on a myriad of contextual oral cues. Another aspect is the knowledge of discrete language fields, which includes phonological awareness, phonics, syntax and grammatical structures. The second phase involves Cognitive Academic Language Proficiency (CALP), which presupposes a facility with abstract concepts, the vocabulary of academic language and the ability to express such abstract concepts clearly and within the complex conventions of academic language. BICS can be acquired quickly (two-three years) and relatively easily, where there is immersion in the language to be learnt, whereas CALP takes on average five to eight years (Cummins, 2000). The following matrix, created by Cummins in 1979 to classify language activities, although somewhat dated, is useful from the perspective of LTSM-use. The text in italics in the table in quadrants 2 and 4 describe typical materials used in a classroom context:

Matrix to classify language activities

Quadrant 1: **Context-embedded and cognitively undemanding** Manifests in: *social interaction on everyday topics that provides many cues and opportunities for clarification; is mainly oral*	Quadrant 3: **Context-embedded and cognitively demanding** Manifests in: *for example, doing a hands-on experiment, oral presentations, working with maps, charts and graphs, relies on visuals, demonstrations and active participation to understand complex ideas; discussion is important to gain comprehension*
Quadrant 2: **Context-reduced and cognitively undemanding** Manifests in: *reading and writing for personal purposes; filling in worksheets that contain previously taught material, labelling, drawing to indicate understanding*	Quadrant 4: **Context-reduced and cognitively demanding** Manifests in: *writing reports and essays; engaging with textbooks and complex written ideas*

Table 7 Cummins's Matrix (1979) to classify language activities

The theories of English Language Learning (ELL) discussed here assume an environment in which learners spend considerable time immersed in English, that is, they hear English spoken by HL speakers a great deal of the time. In addition, teaching is done by HL speakers who are able to monitor, correct and direct the learners' progress[4]. A great deal of research on ELL teaching has produced certain principles, which are followed by both ELL trained teachers and ELL textbook writers. These principles (although there may be debate and variations about them) generally assume an order in which language structures, different kinds of vocabulary and field-specific conventions (such as the way in which report writing may differ from story writing) are acquired. This order helps the learners to develop the confidence to reveal their knowledge (from one-word answers to short phrases, to simple sentences to compound and complex sentences). In addition, it is agreed that ELL learners need 'thinking' time and a great deal of exposure to suitable texts at their level or slightly above this level; the principle of simplification, repetition, rephrasing and slow and exaggerated articulation. Furthermore, there is the principle that a comfortable classroom environment is important to invite risk-taking and of lowering anxiety and stress (Krashen, 1982).

[4] In a context where there are globally far fewer speakers of English as HL than as an additional or foreign language, there is now extensive literature on World Englishes, lingua franca English and codemeshing / translanguaging which argues against the necessity of contact with HL English speakers.

Publishers and writers who work with ELL principles generally use the following guidelines, which are taken from the Heinemann ESL principles for textbook authors and designers:

- Use the active voice.
- Use simple, uncomplicated sentence structure. Try not to use more than one clause.
- Avoid metaphors and similes and other highly culture-specific phrases and expressions. Use literal rather than idiomatic language.
- Avoid pronouns and words like "this" to refer to a previous reference. ESL learners have a hard time referring he/she/it back to the subject/object of the sentence, particularly when the pronoun is extended, ambiguous, far away from the noun to which it refers. For example, Felix was a cat. The cat was different from all others.
- Use visuals to explain and reinforce content. Show rather than tell.
- Spend time defining, discussing and clarifying unfamiliar vocabulary. Tie vocabulary/concepts to relevant experiences in the learners' lives.
- Simplify language and use scaffolding to increase conceptual understanding, but keep lesson content at a challenging and intellectually stimulating level.
- Engage learners in "academic talk" rather than just conversation talk. Academic talk includes discussion of concepts, reinforces learners' understanding of content lessons, and provides them with the language for expressing these concepts.
- Share learning strategies with learners. Tell the learners why you have chosen to use a particular learning strategy, label the strategy, and tell learners why the strategy might be helpful.
- Employ teaching structures that elicit frequent, extended student responses.

In terms of design, the following principles are followed:

- Pictures engage learners. Use images large on the page.
- Clear simple design is best. Make sure there is lots of white space.
- Too many feature/boxes on page are confusing.
- Too many fonts are confusing. Simple fonts are best.
- If there is more than one artwork in a row, separate them by putting them in boxes or spacing them out.
- Text needs to flow down page in a logical manner.
- Heading, activities and sections of work should be easily identifiable.
  (Heinemann, ESL principles, hand-out, n.d.).

Unless learners have an appropriate degree of proficiency in the language of texts and reading, texts are inaccessible whether or not they are present in the classrooms. If teachers do not expose the learners to printed texts consistently and frequently, then the learners cannot acquire the appropriate levels of proficiency.

Interpretive skills

Even with language proficiency in place, the interpretation of texts has different levels of difficulty. The following model (tables 8 and 9), created by Freebody and Luke (1992), identifies four roles that readers and writers adopt that serve as a useful way to identify how readers engage with texts. Highly proficient readers and writers employ all of these roles simultaneously and the roles are not sequential. Decoding skills assist readers to make sense of new or unfamiliar vocabulary, although contextual cues also help. Participants relate the text to their own experience and to textual and narrative clues to create clear, but generally surface comprehension. The understanding of genres (as a user) further assists in this process of general comprehension. It is only as an analyst, that readers begin to engage with meta-narratives and engage in a critical reading of the text. This analytical skill does not necessarily develop after other skills are in place. Even pre-readers can use analytical skills when they look at visual texts. For example, by interrogating why a character in a story is presented in a particular way, the reader is engaged in analysis. Many studies on the use of stereotypes in children's books show how very young children either criticise or internalise certain ideas based on an analytical stance or by passively accepting the position of the author. All of the knowledge and skills in the model are ones that have to be actively and explicitly taught, especially analytical skills, which are gained through extensive interrogation and discussion of texts.

Four Roles of the reader and writer (based on the model by Freebody and Luke, 1992)

As reader:

Decoder	**Participant**
How do I crack this text? How does it work? How do the marks on the page combine to make meaning? What does the word order tell me? How might I say this in my own language?	How do the ideas in this text combine to produce meaning? What do I know about the world that will help me to make sense of this text? What are the possible meanings that can be made from this text?
User	**Analyst**
What am I supposed to do with this text here and now? What other texts are like this text? What features of this text help me to recognise what kind of text this is? Where would I expect to find this text?	What is this text trying to do to me? Whose interests does this text support? Whose voices are silent or absent? Who would find this text unproblematic because it supports their position? Who would find this text problematic?

Table 8 Freebody's (1992) model of the four roles of the reader

As writer:

Decoder	**Participant**
Writers have to learn to match sounds with letters in order to spell words. In some cases they have to learn the spellings because there is no one-to-one match of letter and sound. They have to understand the differences between the grammar of speech and the grammar of writing in order to construct well-formed sentences. In addition, they have to master linking words so as to construct a cohesive text – that is a text that sticks together.	To take on the participant role, writers have to be able to use writing to produce meaning. Here writers have to work out what they want to say and then find the words to say it. The writer concentrates on meaning allowing language to flow fluently. Thereafter writers have to become editors of their own work. This involves correcting punctuation, spelling, word choice and grammar. In addition, it involves examining the sequencing of the ideas and the connections between them. This may result in the reorganisation of the text and the extension or elaboration of the ideas.
User	**Analyst**
People who use writing, use it for a range of purposes: • To communicate • To record • To produce internet texts • As a tool to think with • To play with ideas • To be creative • To teach and to learn Users adapt their writing to suit their purposes. They write differently for different audiences and when using technologies. For example, not use of SMS language in their academic essays	Writers analyse their own work critically. They read what they have written to see what positions they have constructed for themselves and for their readers. They consider who benefits from the ways in which they have represented people, places, situations and ideas that they are writing about. They use their analysis to redesign their texts so that they have effects that can be defended in relation to questions of social justice and an ethical moral order. They examine the values and effects of their positions.

Table 9 Freebody and Luke's (1992) model of the four roles of the writer

The texts teachers provide and the significance they attach to the content necessarily influence the learner-text relationship. There are differences between whether textbooks are provided, the level and amount of reading and the kinds of activities that learners are required to do, and whether and how worksheets are used. These materials all play a role in how learners learn to work with texts; how they perceive the importance of texts; and the way these intersect with the acquisition of knowledge and ideas. Teachers make choices, but these are often circumscribed by what the school, the education department, and even the community encourages. Thus, the learners' most important tool for empowerment (texts that can be worked with independently) is subject to a host of factors, which are controlled by numerous authorities who help or hinder learners' access to texts.

The heart of the matter

The three elements that emerge most prominently from the intersections are: how to achieve coherence between teaching and learning; the ways to mine LTSM features, structures and modalities for optimal transmission and understanding; and how to manage the interplay between the three different elements of the triad. All these elements relate closely to the research question, which examines how teachers think about and work with LTSM.

The question of coherence

Coherence may be derived from any of the three elements in the triad: the textbook or LTSM, teacher presentation or learner input. Logically, some measure of coherence ought to arise from the combination of these different materials and actors. However, it is possible through observation and interviews to discover how teachers position these elements in their pursuit of coherent teaching and learning.

The term "coherence" is used etymologically, namely, as a "holding together" (Oxford Dictionary online). It suggests the creation of a clear, logical thread in the coverage of a topic or idea, which holds together various components that relate and intersect with a topic or idea, so that learners eventually have a composite perception of it.

Affordances of LTSM

Teachers have access to a wide array of LTSM. In this study, teachers used (among other materials) textbooks, reference books, dictionaries, videos/DVDs, images (including maps, graphs, tables, and sketches), posters, notes on board and flashcards. They also used different materials produced on a smart board, story books / stories, technology, including cell phones, tablets and work done on computers. In addition, there were student worksheets, printed materials photocopied by teachers for classroom use, realia, rubrics, the DBE workbook and student-produced models and presentations. Although there may be some overlap, each of these materials has features that allow for particular ways of using them. This reveals the kind of representational power these materials have to clarify or explicate a topic or an idea.

The term "affordance" literally translates as 'that which can be gained from it'. For example, the use of visual materials has different affordances from those of print material. At the same time, different kinds of visual materials (like posters versus film) have different kinds of strengths in relation to exposition. Similarly, printed texts and narratives have different affordances from informational texts.

How teachers select LTSM, which materials predominate and whether affordances are utilised for optimal understanding, are significant indicators of the way teachers think about and use LTSM.

The levels of participation between the texts, teachers and learners

It is possible to have teaching situations where there is no interplay between texts, teachers and learners. Where learners have no access to LTSM and do not participate actively in lessons, then the only participant is the teacher. When the teacher and learners both have access to LTSM, but learners do not actively participate in directing the lessons, then there are only two participating elements. In this case, the teacher is the sole determiner of the importance and level of presence of the LTSM. There are occasions where learners are responsible for presentation (sometimes with the aid of LTSM) and the roles are reversed: the teacher becomes a listener/evaluator rather than an active participant.

Where all three elements are active during the lesson, there are sometimes clear distinctions between the levels of "participation". The ways LTSM are used indicates

more than teaching style: it shows who controls the usage; how much freedom learners have to voice their ideas, questions and understanding; and, whether such input relies on both the teacher and LTSM, or just the one or the other. It also reveals pedagogical thinking in that the positioning of the elements shows where the determining dynamics for teaching and learning reside – in the LTSM, the teacher, or learners' thinking.

Conclusion

The analysis of the data will return repeatedly to the three areas that lie at the crux of the diagram: coherence, how LTSM affordances are used and the levels of participation of teacher, learners (or their thinking) and LTSM. Both the interviews and the observations interconnect neatly with these three areas. There are both explicit and implicit messages in LTSM, and these also indicate how content could or should be presented. LTSM also show how they expect teachers and learners to work with this content by providing particular kinds of texts, exercises and activities, all of which require the consideration of coherence, affordances of the materials and the kind of participation of the various actors that are suggested.

Chapter 5 Lesson analysis

Introduction

Of the twenty-six lessons observed, two were selected for close and detailed analysis. The purpose of this chapter is, in part, to demonstrate some of the underlying ideas that guide the less detailed analyses of lessons in the later chapters. However, the main purpose is to examine and demonstrate how the teacher-learner-LTSM triad operates in two lessons with a similar focus and the dramatically different outcomes that are produced as a result of the way the different interactions are in the triad are managed. The similarity of the two lessons lies in the lesson focus, the size of the classes and the experience of the teachers. The materials also have some similarity in that these are in worksheet format (even if one of the lessons is based on part of the GDE workbook, the format remains a worksheet one). There are also strong differences, as discussed below.

The two lessons are described step by step, using the words of the teacher, as far as possible. Each of the steps, (only those that relate to the use of LTSM were selected) is discussed, and examined and, in the final section, compared.

What emerges from the description and discussion of the two lessons is the important distinction between *variation* on the theme of a lesson (which allows for multiple perspectives numerous opportunities to shift the pace, the tone and the register of what is discussed, without shifting the focus. In other words, learners may be stimulated by changes that take place in the lesson, without losing the coherence of what is under discussion). This stands in contrast with *deviation* from the main focus, where abrupt and unexplained shifts to unrelated ideas or topics take place, and removes the learners from the focus of the lesson.

Theorists agree that it is the chemistry between teacher knowledge (that is, the understanding of the curriculum, the specific topic and the pedagogical process), and the selected LTSM, which is the artefact shared with the learners, that is the starting point of the teaching and learning programme. Brown (2009) and Remillard (2011) add teachers' beliefs and goals, as well as the contextual factors of the school, classroom and teacher to this mix. Remillard (2011, p 85) summarises research on teacher-curriculum interactions and relationships in the following way: "At the one end of the spectrum lies curriculum resources and at the other are teacher resources. The spheres of curriculum resources and teacher resources meet when there is teacher-text interaction which leads to instructional outcomes. This becomes evident in content that is covered, tasks that are competed and pedagogical emphases that have been internalised".

Amid the teacher-text interaction stands the learners and they too shape the enactment process, by their own interaction with the LTSM, with the teacher and with each other. Cohen (2011, p. 47) distinguishes between three terrains in which teachers and learners have to dovetail for a degree of learning (or what he terms "ambitious teaching") to take place: first, the extension of teacher knowledge to learners, together with the kind of connections needed to promote learning; second, the organisation of the instructional discourse; and, third, the teacher's acquaintance with what the learners already know.

Kelcey and Carlisle (2013) produced the following table which explicate the same three ideas in their study of teachers' literacy instruction based on classroom observations. The instructional action gives concrete substance to the way the three terrains are usually enacted.

Terrains for Teaching and Learning to take place and the Instructional Action required, according to Kelsey and Carlisle (2013)

Theoretical dimension	Instructional action
Organisation (that is, providing pedagogical structure)	• Explaining the purpose of the lesson • Explaining the value/relevance of the lesson • Giving directions for an activity • Providing a wrap-up or summary of what has been accomplished
Delivery of content (that is, directing knowledge and skill acquisition)	• Telling • Modelling • Asking questions to check or mediate student learning • Providing practice or review activities
Support for student learning (that is, fostering their engagement and self-understanding)	• Fostering discussion • Assessing students' work; providing feedback • Giving students an opportunity to ask questions

Table 10 Kelsey and Carlisle (2013)

In the lessons that are analysed in this chapter, I paid attention to all of the various intersections that take place between teacher, text and learner. Implicit in these intersections is the creation of a degree of lesson coherence, the way in which LTSM affordances are used and the form that learner participation takes. All of these factors have implications for the ways enactment unfolds. In addition, the analysis includes indications based on the Kelsey and Carlisle's (2013) model (**(O)** for organisation, **(D)** for delivery of content and **(S)** for support for student learning) of the teacher's instructional action in relation to a particular moment in the lesson. In demonstrating where the teacher focuses her energy and how she combines this with LTSM, it acts as an indication of the teacher's pedagogical emphasis.

The following lessons also provide strong contrasts in certain respects, while simultaneously having similar structures and teaching foci. It is important to note that there are considerable differences between the contexts and objective realities of the two lessons. The first lesson takes place in a public school, with thirty-six learners and the second is in an independent school, with twenty-six learners, and in the latter, there is

more physical space. Although the first lesson is an English lesson, it follows the FAL curriculum, which is a different curriculum to the one followed in the second lesson, namely, the HL curriculum. Another difference is that the teachers are dealing with two different age groups (grade 6 versus grade 4). However, given the FAL/HL distinction, it is not unreasonable to expect a closer correlation between a grade 4 HL and a grade 6 FAL English lesson in terms of curriculum content and focus.

The teachers come from different backgrounds. Although both have between 15-20 years of teaching experience and similar qualifications, the teacher in the first lesson does not speak English as her first language. But the first teacher has experienced a multitude of different primary schools, and she was moved to wherever the DoE felt that she was needed. In contrast, the teacher in the second lesson is an English mother-tongue speaker and she has worked consistently at the same level of primary school teaching. Although the second teacher has worked in schools where there were a large number of learners in a class who were second language English speakers, she now taught in an environment she found comfortable and specialised in grade 4 learning.

The socio-economic situations of the learners differ markedly. Learners in the first classroom are likely to come from home backgrounds that have stark limitations in material, especially in print and other literacy-related resources. In contrast, the learners' lives in the second classroom were associated with greater affluence. This meant that they had the benefits of expanded experience and easy access to a broad range of resources. The difference between the learners in the two classes was manifested by their confidence levels to volunteer their own ideas and thinking.

The following lesson was taught by **teacher 1D, and it** was a **grade 6 English lesson**. In this lesson, she follows the GPLMS programme, which provides her with a scripted lesson plan. However, the teacher does not adhere to the script and combines her own thinking, and combination of different lessons to the presentation of this lesson. A description of what happened in the classroom is provided in bold, while a discussion of this step takes place below. This allows for the reader to have a strong sense of the flow of the lesson and where and how teacher-learner-LTSM interactions steer the lesson in particular directions and towards different outcomes. It is also possible to see where interruptions,

whether in the form of deviation or variation takes place. Only the parts of the lesson pertaining to the use of some LTSM and the interaction with these have been described. Incidental and classroom management moments have been excluded but may be the basis for claims of observed enthusiasm, boredom, confusion, etc.

Lesson 1 (observed 19 May 2014)

Learners enter the class, sit down and take out their class books.

The well-established routines of school are clear. The automatic reaching for class books are indicative of patterns that have been drilled and that learners expect, namely, that they will be working in or from their class books. Note that these class books are not textbooks. Instead, they are exercise books in which worksheets have been pasted and where some exercises have been done. These books, through the worksheets, provide a record of curriculum coverage, and they are inspected by Heads of Departments. They do this to establish whether a teacher is keeping abreast with what the curriculum requires at that particular time of the year. In terms of Cohen's framework (2011), it is the first step and indication of the kind of instructional discourse that is regularly followed in the class – namely, that at some stage in the lesson, learners will be expected to do some writing in relation to teacher input.

The teacher has flash cards with specific vocabulary words on the ready… (D)

The teacher knows exactly how she intends to proceed in the lesson. She has prepared her lesson and plans to use flash cards. It is significant that at grade 6 level, flash cards are used. A number of issues arise: the lesson is meant to follow a specific trajectory, which will lead to the use of flash cards. This means that the teacher will steer the lesson towards the vocabulary she wants the learners to use. In a FAL lesson that purports to develop communicative skills, and is based on an ESL approach that emphasises contextual learning, this could be seen as contradictory. In a fashion typical of teachers who are unconfident of their own proficiency, the lesson is planned and conducted to avoid discussion and the use of learners' examples and their own words. English is introduced at grade 4 level as the LoLT. Two years later, learners ought to be in a position to converse with relative ease and explore language to expand their structural knowledge. Flash cards (unless they deal with concepts) are generally indicative of a mechanistic approach, which

is more appropriate to beginner learners. The result of the use of flashcards is that the teacher tightly controls what vocabulary and stock answers the learners are able to use.

… and appoints a learner to put up a poster of a television recording studio.

This chart is part of the GPLMS programme aimed at providing a thematic talking and teaching focus for a few weeks. The choice of a television studio is one likely to appeal to intermediate learners: it could provide a wealth of discussion points from the technical to the cultural, as well as the specifics of the visuals represented about screen media. Indeed, the poster shows people in various roles during the production of television material. It is both a complex and glamorous world that ought to elicit a great number of questions and raise a lot of issues. At age 11 or 12, learners not only feel themselves to be part of that culture as viewers (and often viewers of programmes that depict the world of the television studio, such as, in reality shows) but they also experience a direct curiosity about what it would be like to be part of that world.

She uses the chart to draw examples of actions from the learners. (D)

The teacher wants to focus on verbs. She directs the class to the actions they can see in the poster – walking, sitting, talking, acting, reading and cleaning. The actions are extraordinarily mundane, unless contextualised and discussed as part of the studio. A poster becomes an unnecessary tool for such limited use. The very low level of vocabulary is incongruous when measured against what is expected of grade 6 learners who have to write assessments in all subjects in English.

She teaches with the lesson plan in her hand. (D)

Issues of compliance, insecurity, inadequate preparation, or a determination to stay focused are all possible reasons for needing the lesson plan at her immediate disposal. In some ways, it breaches the conventions of classroom teaching. A lecturer might refer to notes during a lecture, but in classroom teaching, it is unusual to work with materials other than those which the teacher shares with the learners. A lesson plan in the teacher's hand creates an additional barrier between teachers and learners, and it places the teacher firmly in control of what may or may not happen in the lesson. It is also indicative of a rigidity which runs counter to almost all ESL approaches which emphasise fluency and the encouragement to experiment with language so that confidence develops and

communication takes place. Hammond and Gibbons (2005) explains the language-in-context or communicative approach as follows:

> We argue that language learning is not a simple linear process, but, in Baynham's words, is a 'functional diversification, an extension of the learner's communicative range' (Baynham 1993: 5). … Our view is that ESL learners' success in school is largely related to the opportunities they have to participate in a range of authentic learning contexts and meaning-making, and the support – or scaffolding – that they are given to do so successfully in English. (Hammond & Gibbons, 2005, p. 10)

The use of a lesson plan which provides the teacher with the step-by-step progression of a lesson runs counter to the creation of 'authentic learning contexts and meaning-making'.

She makes the learners stand up and demonstrate some actions that are in the chart. (D)

The actions depicted in the chart are not an extension of existing learner knowledge. By making the learners stand up, sit down, walk a step or two, pretend to be sweeping, the learners are not gaining any new understanding. It may be that in the teacher's mind the doing of actions is equated with active learning, or it may be that the teacher wants to alleviate boredom through some form of distraction. From a pedagogical point of view, this is suggestive of a poor grasp of not only how learning takes place, but also of how she views the pedagogical value of her strategies.

She refers to the two pronunciations of the word 'live' (D)

This is a potentially useful and interesting language point; although it is also a fairly complex one. It is one thing to point out different pronunciations, but it is another to explain how the two words are used differently. In order to make it clear from a technical perspective, learners need to understand the distinction between verbs, adjectives and adverbs. The teacher also has to show the difference between 'alive' and 'live' – where these are pronounced in the same way. In this lesson, learners were simply alerted to the fact that the word could be pronounced in both ways. This might give rise to confusion when the word is encountered in texts. From a communicative and contextual perspective, the use of parts of speech could have been avoided, because the poster provided ample opportunity to demonstrate the use of the word 'live' as an adjective or as an adverb. The teacher could use sentences, such as, *They are broadcasting a live show*; or *They are*

broadcasting live, then to expand on what that means. As a verb, learners would have little problem in talking about where they live or where they had lived in the past.

Her focus is initially on present tense and past tense: "They sit at the table; where did the people sit? Yesterday, they sat at the table". (D)

The exercise constructed around the poster is in the mould of a traditional drill exercise – one that promotes rote learning and choral answers. It is clear that the lesson plan contained this activity for the teacher to enact. There may be several reasons for this: perhaps the lesson plan designers felt they were playing to the strength of traditional teachers by reverting to a technique they felt sure teachers would be comfortable with; or, they felt it was an effective strategy for learners in big classes to absorb the concepts of verbs and past tense. Although it is widely accepted that a communicative and contextual approach to FAL learning is desirable and usually more successful, it is very difficult to implement in large classes. One of the reasons for this is because the noise levels in discussion groups often make teachers uncomfortable (Heugh, 2015, p. 15). This mechanistic way of teaching a decontextualised grammar exercise, makes it easy for both teachers and learners to feel that they have achieved their goal: teachers have covered the prescribed work and learners have answered questions or followed instructions correctly.

After a while she adds: "And next week?" (D)

The teacher probably believes she is scaffolding or extending the content, by moving from simple present, to simple past, then to simple future tense. In English, present and future tenses are the same except for the addition of the word 'will' in the future tense. The tense that presents problems for FAL speakers is the past tense in all its various guises. A passing reference to future tense to indicate the form could have formed part of a lesson on tenses, but there was no need to scaffold this concept in this lesson. Perhaps it was significant that all the answers required during this lesson were accessed easily through the learners' memory and their ready knowledge. The teacher's use of a poster was not necessary and there was no interaction with knowledge beyond what the learners were already expected to know.

The class answers in choral fashion, … (D)

The main critique against the use of choral answering, where learners answer in unison and which was employed by almost all teachers I observed at some stage during

classroom work, is that learner knowledge cannot be established. Yet, for teachers and learners alike, it is immensely reassuring to hear a chorus of voices mouthing the answer that the teacher wants. In line with Cohen's (2011) notion of inert teaching, the semblance of learning can be maintained, while a significant proportion of the class does not understand or know the work. In this lesson, because of the facile level of the questions, it is likely that the majority of learners were familiar with the answers. This means the learners become unthinking and bored. When choral reading or answering takes place while working with texts, learners have to focus on reading as well as answering. There is another layer of engagement which takes place when learners have to work with words and sentences on a page. It is significant that some teachers engage in such strongly aural-based teaching, because it may be one that mimics the teacher's own school experiences.

… interspersed with the very occasional individual answer. (D)

Possibly to keep learners on their toes, the teacher interrupts the choral answering technique to ask individual learners recall-type questions from time to time. This has more to do with attempting to keep the learners' attention than trying to establish meaningful knowledge and/or understanding.

Suddenly among the various examples the past tense of 'clean' is presented as 'has cleaned'. (D)

It is not fair to single out instances where teachers make (usually small) mistakes. In almost all teaching situations, these mistakes are part of the process. Problems arise when these mistakes lead to substantial confusion or when mistakes are repeatedly reinforced through poor teacher knowledge. In this instance, it is possible to argue that the mistake was insignificant and did not warrant further discussion, because the verb 'clean' does not change in the present perfect tense. But if the word was, for example, 'take', then the form would have changed to 'has taken', which is different to the simple past tense of 'took'. In such a case, the teacher needs to explain the different verb forms, but this might lead to significant confusion for the learners. Seeing the work in print, might help to eliminate the kind of confusion these mistakes could cause.

This slips past without comment or notice.

Because the lesson took on a very mechanical pattern, where there was no discussion of tenses at all, the mistake 'has cleaned' can slip past unnoticed by both teacher and

learners. In an interested, engaged and alert class, such a mistake would elicit questions. Learners generally enjoy showing up teachers and being praised for their attentiveness.

The teacher then writes on the board: (D)

A second layer of LTSM is added to the lesson when the teacher presents written work on the board. It is a logical extension of working with visual material and is meant to supplement the topic under discussion. The chalk board is one of the oldest and most constant features of classroom teaching. It has extraordinary advantages: the work that appears on it is usually an organic development of discussion and can represent both teacher and learner thought. With colour, drawing and spacing, the teacher can use the board to create a memorable, creative and coherent overview of what is taking place in the lesson. The ability to change instantly what is on the board, through erasure, means that the teacher can play with multiple options and versions of ideas. Board work stands in strong contrast to the static nature of slides, overhead projector (OHP) or poster work. It is also a democratic medium. More than one person can express themselves (or have themselves expressed) on the board. This can create a powerful form of engagement and ownership of new ideas and knowledge among learners when it is used well.

Deviation 1: Thili, she cleans the studio. (D)

The lesson has been about verbs and tenses up to this point. Then the teacher deviates, without any preamble, into a "common error" of African language speakers. It is incongruous that the teacher chooses to use the learners' first exposure to text in the lesson to write an "incorrect" sentence on the board, and this sentence includes the pronoun 'she' (Thili, she cleans the studio). This "error" shows a transference from an African language structure, where a pronoun is part of a conjunctive structure together with a noun. Teachers and examiners note constantly the prevalence of this kind of "error", and it has become emblematic of an "African" use of English. In a socio-cultural theory of language, this usage would be regarded as part of the unique characteristics of one of the many varieties of English that exist in the world today. It does not interfere with meaning and has no bearing on articulacy or fluency. An emphasis on flawless English grammar among young learners, who are battling with serious literacy issues, is regarded as misplaced in communicative and contextualised ESL teaching.

She asks for someone to correct this, which is done promptly. (D)

It is clear that this particular error has been pointed out previously and that learners have been shown how to correct it. Several learners volunteer answers. It is evident that they have internalised that it is a serious error to include the pronoun in sentences, after the subject has been stated. By using case studies, Cummins (2000) shows that it is essential for a respectful endorsement and validation of a learner's first language while s/he learns a second language. An understanding of the similarities and differences between languages – structurally, as well as in vocabulary formation – is a fundamental stepping stone to understanding and internalising knowledge about a new language. Although many South African teachers are not as proficient in English as might be required, they have the enormous advantage of knowing how the African languages of their learners' work. This knowledge is extremely valuable in teaching FAL if the teacher knows how to use it purposefully and effectively. The difference between mindless code switching and purposeful code switching is to establish transference between mother tongue and FAL.

She then points to 'she' and asks which part of speech this word is. (D)

The strong emphasis on parts of speech is curious. In interviews, teachers repeatedly mention how the CAPS curriculum underplays "grammar" and how this is a loss to their learners. This raises the question of the role grammar plays in learning a language? According to Fraser and Hodson (2003), "The overriding aim of any good grammar program should be, through experience and knowledge, to enhance the students' control of language… Grammar is a means to an end… Students need to understand the concepts (and know the terms that represent them) but above all, they need to use this knowledge". For HL learners, the knowledge of grammar facilitates a clearer and more articulate use of language as they internalise the functions of words and understand the structures of sentences. For FAL learners, a knowledge of how the structure of language works can be helpful in facilitating transference from HL to the new language. This means that grammar becomes useful for an FAL learner only once a firm understanding and foundation of grammar in the HL is established (Cummins, 2000). In the early stages of language acquisition, an understanding of naming words and action words can be very useful. These words can be accompanied by describing words, which may also be of some

practical help. The further intricacies of parts of speech and sentence construction have a limited place – especially in a communicative approach to FAL acquisition. The focus this teacher places on pronouns is indicative of parroting the names of different kinds of words. It is difficult to see how this exercise fulfils a useful purpose at this stage of the language development of these learners.

Someone says 'verb'; she explains why it is not a verb; another learner says it is a pronoun. (D)

Incorrect answers (as vividly illustrated in this case) present an opportunity for engagement with learners' knowledge. If there was attentive and ambitious teaching (Cohen, 2011), then this leads a teacher to interrogate the pathways by which learners arrive at a particular, maybe incorrect, conclusion and then to redirect their thinking. The teacher shows the learner and the class how 'she' cannot be a verb, because there is no action that can be illustrated by using this word. It is a clear and logical explanation that ought to eliminate confusion. When another learner provides the correct answer of 'pronoun', the teacher commends the learner but does not explain either what a pronoun is or how to recognise it. Teaching pronouns is difficult because it is a complex concept and there are many variations of pronouns. However, the simplest explanation (that it stands in the place of a noun) would have helped the learners if pronouns were included in this lesson. However, ensuring the learners' understanding of personal pronouns (I, you, he, she, it, we, they) requires a fair degree of practice and checking of understanding by the teacher. In other words, without any engagement with the learner's answer beyond agreement runs counter to Cohen's (2011) notion of ambitious teaching.

She writes the answers on the board, but cleans these off the board as soon as the new (correct) answer is presented. (D)

It is not uncommon to see mistakes on chalk boards, although teachers are aware that mistakes on a chalk board announce themselves in ways that a slip of the tongue does not. Having an observer in the classroom may be one of the reasons for the teacher to display this kind of insecurity. Another reason to erase her writing on the board may be because this is the way she usually uses the board. This erasure of her writing makes the board less useful than if the learners could have had the opportunity to look and study what she

wrote on it. Having a teacher's writing erased as soon as it appears is frustrating for learners and self-defeating for the teacher.

Deviation 2: Suddenly she moves to articles: "A/the presenter wears a red shirt" (D)

The abrupt change of direction is disconcerting. Nothing announces the new focus on articles. Articles (a/an; the) barely warrant mention in a grammar class at this level. It is a difficult topic, which requires a subtle understanding and deep knowledge of language structure to do justice to the teaching of how / when articles are used in English. The rules that govern the use of articles are obscure. This topic is avoided in both HL and FAL classes throughout school, unless these words are labelled to show that the indefinite articles (a/an) are used with singular nouns, and that 'an' is used before a word starting with a vowel. The example the teacher puts on the board ("A/the presenter wears a red shirt") illustrates the pointlessness of the exercise, since there is no obvious answer (in terms of the poster or the sentence) and either article would be correct.

Deviation 3: Then she asks learners to open their class books and instructs: "Give me 3 sentences". (D)

When the teacher moves unexpectedly to written work, the lack of a coherent and logical flow to the lesson is starkly evident. So far, the learners' experience of learning language in this classroom has focused on tenses, pronouns and articles. The discussion of these language structures has taken place very loosely around the poster, and the teacher's instruction to the learners is confusing and unclear.

Simultaneously, she puts several flash cards with verbs on the board. There is no explanation whether the sentences need to contain the verbs that are on the flash cards or whether sentences can be based on the poster. (D)

It appears that the flash cards are part of a regular routine that prompt learners to write sentences containing these words. Generally, learners do very little writing during lessons, and the required writing, is usually highly prescriptive and guided. The tight control the teacher keeps on what the learners see, hear, say and write is noticeable. A number of important and interesting issues arise from this: certain subject areas may lend themselves better to this form of control. For example, there may be a case (and it can, of course, be contested) for mathematics teaching to be quite carefully and tightly controlled for reasons of sequential scaffolding. In other words, different learning areas usually

warrant different teaching styles and teaching methods (Fordham, 2015). However, language teaching is generally regarded as a subject area which encourages openness about the content and topics in order to create expansiveness and experimentation. Language is the medium through which ideas are expressed and generated. It is only through uninhibited and wide use that learners discover how to work effectively with language. This teacher does not distinguish between controlling the class and controlling the way learners work with materials and ideas. The second issue, related to the first is how teachers understand the idea of a communicative approach to language learning. Many teachers home in on the notion of communication as something that happens in oral (in many classrooms, aural) mode. In other words, learners and teacher engage in talking and listening. A communicative approach is primarily about meaning-making: an effective transmission of meaning needs to take place in all the realms of language – talking and listening, but especially reading and writing. The characteristic that defines the communicative approach is that meaning-making needs to be contextually based (Hammond & Gibbons, 2005). This approach requires that meaning is created and extracted from within the framework created in a lesson, and in this example, by using the television recording studio. The teacher needs to find ways in which learners can practise and experience the kind of communication that takes place in the context of the television studio. This means framing exercises and discussions to exploit the topic for communication opportunities. If, for example, a teacher decided to teach the past tense within the context of a television studio, then she might instruct the class to report to the programme producer what the programme scheduling team had planned for the previous day. In a classroom, learners work in groups as the "team" and generate sentences to report to the "producer". This kind of teaching requires careful planning, facilitation and management. It is difficult to do this kind of activity in a large class as well as for a teacher who does not feel comfortable and fluent in the language they teach. This means that examples do not come from a lesson plan, instead they come from the learners, who have to generate different kinds of texts for reading and writing, for example, different kinds of broadcasts and story lines for films or television series. The intention of the communicative approach is to expose learners to lots of language practice, but this practice is informal and does not take the form of drill exercises. A communicative approach is ambitious, and is beyond the scope of many teachers. The danger of

encouraging a 'communicative' approach, when teachers do not understand or are unable to deliver what is required, is that teachers re-interpret the approach to mean something very light-weight. They think it entails a lot of talking, and almost no reading and writing, which means that there is insufficient practice on topics that need to be covered by the curriculum (Hammond & Gibbons, 2005; Heugh, 2015; Makgamatha, Heugh, Prinsloo & Winnaar, 2013).

She tells the learners that as soon as they are done, they are to take out the DBE work book. She writes on the board: (D and O)

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The teacher alerts the learners to the forthcoming change in lesson focus. She does so, when for the first time in the lesson, the learners have to concentrate on doing their own thinking and writing. Not only does she alert them, but she also urges them to be quick about their writing and indicates the page they will be working from in the DBE workbook. This means that the learners, especially the easily distractible ones, can move ahead to that page even if they have not completed the written work the teacher set for them on sentence construction. The way in which this part of the lesson is structured encourages distraction and speed. It takes the learners away from an activity that ought to require attention and care. A subliminal message is sent to learners that writing is both unimportant and can be done without much effort.

Deviation 4: After a short time, she tells learners to stop doing their sentences … (D)

Learners have not completed their written work. The teacher does not tell the learners to complete the work later; there is no indication to the learners that she puts any store in their own writing. Learners are placed in a position where, once again, what they produce has a mechanical feel to it. Their writing is for the sake of evidence, rather than for the sake of their own learning. They are also internalising a sense that incompletion is unproblematic and that a rapid move from one activity to another is an acceptable part of the school's routine. Teachers complain a great deal about the impractical pace embedded in both the CAPS curriculum and the GPLMS lesson plans (based on the CAPS curriculum). They feel too much needs to be covered too quickly (see interview data). It may be that teachers adopt such a disruptive and jumbled teaching style in response to a curriculum that is too full. However, teachers may jump from topic to topic and activity

to activity, because they feel that leaving learners to work for too long on a single topic will lead to boredom and potentially disruptive behaviour. It may also be a blind adherence to programmes that suggest particular time frames and pacing of the lessons.

… and to turn to page 26 in the DBE book (see photo on next page). (D)

Friendly letter lesson from the Grade 6 DBE workbook

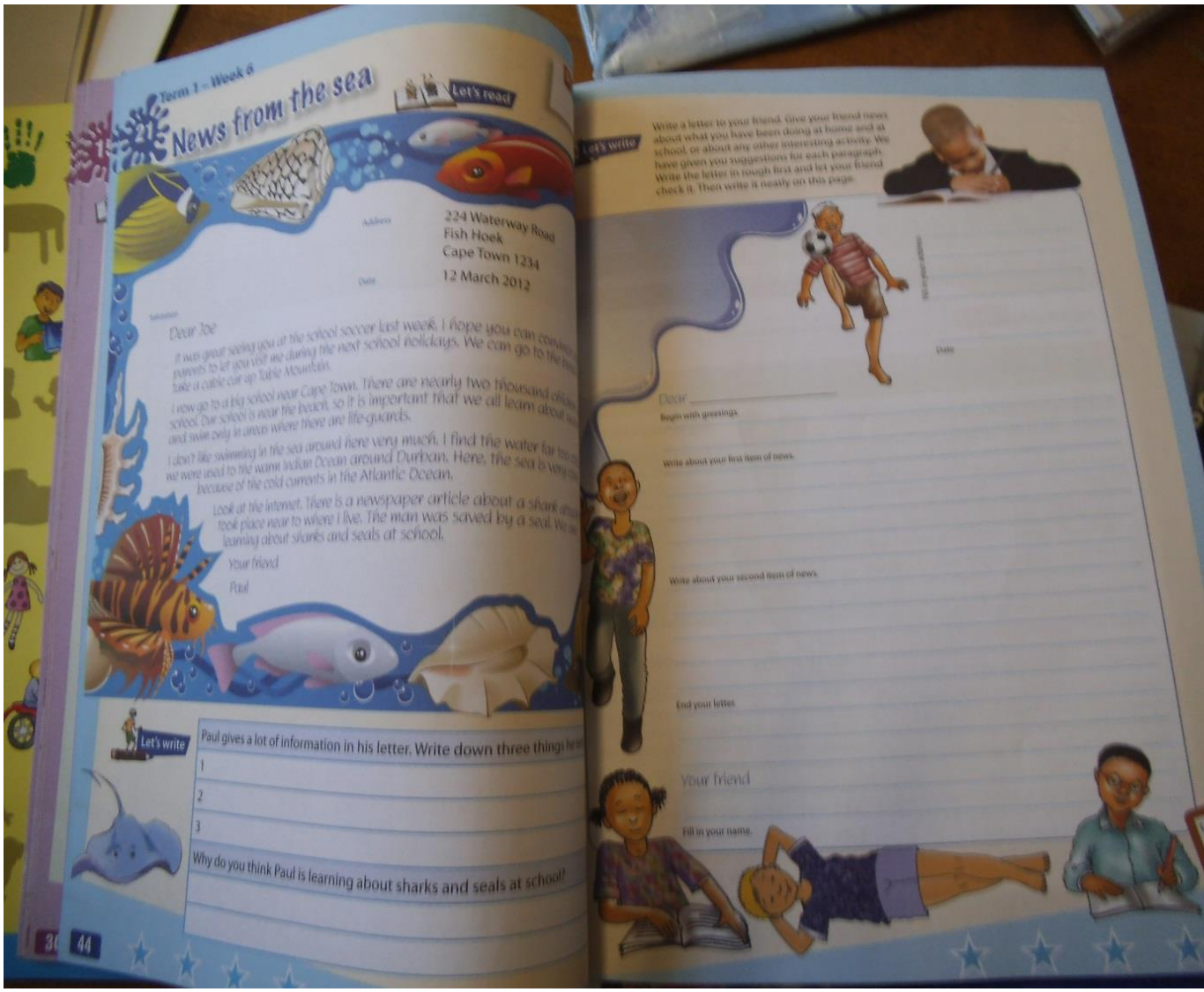


Figure 5 LTSM (DBE workbook) used in part of Lesson by teacher 1D

Learners, reportedly, enjoy the DBE workbooks a great deal. This book is printed in full colour, and it is beautifully designed so that the learners (in the form of a photograph and

drawings of a learner working) feel represented in the book. There are also illustrations that are fun, clear and realistic. The font is large and there is a great deal of white space that makes for a friendly and inviting layout. Different activities are clearly demarcated and colour coding shows what kind of content the teacher and learners are dealing with at the time. This book uses double page spreads so that when a page is turned, then learners encounter a whole activity / topic. The author's intention is to create a degree of coherence and to engage both learners and teachers fully on an aspect of the work. This particular double page spread includes the reading activity, two comprehension questions to be answered in writing, as well as the construction of a friendly letter. The work is constructed around the theme of the sea and it crosses over into natural and social sciences (biology and geography) and life skills (polite and friendly ways of communicating with a friend). It is easy to imagine the book's appeal to learners and teachers. Teachers check the work filled into the provided space and it becomes a ready record of curriculum coverage. Learners, who all have their own copy, are attracted by the friendly and accessible-looking design as well as the layout and their ownership of the book.

It is strange that the curriculum (and the DBE workbook) covers the topic of friendly letters – especially with a strict emphasis on format. In a world, which has all but abandoned friendly letters in favour of emails, it makes far more sense to learn about email with an emphasis on register and social media etiquette. This approach could dovetail well with what a friendly letter would require, because it uses the same communication strategy without being (almost) anachronistic. An explanation for why dates and addresses are important in traditional letters, yet how this becomes redundant when using email, may be a useful addition to a lesson which has a strong focus on letter format.

She gets a learner to read the letter to Joe on 'news from the sea'. She stops him after the first paragraph and discusses the paragraph (D) and (S)

In this interaction, all learners are engaged with the text. The selected reader has to show evidence of competency and the teacher has to work with learner error and uncertainty. This means that the teacher needs to focus on a number of different aspects relating to the text: meaning-making of vocabulary, reading fluency, expression and pace, and how the text is interpreted more generally. She also needs to ensure that the lesson's momentum

is maintained if a learner is very hesitant and lacking in proficiency. If carefully managed, this pedagogic process can be very valuable.

She explains what a cable car is. (D)

A cable car falls outside the experience and framework of most learners in this classroom. The teacher has to make use of a variety of techniques to explain what a cable car is (*Perhaps you have seen one on television … If you have been to the Pretoria zoo …*). Learners seem to understand her explanation. The text itself expands the knowledge and horizons of learners who have not encountered such a phenomenon before, and it provides an exciting experience for the learners to look forward to should they someday have an opportunity to ride on a cable car.

She continues this pattern of focusing on a paragraph at a time. (D)

The pattern which requires individuals to read has several effects: learners follow carefully because they do not know if they will be called upon to read next; and, the learners who read reveal their strengths and weaknesses, which becomes learning opportunities for other learners. These opportunities come in the form of error correction as well as exceptional proficiency. Unless a passage is very long, which might become boring, the learners' reading aloud can become a teaching technique that exploits and creates many learning opportunities on pronunciation, cadence, punctuation, meaning-making, and so forth.

She stops to talk about warm/cold currents and explains that she is crossing over into geography. (D)

The text allows the teacher a chance to do cross-curricular work. It is important to note how the text directs the lesson and how it allows the teacher to make connections that otherwise probably might not take place. Textbooks are designed in accordance with not only the specifics of the curriculum document, but also with the approaches envisaged by the curriculum developers. Cross-curricular work ties in with a particular kind of approach that makes overt connections between parts of curriculum for the purposes of a more holistic understanding of how knowledge and disciplines are not necessarily separate. Such interconnected knowledge is to encourage more expansive thinking about what learners learn and teachers teach (Savage, 2010). Savage (2010) also speaks about how primary school teachers, usually seen as generalists, are deemed to be in a better

position to engage in cross-curricular work, although he contests this position. Writing about the UK, he argues that with the strong emphasis on literacy and mathematics in primary school, many teachers have become far more specialised in those areas. This means that the teachers rely heavily on outside resources for the teaching of topics that fall into areas such as geography. Irrespective of whether this applies to a South African context or not, it implies that teachers need to prepare carefully in order to do cross-curricular work effectively. Such preparation requires research and cross-checking of information.

She discusses the register of the letter … (D)

Register is perhaps the core concept when teaching 'the friendly letter'. Learners have to distinguish, for example, the informal tone used when writing to a friend versus the more respectful tone when writing to an adult they know versus the formality required for a formal letter of enquiry. Register is both complex and important because it inducts the language user into the social and sometimes more technical aspects of how to use a language appropriately. It also helps the learners to recognise different kinds of jargon or slang, as well as field-specific language, which is used in, for example, the legal or medical fields. Proficiency in register comes after a great deal of exposure to language (Widdowson, 2003), and this can take a variety of forms, but reading, in particular, will sharpen awareness of register. Texts, which reveal the nuances of register and make clear how register changes from context to context, are part of the development of social skills and emotional intelligence, which are required to be an effective user of language. The teacher, rather than the text book, takes up the issue of register and she gleans the necessary examples from the text provided.

… and uses a bit of code switching: "In our home languages we have an advantage we have no formal and informal forms of greeting addresses – only one" and demonstrates this. (D)

Code switching is generally encouraged in FAL teaching. However, few teachers know how and when code switching is an appropriate teaching strategy. Sert (2005) delineates three major reasons for code switching by teachers: topic switching (for pedagogical purposes), affective functions (to create a communal bonding experience) and repetitive functions (to reinforce presented knowledge by repeating it in HL). Although these three

categories seem to suggest a conscious application of purpose by teachers, this clarity of purpose does not always happen. Emotive and ideological issues sometimes cloud the question of how to use code switching appropriately. The most basic principle regarding code switching is that it should facilitate learning and eliminate confusion, but this could be interpreted very widely. In certain schools, in subjects other than English FAL, much of the teaching takes place in the mother tongue of the learners, despite having English as the LoLT.

In FAL, there may be a great deal of code switching, even if training courses and the curriculum emphasise that English needs to be used for the most part. If used in a considered way, then code switching in FAL will assist with the transference of knowledge from one language to another. This means that learners will see either strong links or strong differences between their own language and FAL and this will help them to internalise those similarities or differences. Sert (2005, p. 3) outlines this process as follows:

> In topic switch cases, the teacher alters his/her language according to the topic that is under discussion. This is mostly observed in grammar instruction, that the teacher shifts his language to the mother tongue of his students in dealing with particular grammar points, which are taught at that moment. In these cases, the students' attention is directed to the new knowledge by making use of code switching and accordingly making use of native tongue. At this point it may be suggested that a bridge from known (native language) to unknown (new foreign language content) is constructed in order to transfer the new content, and meaning is made clear in this way. It is suggested by Cole (1998): "a teacher can exploit students' previous L1 learning experience to increase their understanding of L2".

In the lesson I observed, the teacher shows, in a well-integrated way, how there is a difference between the way isiZulu and English approach forms of address. The teacher shows the learners how this difference has a two-fold effect on language use and register. It is important to note that the teacher and learners are led to this point by the text itself.

She then goes through the questions set on the letter with the learners. (O)

The first question demands recall: learners have to write down three items of information that Paul provided in his letter. There are different levels of recall-type questions. Many

questions are asked in such a way that the learner simply has to lift the answer from the passage, because the question is phrased in such a way that the vocabulary points the learner directly to the answer. An example would be: *What is the name of the Ocean found in Durban where Paul lives?* Learners would simply scan the text to find the answer (*Indian Ocean*). The type of recall question asked in this text does not lead the learners at all. They have to reread the entire passage in order to find suitable answers. The learners also have to decide what constitutes "information". In other words, a simple recall-type question is posed in a way that makes it challenging for the learners and it forces them to engage in a critical thinking process. It usually takes many years of experience for teachers to devise questions which create such learning opportunities for learners. The second question asks the learners to make a deduction: they need to decide why Paul would find information about sharks and seals important and interesting (*he reports an incident where a man is saved by a seal during a shark attack*). The report provides an entry point into a host of discussion points. Learners are likely to have ideas about how wild creatures interact with humans, the likelihood of the story, the presence of sharks at bathing beaches and the debates about nets. In the lesson observed, the teacher does not enter into any discussion with the learners. It may be that she feels these issues are outside their experience, or that she feels class discussions are disruptive, or the question requires a simple written answer and she is pressed for time. For learners, the message is that textbook use is about writing a suitable answer, not about engaging with the text via discussion.

She asks: "What tells you this is a letter?" (S)

The teacher asks the question with the specific aim of eliciting an answer about the format. Letters are a genre of writing and potentially also a rich and interesting field for discussion – its role in the past, its role today, how some books are constructed around letters, and how letters are used as source material for the recording of history. The format of the letter – even as a traditional piece of writing is of lesser importance than its purpose. In rubrics where teachers have to assess letter writing, more than half the marks are usually allocated to formatting and spacing. The excessive emphasis placed on format is likely to be as a result of the way in which testing of letters are done.

As answer to her own question, the teacher points out the format of the letter. (D)

The format of the letter, as has been said, is of lesser importance than the letter as genre. However, if formatting is emphasised, then it is important for learners to understand why, for example, the address is put on the right-hand side of the page (for easy and quick reference when one replied and had to address the envelope). Another example that could be explained by the teacher is why a line is left below the address before the date (to give it separate prominence, since correspondence is often filed by date, and postal codes and dates could potentially be confused). She might also explore the how the tone and purpose of a particular greeting demonstrate the level of intimacy between the correspondents, Finally, the teacher could look at the way the customary introduction, body and conclusion of the letter is formatted. As an exercise in teaching the value of formatting and spacing, letters need to explained, and not only illustrated, as is done in this lesson. The layout of the letter in the textbook is very clear and concise and would make the task easy for both the teacher and learners.

Deviation 5: She looks in their class books and notices that they have not yet completed work on the previous poster picture (see photo on the next page). (D)

Learner work book showing the results of poster work done in class

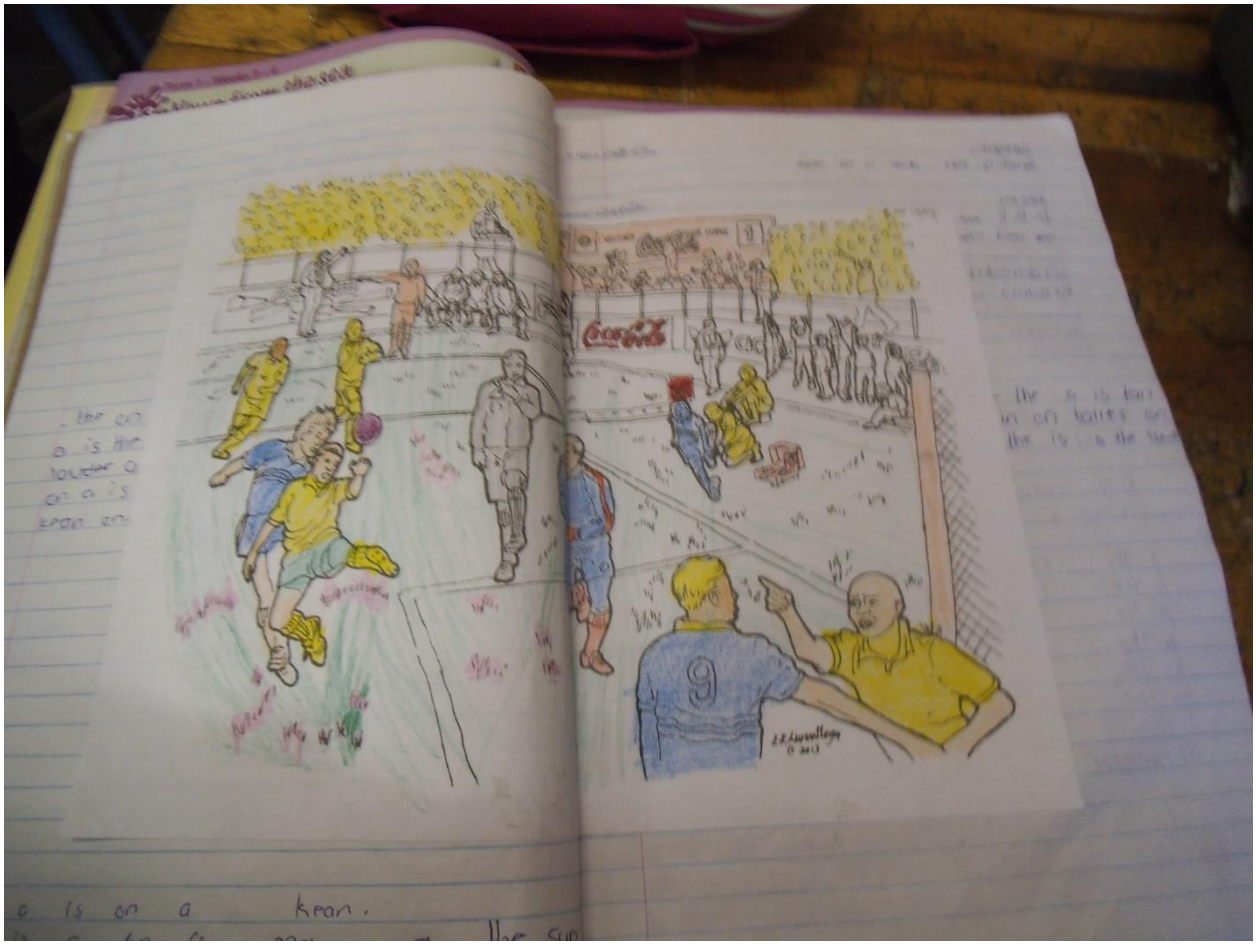


Figure 6 Learner workbook, as used in part of lesson by teacher 1D

Teachers complain about the lack of time to complete work in class; they also complain about learners who seldom do homework. Since learners dip in and out of the DBE workbook and it is not the record which indicate coverage, their class book is the book that defines how they have covered the curriculum. It is also the class book from where they prepare for tests. Many difficult questions arise from this incomplete work: As was evident in this particular lesson, the result of discovering incomplete work meant that the presented lesson lost continuity and momentum. Both teacher and learners have no appetite for doing thorough and interesting written responses to either to previous or current work. The teacher has fallen into a pattern where she does not check incomplete work before continuing with the next topic. Because she needs to keep abreast with the lesson plans, and the lesson plans start afresh with a new topic every day, homework, or incomplete work is not revisited until the next exercise has to be entered in the class book.

Teachers resist checking homework because they know it does not get done. Oakes and Saunders (2004, p. 1971) cite a review by Cooper (1997) of research that links homework to a markedly improved academic performance. Undone homework poses a problem for the few who have done the work, because this means that lesson time is wasted as others are given the opportunity to catch up in class. If the majority of learners do not do their homework, then teachers are placed in a difficult position: either they have to punish the learners (who may have both good and bad reasons for not having done the work), or they have to talk to parents about homework supervision or they have to find time to supervise the work themselves during breaks or after school. Many teachers simply assume homework will not be done and embark on the strategy adopted by the teacher observed, where they allow a bit of catch-up time in class. This is accompanied by the teacher harrying the learners and adopting a brusque and reproachful tone to them.

She instructs learners to finish the labelling and sentences related to the soccer match picture. (O)

Figure 6 displays some worrying features. In grade 6, it appears that considerable time is spent on colouring in a picture that is on display in the class as a poster. The purpose of the class book version is to provide a reference point for the written work. Many teachers and learners believe that an inviting class book with colourful pictures will appeal to everyone: parents; heads of department who look at the teachers' work by examining their learners' books; the principal, and a department official, who may occasionally call for the learners' books; some learners themselves who take pride in the appearance of their books; and, teachers who regard neat and prettified books as evidence of enthusiasm and commitment. In the particular example here, the learner has made a hasty, cursory effort. Next to the poorly coloured picture, the learner has written a few sentences. The picture takes up all the space and the sentences are squashed into small spaces around the picture. They are written in an untidy hand with no regard for clarity and good spacing. Although the photograph does not show the writing in a way that is readable, this learner has tended to repeat the same sentence structure with slight vocabulary changes in different sentences. Many of the words are difficult to decipher.

She tells learners to keep their sentences short. (D)

The teacher is aiming for accuracy rather than expression. She is also aiming for speed so that she can complete the original lesson. Learners would inevitably feel their writing-time is constrained and they are not in a position to experiment with language or to use it creatively. Short sentences eliminate difficult marking and correction. It is the refuge of teachers with large classes and limited time.

Some learners highlight words they have written.

In his model of the Four Roles of the Reader and Writer, Freebody (1992) outlines how the reading and writing process involve four different layers of engagement. As a decoder, technical skills are involved which allows the writer to produce recognisable words and sentences; as a participant, the writer concentrates on meaning by allowing language to flow fluently. Thereafter writers have to become editors of their own work. This involves correcting punctuation, spelling, word choice and grammar. In addition, it involves examining the sequencing of the ideas and the connections between them. This may result in the reorganisation of the text and the extension or elaboration of the ideas. As a participant, the writer (and reader) would highlight and annotate text. Teachers encourage learners to highlight words in order to have immediate access to the main ideas when they study. In the case of this particular exercise, where learners are expected to write about what they see in a picture, it is hard to imagine what they would choose to highlight, unless it is specific vocabulary the teacher has emphasised in lessons. Highlighting words without a particular purpose is not only a meaningless exercise, but it also subverts the skill highlighting is meant to confer. Given that this is the text from which the learners learn for assessments, random highlighting could be problematic.

The teacher carefully inspects what learners are doing and scolds them for work that is untidy and books that are not well kept. (D)

Good organisational skills (keeping work tidy and books well kept) are important skills in the learning process. When work is laid out carefully and there is clearly produced written work and a complete set of worksheets, then this helps to set a standard of both thinking and constructing work as part of activities (especially if work books are to serve as substitutes for textbooks). It is certainly not an area that a teacher should neglect, because neat and well organised learners' work reflects well on the teacher. However, it

is worrying if this is the only area that a teacher focuses on. During the time spent monitoring learners' books, the teacher did not once engage with the content of what the learners were doing. Hugo (2013, p. 105) cites Hattie, 1999, who in a study that canvassed about 180 000 studies (covering over fifty million students), concluded that "evaluative feedback is the single most important thing a teacher can do to improve learning". He quotes Hattie (1999, p. 9) as saying the value of feedback is: "providing information how and why the child understands and misunderstands, and what directions the student must take to improve." This view on feedback stands to reason, but if the sole purpose of writing is to demonstrate neatness, then it has very little teaching and learning value.

Deviation 6: After some time, she tells the class to write a letter for homework using the DBE text as example. (O)

The teacher now returns to the letter. Cognitive theory has established a number of important fundamental principles about how working memory and long-term memory work. Crucially, working memory, which is employed during active instruction during a lesson, can hold a very limited number of items at any one time. The number of items varies from 4 to 7 and these depend on the receiver's interests, what is foregrounded and backgrounded, and many other factors related to physical comfort level and the environment. Unless information finds it ways to the long-term memory, which has unlimited capacity, it gets lost. The way information is stored in the long-term memory is by making connections with existing networks of information. This means that the teacher and learners needs to establish these connections, so that new information becomes embedded in such a network (Hugo, 2013). The many deviations in this lesson, the constant shift of focus, the to-ing and fro-ing from one topic to another, all of these events are highly problematic from the perspective of creating new knowledge for learners. Unless learners have developed the skills themselves to make links and/or are able to use learning materials to do so, there is too little concentrated time in the teaching format this teacher adopts for learners to be able to rely on her presentation for the creation of new knowledge.

She tells them to write it in rough first and to check their formatting is correct. (D)

Zamel (1982), in her seminal work on how writing is interlinked with the development of academic cognitive skills, emphasises how the specific processes of drafting, revising and

rewriting are interwoven and interdependent. If the learners follow the teacher's advice (produce a rough draft, revise it, and then produce a better and improved final version) then they are firmly on their way to honing their thinking and expressive skills. It is clear the teacher knows and understands this process. However, the teacher's attitude towards homework and the level of feedback witnessed in the lesson makes it unlikely that this writing process will be exploited for its capacity to improve thinking and writing. This process needs the teacher to look at and comment on the first draft, to give guidance on how to improve and modify it, and this needs to become the standard approach to all the learners' writing.

They need to write about their home or school. (D)

Conventional wisdom holds that learners (and others) should write about what they know. Telling learners to write about home or school gives them carte blanche to write about anything in their daily lives. This should provide the teacher with an interesting array of writing which has a lot of variation. For novice writers, however, the tendency is to be ultra-prosaic in an attempt to be accurate and precise. In order to stimulate good writing, there needs to be a great deal of discussion and modelling to inspire learners to be experimental, original and creative in their writing. The examples of sentences in their class books that describe the poster picture did not inspire hope that the learners will write more than a few descriptive sentences. It also encourages the following of the same sentence structure. According to Zamel (1989) and Kraschen (2007), a blanket instruction, without any guidance other than an example, such as the example letter in the DBE workbook, is inadequate preparation for a meaningful writing exercise.

A number of important issues were raised in this lesson, and these will be discussed and compared to lesson 2. Lesson 1 was described and discussed in considerable detail, with the intention of highlighting issues of coherence. It also showed the ways in which LTSM affordances were either emphasised, used productively or ignored. Learners' participation was encouraged or discouraged by the adoption of particular teaching strategies that were used with the LTSM. This was a strongly teacher-led lesson, which employed LTSM affordances unevenly and there was systematic discouragement of learner participation. This lesson stands both in contrast to and in alignment with the second lesson.

Lesson 2 (observed 29 October 2014)

The second lesson that I examine closely is a grade 4 English HL lesson at an independent school. Some of the aims of this lesson dovetail with the previous lesson, namely, that learners produce a personal piece of writing, which is based on provided examples. This is one of the reasons lesson 2 forms a good basis for comparison with lesson 1, but with the qualification that it does not do so in every way**.** Teacher 4C works with a grade 4 class of twenty-six learners, the majority of whom are not English mother-tongue speakers, but who have acquired the proficiency to do the HL curriculum. The lesson is on diaries.

The teacher starts the lesson by holding up a thick, cloth covered blue book without a picture on it. "Shall I read some of it?" The excited class clamours for her to read. (D)

The old-fashioned appearance of the book, which has no picture adorning the cover, is instructive. This class is attracted by the imagined content of the book, and not by the invitation that a cover holds. It is evidence that the learners have absorbed the message that the 'writing' is what provides the excitement and interesting parts of a book, and not only the visuals. The invitation that the teacher extends to the class is also significant, because the learners invest in the lesson by expressing their willingness to participate in it by listening. This shows clearly how the learners have been inducted into a tradition, where books provide pleasure either by listening to them or by reading books themselves.

She starts: 'Dear diary' – gasps of excitement from the class. 'More?' the teacher asks? Unanimously: 'Yes'. (D)

The teacher plays interactively with the class. Her first words introduce them to the genre they are going to work with in the lesson, although the class is already familiar with this genre and they like it. The teacher keeps alive their active commitment to the process of the lesson by adopting a slightly teasing tone. It signals the relationship she has established with the learners, and shows that she is interested in their input and reactions. This approach also indicates that she likes to please and entertain them, and she actively holds their attention by her questions and the way she expresses herself.

It turns out to be the teacher's own diary and she reads about an item in the class (a structure they built) and events that took place in the class. The class is transported. (D)

In a stroke of genius, the teacher has done a number of interesting things to enliven the experience of diary writing for her learners: she has modelled writing by using her own 'voice'; she has made the learners themselves the characters in her diary; and, she has placed importance on another learning activity that has taken place previously in the classroom. It takes an exceptional teacher to produce good learning materials. Many classroom materials are either constructed or copied from typical materials that are found in existing textbooks. It is a very rare teacher indeed who can write materials that are apt and entertaining in a completely original way. Policy makers who require teachers to create their own materials have a teacher like this in mind – one who writes to the specific needs and interests of the learners she teaches, at a level that will be of their standard, but simultaneously challenges them. This teacher builds the kind of learners' activities that develop transferable skills to other contexts.

Learners were handed printed worksheets with a wide variety of different diary entries before the start of the lesson. (O)

Accompanying the teacher's written passage is the first of two worksheets, which is the product of her research on a number of diary entries. Her aim in creating this worksheet was to expose the learners to a broad overview of the kinds of writing that constitutes the diary writing genre. At the same time, they can see how there are specific common features that define the genre. Some passages are simple and straightforward, while others are more challenging. The worksheet is formatted so that the different fonts and layout indicate the kind of entry to be expected while reading it.

She calls on individual learners to read, and each entry is discussed, both in terms of content and specific vocabulary that may be difficult. (D & S)

The teacher follows the same pattern as the previous teacher, where individual readers read bite-sized reading passages, and this is then discussed with the whole class. Once again, all learners are engaged with the text. The selected reader has to show evidence of competence and the teacher works with learner error and uncertainty. She focuses on a number of different aspects relating to text: meaning-making of the vocabulary, reading fluency, expression and pace, and how the text is interpreted more generally. She also needs to ensure that the lesson's momentum is maintained if a learner is very hesitant and lacking in proficiency.

The different entries vary from those written by children about their own age (concerns about pets, sport events, friendship, and people taking their things); then a different kind of entry: wanting to be an author; description of having been to a wedding; then a very different kind of entry: 1848 – from a sailor on a ship – reporting on the sighting of another ship. (D&S)

In the case of the different diary entries, each has its own style and a new narrative. This means that there is constant shifting of perspectives, ideas and topics. The diversity of pieces could be perceived as distracting and incoherent. Yet, the teacher is introducing learners to the elements of the genre operating slightly differently in a number of contexts. These entries are immediately understandable, and they do not digress from the central focus of the lesson, namely, the diary genre. When the 1848 entry appears, the learners could re-contextualise it. Without the preceding readings, they would have experienced difficulties in understanding it. The diary entry is about the daily goings-on of the writer, but a couple of centuries later, it takes on historical importance and interest for the reader. There is a gradual build-up to the significance of the genre beyond an indulgent daily piece of arbitrary writing, and this suddenly emerges and the learners grasp this idea.

A reader struggles somewhat with reading and the teacher appoints another reader to take over. Teacher to struggling reader: 'Very well read. This is hard, because it is old writing'. (D&S)

The teacher ensures that the class's concentration is not lost because of a learner's faltering reading. At the same time, she allows the struggling reader sufficient time to read so that s/he does not lose face. In addition, the teacher explains to the reader (and the class) that old writing can be more difficult to read than modern writing. She is generous in her praise and careful so that no learner might feel discouraged in future. An important distinction is that there is a considerable difference (even at an early age) between silent reading and reading aloud. Silent reading has no audience other than the reader: issues of pronunciation and fluency are not causes for worry, and neither is there the need to read with expression. Many readers read a great deal faster when they read silently and that translates into faltering reading when they read aloud, although it can usually be discerned by a teacher if a reader's thoughts are running ahead of their ability to voice them. Reading aloud is useful to the teacher, because she can assess the learner's levels of

meaning-making, and ascertain if there are fundamental problems hindering the learner's progress. However, it is almost always stressful for learners who find reading aloud challenging, especially when they have to read to their peers as well. Teachers need to be careful to retain learners' confidence and ensure that learners do not develop an aversion to reading because they are unable to 'perform' reading.

The teacher shows the class a number of examples of old diaries on her iPad and exclaims: 'Isn't it beautiful?' (D)

The teacher introduces yet another LTSM, namely the iPad. She uses it for the function that she believes makes it pedagogically helpful, namely, for visual access to make knowledge more immediate. In addition, she makes an aesthetic value judgement, when she invites the learners to look at more than the letters and words by focusing on the surrounding visual context. The visuals show different scripting, a sense of history through the aged paper, ink, ink stains, and book bindings. It allows learners to imagine a different reality, but one in which people engaged in activities that are still relevant and prevalent today.

Only now does the teacher open a discussion with the class on whether they themselves have ever kept a diary or keep a diary. She makes the distinction between homework diaries and diaries for reflection. (O&S)

Thus, the teacher gives the learners a substantial build-up to their discussion about diaries. The learners have already mulled over a number of issues relating to diaries and they were exposed to different writing style(s) for diaries. Now when learners start talking about their own diary experiences they are doing so against the backdrop of this information and many examples. The distinction the teacher draws between diaries as an organisational tool and diaries as a genre of writing clears up any potential confusion. It also steers the discussion in the direction that she wishes the class to take.

She puts the books on display from which the various diary extracts have been taken – all books that could interest the learners, as well as other books in diary format. (D & S)

After a discussion about their own diaries in the context of the preceding readings, which establishes a strong narrative and reflection about the features of diaries, the teacher brings another LTSM into play. She puts on display age appropriate reading books in the

genre format, for example, *Diary of a Wimpy Kid* (clearly a firm favourite), *Diary of Adrian Mole* (perhaps a little advanced), and other books. All of these books are available from either the library or the teacher, and some of the learners come after the lesson to request copies of the books. This shows that the teacher is linking the learning of writing, to the diary format, and also extensive reading.

The class discussion revolves around issues of secrecy like the fact that diaries have locks. They talk about a story involving a sports car and friendship and how it revolved around the sharing of diaries. Mothers often buy diaries and encourage their children to use them. There are complaints about loss of keys – advice on how a knitting needle will open the lock. (S)

The book display stimulates further discussion, which veers into issues of privacy, references to stories the learners have read, as well as parental input into the development of their literacy skills. The significance of this discussion is that it reveals the richness of the learners' out-of-school experiences. It shows their decided views on issues and their ability to participate in a discussion that leads to diverse, but related, issues. This speaks of possible affluence, but does not necessarily do so. Learning to participate in a discussion, and using sophisticated cognitive tools, comes with a great deal of encouragement and practice. In other words, it is a skill that needs to be nurtured by the adults in the world of the learners. Exposure to social issues (such as privacy), the reading of books (available through guidance from libraries) and parental input need not necessarily be linked to class and privilege. Where parents are unavailable or unwilling to provide opportunities for discussion, then teachers sometimes take on the responsibility to foster these kinds of interests and skills. In some schools, the following issues makes it difficult to achieve this aim: the lack of teachers' willingness; the problem of classroom management; an overfull curriculum; the learners' underdeveloped skills, a lack of parental cooperation; and, language issues, such as a classroom in which there are learners from multiple language backgrounds and not necessarily a single language in which everyone can participate comfortably. However, discussion and debate is the entry point for good reading and writing. Knowing and understanding something about the world, makes the content of books accessible and the creation of texts possible for learners.

The teacher starts to hand out a second worksheet [see figure 7 below], and the learners cut and paste it into their exercise books. (O & D)

As the class discussion starts to lose its focus, the teacher hands out the next worksheet. In contrast to the first worksheet, where the reading passages were the central focus for a substantial part of the lesson, this worksheet is not used for reading. In fact, the teacher lets the learners paste the worksheet into their books without reading it, and she is particular that this is done promptly and efficiently. The teacher wants the learners to have access to this worksheet for future reference, so that the learners can refer to it when they do the work she has set for them. This worksheet's content has been thoroughly covered in the lesson. It is used for the learners to check their own writing against the format shown and the rubric.

Teacher writes the headings on the board: Date and English 2: Diary

Then: 31 October (O & D)

As evident in almost all the observed lessons, learners are schooled to record systematically the date, subject area and topic that they cover in the lessons. This practice helps to develop an understanding of the importance of categorisation, but it is also a starting point which locates work in a particular time and space.

Dear diary

Today we were given the list of what to pack for camp. I _____. Learners come up with many suggestions of what would follow.

The age of grade 4 learners is about 9 or 10 (on average). This diary entry is linked to the first school camp that learners will attend. They will be sleeping away from home for two nights and will be away for a total of three days. Many learners are daunted by this prospect, while excited at the same time. This is evident when the sentence is written on the board and there are various exclamations made by the class. The introduction/prompt to the diary entry allows them a number of entry points to the assigned writing task: for struggling learners it would be possible to make a simple list of items paragraph style by using the school newsletter as a scaffold; more advanced learners might engage with what the items on the list suggest they will do at the camp; they could write a more personal expression of how they feel about going to camp and what they will need to get ready for

camp; or, a description of their past camping experiences. In other words, the prompt allows a great deal of scope for the learners' own interpretation of the topic, while simultaneously creating a strong focal point for their writing.

The teacher allows for some discussion before the learners start to write. Feeding off the ideas of their peers, this process sets their minds and imaginations to work. It creates enthusiasm for the task, and a sense of security that many fellow learners are also engaging with the same exercise. This means that the learners can measure their own thinking against others to establish if they are on the right track.

The teacher instructs them to write a paragraph: "Remember capital letters and full stops, and maybe some adjectives". (D & S)

The distinguishing characteristic of paragraph writing (from other forms of writing) is the creation of a number of sentences that form a relatively coherent short piece of writing. It is distinct from the single sentences on single lines that usually forms part of written exercises in the classroom. In order to demarcate the sentences, learners need to use capital letters and full stops. The teacher emphasises this and adds, almost as an aside, that the sentences are more interesting if adjectives are included. It is instructive to note how the teacher, almost instinctively, structures her lesson to move from the simple to the complex and from the concrete to the abstract in almost all her dealings with the learners.

The class gets busy and are very engaged. They are told to write so that it can be read to the class.

Writing for an audience is one of the primary motivators for the creation of good and enthusiastic writers. Trimble (1975), cited by Kroll (1984, pp. 180-181) claims that a "big breakthrough for the novice writer will occur at the moment he begins to comprehend the social implications of what he's doing. Far from writing in a vacuum, he is conversing, in a very real sense, with another human being... This breakthrough is comparable to an infant's dawning realization that a world exists beyond himself." Kroll & Potter (1984, p.181) goes on to say that "one approach to helping novice writers experience the social dimensions of writing is to make the composition classroom a place where writers can cooperate and interact". Furthermore: "Advocates of the social perspective on audience argue that novice writers need to experience the satisfactions and the conflicts of reader response: both the satisfaction that comes from having successfully shaped the reader's

understanding and experience, and the conflict that arises when a concept which seemed clear to the writer baffles the reader, or when a phrase which held special meaning for the writer evokes no response, or when an omitted detail--clear enough in the writer's mind--causes the reader to stumble". The distinction between oral and written communication becomes far clearer when there is an awareness of an audience for the writer.

The teacher checks on learners while they are writing. (S)

The active presence of the teacher means that the learners are constantly calling on her to help them check their work and to make sure that they are fulfilling the task requirements. A great deal of the interaction between teacher and learners is for reassurance. This is an important observation, because when learners are left to write on their own, they could feel inhibited, and this might lead to minimum effort and input on their part.

The teacher refers constantly to the importance of editing. (S)

Process writing has been promoting for decades as the most effective way to teach writing. It is largely an outgrowth of studies in ESL teaching and learning (Kraschen, 2007; Zamel, 1982). Although criticised for a lack of empirical evidence that it substantially improves writing more than formal and other ways of teaching writing, many teachers have adopted the idea that writing is a non-linear process. This process suggests: that writing requires a great deal of thinking before the actual start of writing the first draft; that writing needs to be drafted and re-drafted; that writing needs external feedback and internal editing before a final version can be produced. The editing part of the process is a two-fold process where the primary purpose is to establish whether the 'message' has been transmitted in a meaningful and clear way. The second part is to analyse grammatical and technical errors during the editing process. In this lesson, the teacher has already established with the learners that editing is part of the process, and they need to look for better ways to express themselves as well as for possible errors.

After about 30 minutes, learners start reading their entries. The learners are clearly very pleased to be showing off their writing skills. They express mainly fears and worries and what they are looking forward to on the camp. The teacher listens, but she does not respond to or comment on the fears. The lesson becomes an interesting mixture of language teaching and life skills. Learners are worried about missing families and rattle snakes. Learners also get to know about each other's situations. (S)

The teacher becomes a listener in this part of the lesson. Learners are reading and talking more to each other than to the teacher, and their own work becomes the materials for learning. It also gives the teacher an opportunity to observe and to get to know the strengths and weaknesses of her learners. This is in line with Cohen's (2011) contention that "the more teachers learn about what learners know, the more learning can be implicated in teaching, and the more sophisticated the practice that teachers can devise; but the less they learn about students' knowledge, the less teachers need to take learning into account, and the freer they are to teach as they like, or are able" (p. 164). Cohen says that this leads to 'responsive teaching', which is a difficult form of teaching where the teacher encounters the "gaps between teaching and learning" and the fragility of learning. In this lesson, the teacher allows for the deviation from the lesson focus to the emotional concerns of the learners, although she does not attempt to play the counsellor. Instead, she allows the sense of communal apprehensions and camaraderie to take care of these fears. In other words, the diary entries stand as a testament to the learners' feelings without the teacher trying to modify the content in any substantial way. The teacher throws in the occasional comment to dispel an absurd fear like the possible encounter with a rattle snake, but the integrity of the writing task remains at the centre of the lesson.

As they read, the teacher writes words on the board they may not be able to spell, for example, 'excited'. (D & S)

While the teacher listens to the learners reading their diaries, her response is to capture what the learners are expressing in visual form on the board. Learners can see their words in written form and they simultaneously feel validated by the teacher's attention to their writing. None of the teacher's input is specific or judgemental. Instead, she is making pedagogical judgements on what all the learners might need to know and correct.

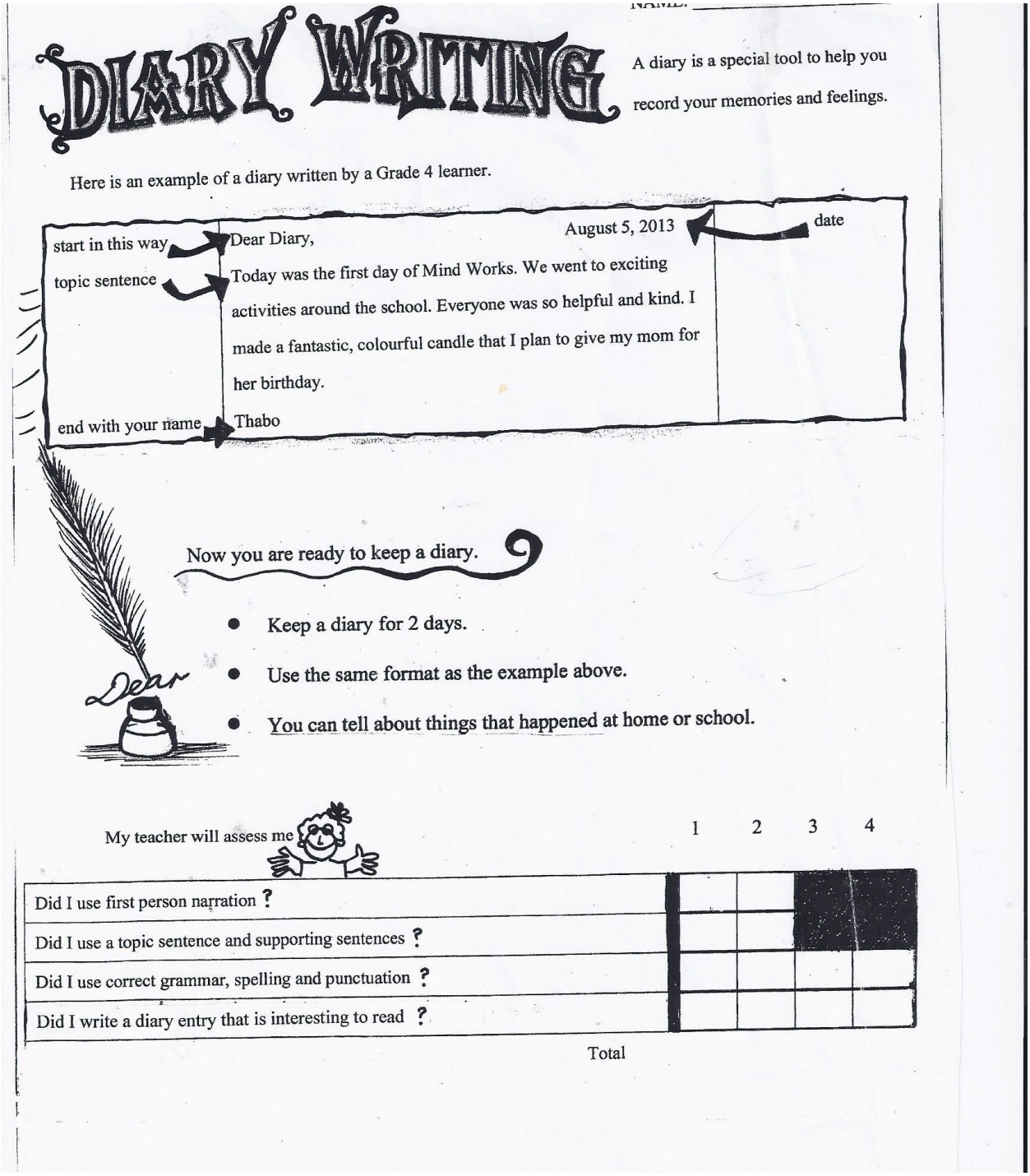
The teacher dispenses lots of praise.

The role of praise in the classroom is a well-researched area. Learners are particularly vulnerable when they expose both their writing skills and their personal lives through this kind of writing exercise. By making learners feel confident about their abilities and safe in their exposure, it enables their future interactions to be comfortable and forthright. Although the teacher makes learners feel that their efforts are appreciated, she does not exaggerate or distort their abilities. Teacher judgement of learner performance is part of

the unspoken contract between learner and teacher (Oakeshott, 2001, cited by Kitchen, 2014). Learners need the reassurance that what they are doing meets the criteria set by the teacher. If not, then they need help to recognise how to modify their efforts in order to meet the requirements. In teaching, where specific kinds of knowledge and skills are being transmitted, this is particularly important. In the teaching of personal reflection, learners need to learn to trust that their own judgements – clearly expressed – are valid and valuable, and praise for such effort becomes even more important.

Finally, the teacher takes in the learners' work books and does a stretching exercise with them.

Worksheet on diary writing to be used by learners for their own reference purposes



DIARY WRITING

NAME: _____

A diary is a special tool to help you record your memories and feelings.

Here is an example of a diary written by a Grade 4 learner.

start in this way → Dear Diary,

August 5, 2013 ← date

topic sentence → Today was the first day of Mind Works. We went to exciting activities around the school. Everyone was so helpful and kind. I made a fantastic, colourful candle that I plan to give my mom for her birthday.

end with your name → Thabo

Now you are ready to keep a diary.

- Keep a diary for 2 days.
- Use the same format as the example above.
- You can tell about things that happened at home or school.

My teacher will assess me

	1	2	3	4
Did I use first person narration ?				
Did I use a topic sentence and supporting sentences ?				
Did I use correct grammar, spelling and punctuation ?				
Did I write a diary entry that is interesting to read ?				
Total				

Figure 7 ***Worksheet 2 on diary writing to be used for reference purposes***

Comparison of the two lessons

While cognisant of the contextual differences between the two lessons, the following sections examines the areas where comparisons between the two lessons can be drawn.

LTSM and enactment: where are the boundaries?

In order to understand the way engagement with text is theorised in this thesis, I turn to a brief reflection on literary theory. At a simplistic level in literary theory, a text is considered an independent artefact after its production. It is informed by a vast array of ideas and factors that shape the author's work. Many literary theorists examine the text/artefact to find its structural and embedded ideas and how these are expressed as a specific focus. Others examine the historical, social, psychological, geographical, political and economic elements that give rise to such a text/artefact. Some theorists look at how these two terrains intersect with each other. The third terrain, which has also been extensively theorised, is the transformation of the text as it is read and interpreted by an audience. For example, a reading of Shakespeare in pre-industrial England would be different to a twenty-first century reading in a Kenyan High School classroom. In short, the text is subject to a variety of different interpretive approaches, which depend on the enactor (reader/ interpreter) of that text.

Brown (2009) uses the analogy of the jazz song, *Take the A Train*, and refers to the different interpretations of this song by Duke Ellington and Ella Fitzgerald. While the score is the same the artists' interpretation and the audience's experience in listening to these versions is different. In a similar way, this is how Brown views the work teachers do with LTSM in a classroom situation, where teachers usually lead the interpretative process with a variety of materials. But it is the learners' engagement with the text that creates additional layers of interpretation and adds considerable complexity to the process. In South Africa, some teachers recognise the difficulty of such negotiation, and keep the "score" to themselves. The interpretation becomes a solo rendition of the materials. In certain instances, the teacher may control the process so that only unison participation becomes possible, such as in chorusing. In other situations, the teacher "conducts" the lesson so that a variety of voices and ideas are heard, included and integrated.

In a school context, especially primary school, it is pivotal that teachers mediate LTSM. The form this mediation takes relates to different ways. It refers to how teachers work with and interpret the materials for their own use, that is, the way they bring their own understanding and knowledge to the enactment process, and how they select and evaluate materials. This mediation also refers to how they stand between the materials and learners and how they mould this central element in the teaching process to enable learning. Charalambous and Hill (2012) argue that by excluding learner participation, and examining the lesson process only, does not sufficiently explain how enactment takes place. Such analysis leads to closer understanding of how the inter-relationship between teacher and LTSM but the process of teaching affects and expands that inter-relationship in the way learners become part of that relationship. This means that the boundary between LTSM and enactment is fluid, and ideally this boundary should become invisible as learners engage with LTSM and teacher enactment. In other words, an integration between the lesson content, the lesson presentation, and way in which the LTSM is woven into the fabric of the content and presentation should take place and feel coherent to the learners.

How teachers 1D and 4C work with materials

Materials form the core of both of the lessons I observed. The teachers used a variety of materials which ranged from reading materials, visual materials, worksheets, chalkboard work, flash cards, to the learners' own work. I indicated how the teachers used these materials in the above description of their lessons and now I turn to a comparison of how their presentation and enactment fell into the dimensions of the table below. These dimensions relate to the **O**rganisation, **D**elivery of content, and **S**upport for student learning displayed in the lessons

Theoretical dimension	Instructional action	Lesson 1	Lesson 2
Organisation (that is, providing pedagogical structure)	• Explaining the purpose of the lesson • Explaining the value/relevance of the lesson • Giving directions for an activity • Providing a wrap-up or summary of what has been accomplished	4	4
Delivery of content (that is, directing knowledge and skill acquisition)	• Telling • Modelling • Asking questions to check or mediate student learning • Providing practice or review activities	33	12
Support for student learning (that is, fostering their engagement and self-understanding)	• Fostering discussion • Assessing students' work; providing feedback • Giving students an opportunity to ask questions	2	11

Table 11 How the teachers in the above lessons enacted the Terrains for Teaching and Learning and the Instructional Action required, by following Kelsey and Carlisle's (2013) model

By using Kelsey and Carlisle's (2013) model, it reveals the different dimensions that teachers choose during the lesson. This analysis makes it possible to see the differences between two teachers' approaches to the teaching of a similar lesson. In the first lesson, the teacher is almost exclusively directive in her approach. Out of thirty-nine instances of labelled actions/events in the class, thirty-three are about delivery, four are about organisation and two are about student support. In the second lesson, there is almost an equal balance between delivery and student support, with twelve and eleven instances recorded in the description of the lesson. Both teachers refer to the organisation of the lesson four times. It is impossible to make a direct comparison between the two lessons, because they were analysed in segments that pertained to actions and events that took place during the course of the respective lessons. This meant that the number and nature of these actions and events differed considerably in the two lessons. However, it is significant that the teacher provided so little support for the learners in the first lesson. In contrast, the second lesson has an ebb and flow between teacher delivery and learner support that run throughout the lesson. With almost every directive in this lesson, there is an opportunity for learners to clarify, discuss or receive feedback on the directive or event.

It might be significant that neither teacher spends time on clarifying either the lesson's purpose or its relevance. In other words, learners are not privy to the rationale for learning

about friendly letters or diary writing. They either have to infer it, or accept without question that it is important for their development to be familiar with these formats and genres. The information sheet used in the second lesson serves as a kind of a summary, but its purpose was not made explicit. In both lessons, the teachers refer only to the organisational flow of the specific lesson. What went before and what is to come is peripheral or obscure to the position of this lesson in a sequence of lessons.

How these teachers deal with *coherence* (or the lack thereof), and the use of materials to exploit the teaching and *learning opportunities these can afford,* and *the role teachers assign to learner interaction with themselves and the materials* stands at the centre of framework within which I look at teacher enactment. Each of these elements will be discussed in the following section.

Coherence

The disquieting number of deviations noted in lesson 1 indicates the absence of coherence in the formulation of a central lesson topic. It is important to differentiate between deviation from and a variation in a topic or focus. Deviation interferes with the progress of cementing new input to an established network of ideas and structures. Variation demonstrates different forms of a single idea which could then fit into an established network of ideas and structures.

This distinction between variation and deviation is important, because it feeds into cognitive load theory that argues that working memory is limited, but long-term memory is almost infinite. Through deviation, cognitive load becomes unmanageable. However, variation uses methods that enable the "chunking" of information, so that it becomes part of long-term memory. Hugo (2013, pp. 115-117) explains it as follows:

> The stepping off point for the intersection of pedagogy and our cognitive architecture is the simple point that our working memory is limited. If we are just remembering stuff then we can hold around seven bits in our minds, but as soon as we start to process information through making sense of it by contrasting it, placing it, comparing it to what we already know, then we can only hold around two or three bits at the same time. Crucially, this information only stays in our working memories for around 20 seconds. Pedagogic practices have to take the limitations of working memory very seriously, for it provides the gateway to deep learning - every piece of

> knowledge has to pass through its gates, gates that have a limited carrying and holding capacity…It might be that you can only carry around four elements at a time in your working memory, but the size of these chunks can vary from a single bit of information to a massive networked process. Suddenly, what seemed to be a terribly limited capacity can be expanded almost to infinity, not by increasing the number of slots in working memory, but by increasing the size and complexity of the chunks. It is the networked schemas you carry in your long-term memory that gives your working memory real power.

When the lesson moves rapidly from one focal point to another, then there is scope not only for distraction, but also for confusion. Few cues are provided for learners that it is necessary for them to re-orientate themselves. The teacher in the first lesson assumes that the learners share her overview of a curriculum, which consists of discrete topics and sections. She moves from her own materials (lesson plans, created worksheets, or decisions to use the GDE workbook) without regard for whether the learners are keeping pace with her own thinking. Her actions seem to be governed strictly by a need to comply with what inspectors of her work would want to see, that is, completed activities and worksheets. In addition, her approach to topics is mechanical, rather than exploratory. This gives the impression that she is checking tick boxes, so that she can avoid an accusation that she has not stayed abreast with the prescribed work. The content of the work, in terms of level as well as its relevance, makes it difficult for the teacher to elicit a lively interest in what she presents to the learners.

The second teacher provides many opportunities for the learners to engage with the same topic but from a variety of angles. This means that she is able to provide depth, interest and coherence throughout the lesson. So, although the lesson moves from example to example, all of which are different, it does not deviate from the central focus.

Finding LTSM affordances

Learning materials can be exploited in any number of ways: The use of colour; size; layout, which includes spacing, font sizes, the demarcation of different ideas, activities and types of text; and, the modality of the text, for example, on screen or in print, all of these make a difference to learning when learners have the opportunity to interact with them. Certain materials are designed with particular purposes in mind, but these can be extended or subverted as the user sees fit (Walsh, 2006). An example of such extension

or subversion might be whether a poster is used to invite viewers into the world which is depicting (like the film studio poster) so that learning opportunities based in that world can be imagined or created, or whether the poster becomes a depiction of discrete objects and actions to be used as the basis for a drill exercise. Another example might be where a newspaper article is used to explore the perspectives of different people in described in the report, or whether it is used to underline all adjectives.

LTSM fall into different genres; and these require that the user understands (or develops an understanding) of its purpose and possibilities. Genres generally used in the classroom range from picture books, information books, newspapers, magazines, posters, readers and workbooks. For example, posters, as teachers and advertisers know, are meant to have a visual impact on viewers. The presentation ideally leads to some form of engagement, as the poster's size demands viewers' spontaneous attention when in colour and laid out well, so that it elicits sufficient interest for discussion and exploration. However, story books, for example, will hold little attraction for novice readers unless these are mediated and they are inducted into the use of such books/texts.

Teachers need to understand the affordances of LTSM and know how to exploit these to maximum advantage for any learning in depth to take place. This falls into the realm of the teacher's pedagogical content knowledge: sufficient content knowledge to make a strong teaching point and sufficient pedagogical knowledge to know how the teaching tool (LTSM) can make that teaching point most effectively. Bearne (2004, p. 26) suggests that working with texts require "deliberate consideration of how children can be helped to extend and practice their control in different modes by making explicit to themselves – and their teachers – what they know about multidimensional texts and how they work".

In the first lesson, the teacher uses a variety of materials. The way the poster is used has almost no bearing on its visual and layout format. Drawing out the formal grammatical sentences based on the activities shown in the poster, the teacher could have done this exercise without the poster. In other words, that which the poster affords the learning environment was distorted. She used small, specific parts of the poster, although not as the basis for discussion, vocabulary expansion or to provide learners opportunities for independent work. Instead, she allowed them to draw on the numerous parts of the poster that could multiply the initial examples given by the teacher. This subverted the purpose

of using a poster, because it became the vehicle for a mechanical exercise that runs counter to the kind of oral engagement posters afford. The workbook, which provides a reading text and writing activities, is used mainly for decoding purposes and the understanding of vocabulary. There is a strong emphasis on the format of the friendly letter in this lesson, but there is no discussion of the reasons for this format, the register to adopt and other affordances of this genre. This means that any text with the same sentence structures or vocabulary might have been used, and the affordances of the friendly letter genre are ignored. The activities in the workbook do not remedy this problem. There is probably an expectation that an individual teacher would explore the genre and point out the important reasons for its focus. But the workbook itself makes it possible for teachers to provide written evidence from the learners' work that the topic was covered. However, it is possible for learners to copy the format without a clear understanding that they are working with a particular genre.

In her use of the chalkboard, the first teacher erases what she writes almost as soon as it appears on the board. At the end of the lesson, only her flash cards are stuck on the board as prompts for learners to write a number of sentences. Again, the affordances of the chalkboard, which shows process, represents learners' thinking, and illustrates examples, is distorted and subverted.

The second teacher works with many examples of the same genre, which allows the learners to explore the genre in a variety of contexts. This provides an opportunity for the learners to gain a broad and deep understanding of the purpose of the genre and how it can be used. The examples are mainly in the form of printed text, but the teacher also makes use of some visual input through digital means. When working with a worksheet, she demonstrates the particular affordance of that worksheet, which is to act as a reference sheet for the leaners. Her input on the chalkboard remains there for the learners as reminders of how to proceed and what to correct or avoid. Some of the chalkboard work is based on the learners' input and some on the teacher's input in the form of a prompt, so it represents their interactions during the lesson.

Learners' participation

Cohen (2011) devotes a chapter to teachers' knowledge of what learners know. He devises four categories of teachers, and includes those who:

1. Ignore what learners know (in other words, the teachers speak, but do not listen to learners' input). This goes hand in hand with an assumption "of equivalence between what they say and what learners learn". In this way, learners can (and are) blamed for failure because it is ascribed to poor or inadequate 'listening'.
2. Attend passively to learners' input (in other words, the teachers will answer questions, but not amend their teaching to address any misunderstanding or be more explicit).
3. Attend vicariously to what learners' input might be (in other words, work with the theories of teaching and learning and discuss strategies with colleagues, but do not work directly with learners' input).
4. Attend directly with learners' input (in other words, responds to learners' input in order to engage with learner thinking and to amend their teaching for clearer understanding).

Cohen (2011, p. 178) comments that "when teachers search for minds at work, they have a more complex task than if they check for congruence… [and this requires] specialised knowledge and skills to put themselves in learners' mental shoes". This approach requires that teachers make themselves "vulnerable to evidence of failure" – a situation that many teachers chose to avoid.

Cohen links the kind of LTSM used to the teachers' approaches to the learners' input, as well as the teachers' conception of whether knowledge is fixed or a practice of inquiry. Teachers who limit learners' input check for congruence through worksheets which contain multiple choice tests, fill-in-the-blank worksheets and right/wrong answers. However, teachers who are interested in learning as a process that checks for learners' understanding will want evidence of "minds at work". This will be found in expressive writing and presentation opportunities for the learners. Working in such a way, which Cohen (2011) termed "ambitious teaching" is far more demanding than the alternatives.

The lessons observed show a stark contrast between the teachers regarding the importance of learners' input. In the first instance, the teacher limits (and some instances, actively avoids) learners' input to specific questions and instructions from her. She controls responses and does not depart from the "script" in her head which requires the learners to give specific answers. There is not the smallest opening which allows learners to ask

questions or to give unsolicited comments. This is true for their interactions with the teacher, their peers and their writing activities.

The second teacher goes out of her way to solicit learners' responses and she works with learners' input. Even when learners' input does not require further explanation, she continues to add their contribution to the lesson in the form of written words on the board and by actively encouraging them to ask questions and to make comments. However, she is careful to maintain the lesson's focus and to enforce its aim. Both the systematic structure of the lesson and the ways she uses learners' thinking are indicative of a movement from simple to complex ideas, and from concrete to more abstract concepts. She provides a wide array of opportunities for learners to engage with the central topic: the readings of examples; the reference to novels; their own experiences; and, the writing of a diary entry. It is clear that her confidence in being able to respond to whatever learners might bring to the lesson is why she is able to adopt such a strategy. Considerable command of PCK is required to teach in such a way.

Conclusion

This chapter looked closely at only two of the twenty-six lessons observed. The lessons provide strong and useful contrasts, although these findings need to be tempered by the contextual factors at the respective schools. These contrasts relate largely to the following: deviation versus variation in the provision of LTSM and how these affect coherence; the thoughtful exploration of how LTSM might be used most productively in order to accomplish the teaching goal – such as how visual and text could be used to complement each other, how the texts of others and learners' own texts stand side by side in a lesson as teaching texts, how reading, writing and viewing is valued (implicitly or explicitly) by the teachers and learners in their engagement with LTSM; and finally, the active encouragement or discouragement of learner participation so that the lesson might be shaped by learner questions, issues and concerns

These contrasts are useful, because they provide clarity when applied to other lessons that fall between these extremes. The following chapters on the observation data will deal with the kinds of LTSM used, more so than the different enactment strategies, and the next chapter looks specifically at the use of books in the classroom.

Chapter 6 Using books

Introduction

In this chapter, I will discuss how teachers enact LTSM in the form of reading books across different genres, and textbooks. A brief look at the way in which textbooks have changed over four decades is included by way of an example of the same material dealt with in the same textbook series in 1978 and 2005 editions. Some reference to studies on the use of books, specifically, will be used to introduce the possibilities and rationale for working with books in grades 4 to grade 7. The analysis of the four lessons in which teachers used books will then examine how and why teachers worked with books and what the possible implications are of some of their practices.

Learners seldom had an opportunity to handle or read books in most of the lessons I observed. Although books were often present, these were mainly used occasionally or they were for the teacher's use only. One of the teachers I interviewed said that the textbooks she kept on her desk were for learners to browse through when they had completed work and were waiting for the rest of the class. She commented that "the learners really enjoy looking through these books" (Interview with teacher 2A).

Books (and especially textbooks) are not a panacea for systemic problems in an education system. In a study in the United States of America, McGill-Franzen, Allington, Yokoi & Brooks (1999) staged an intervention: certain schools received targeted training on the use of books for literacy development and a substantial collection of children's books of all sorts; while other schools received the same books as the first set of schools, but no training; and, the control schools received no added books and no training. The results were as follows:

> Kindergarten children who were taught by teachers who had a well-stocked classroom library and who had participated in a series of training sessions on the display and use

> of books in kindergarten classroom lessons achieved significantly higher scores on every measure of literacy development when compared with children who were taught by teachers who were provided with a well-stocked classroom library but not professional development support. Simply providing teachers with a generous supply of children's books had little effect on the educational outcomes of students. (McGill-Franzen, Allington, Yokoi & Brooks, 1999, p.67)

The results showed that teachers need not only to know how to promote books, but also to be able to use books effectively with learners so that learners learn how to use books. The knowledge teachers need to be exposed to includes the valid and established criticisms of textbooks, which were formulated in the seventies and eighties when textbooks were seen as a teacher's prop. During that time, textbooks were accepted uncritically as a means for providing the material that learners would memorise for exam purposes (Meek, 1996). These textbooks used the unchallengeable and authoritative voice of an author, and knowledge was presented as if it was definitive. The "hidden curriculum" (Apple, 1971), which was underpinned by a specific worldview and ideology to be promoted to readers, was embedded in these textbooks. In current textbooks, the (hidden or overt) agenda of the curriculum developers, publishers and textbook authors is present and needs to be noted by readers. A teacher is required to supplement, problematise and debate the order and style in which knowledge is presented, and the views and ideas that are either subtly dismissed or excluded from these textbooks. This hidden curriculum is not restricted to textbooks only.

Meek (1996) makes the useful distinction between traditional textbooks and other informational texts written for school purposes, such as, course books, which work on the assumption of levels to be mastered, while topic books provide information in a pattern that "shows how entrenched is the notion of *the structure of learning* in the production of information books" (Meek, 1996, p. 40). This structure results in consistent use of the following: topic presentation, representation of attributes, characteristic events, categories of comparison and a final summary. These books are usually richly illustrated and sometimes the printed text is almost an adjunct to the illustrations. Irrespective of the kind of informational text, such books make particular assumptions of the way in which knowledge needs to be presented, how the knowledge will be received and what is to be

done with that knowledge (that is, it needs to be internalised either for assessment or further learning purposes).

The reading of textbooks and informational books requires a specific kind of literacy. When wide-spread textbook use is introduced in grades 4-7, there is an assumption that basic literacy has been established. Once literacy has been acquired, a focus on learning-to-read changes to reading-to-learn at primary school level. Meek (1996, p. 7) argues that reading-to-learn is (or should be) the primary concern of most primary school teachers. In addition, she makes the important distinction between texts (of all kinds) that elicit fleeting interest, and those that cultivate ongoing and extended interest. Meek's (1996) research suggests that how teachers work with learners in the classroom is crucial to how learners learn to work with books.

> We still need much more evidence of the kind of mental 'space' that readers inhabit as they read to learn, the different reasons they have for accepting or rejecting what books tell them, and the ways with words that turn understanding into knowing. If, however, we agree that significant texts teach readers not only what they *can* learn but also how to enter into an interior dialogue with a more informed knower, then something may come from a closer inspection of the kinds of invitation offered by writers … of individual texts across a range of subject matters. (Meek, 1996, p. 43)

School books, which include a range of genres, can have significant advantages, despite important criticisms and reservations about them. Reading books, apart from systematic and carefully researched methods on the introduction of vocabulary and language structures, find their distinction in pleasurable versus serious texts. However, as Meek (1996) points out fiction or narrative texts are not devoid of information and a range of profoundly "educational" content. She makes a strong claim for the relinquishment of the traditional view that fiction and informational texts find their distinction in pleasurable versus serious texts. Topic books can be very attractive to young learners, and, when inspired by a topic such as dinosaurs or cars, this can lead to extensive further (and independent) exploration. Some topic books include narrative elements and they can even be structured within a narrative framework. Some topic books (Meek uses the Dorling-Kindersley topic books as an example) present the world 'as it is' through photographic and lexigraphical techniques. The latter term was coined by Dorling-Kindersley to

describe the interaction between photographs, drawings, diagrams and print. Such presentation of knowledge brooks no dissension, and it does not allow for any alternative perceptions unless a trained and expert reader can discern how these techniques serve to coerce the reader into a particular view of knowledge. The result of such presentation is that it usually diminishes critical perspectives, openings for discussion and debate, in much the same way that certain textbooks do.

Textbooks are meant to provide curriculum coverage in a way that is methodically structured and sequenced, and they are also meant to give teachers and learners a bird's eye view of a year's work. In addition, exercises, tasks and activities indicate the level of accomplishment that is considered the standard to be reached for progression through school, and, if well produced, these can serve as a stimulus for further reading and discussion. According to Meek's (1996) research, teachers treasure the way in which learners become immersed in the discourse of a particular subject areas through textbooks, because "…geography texts display how geographers write; business studies conduct business with readers" (p. 36). In working with texts, but especially information texts, learners' talk is seen to contribute significantly to learning. By sharing interpretations, wondering and questioning, the learners develop skills that are fundamental to the building of understanding and then the establishment of knowledge.

What teachers and learners encounter on the pages or pages of learning materials are a series (or more likely an assemblage) of signs. Each of these signs carries meaning: they may take the shape of letters as part of writing; or they may be part of the various elements of image, such as, levels of realism, depth, colour and proportionality; or they may be the way the layout has spaced and positioned components of the assemblage; and, they may be affected by the typography, such as, the fonts, bolding, italicising, boxing of parts of the page (Bezemer & Kress, 2010). The semiotic mosaic is re-contextualised and interpreted in every encounter the user has with it, sometimes mediated by a third party, and sometimes not.

The following analysis of sections a long-standing and popular South African textbook, *Comprehensive English Practice*, serves to illustrate how changes in pedagogical expectations have taken place over about thirty years.

The following sections, which show the same poem, come respectively from the 1978 and 2004 editions. It was fortuitous that the same poem was covered so many years apart, and it provided a rare opportunity to see how the same text was presented in different curriculum eras. The first was presented using a traditional and formal approach, the second an outcomes-based, communicative approach.

17

Read the following poem and answer the questions that follow:

Last run

He'd fallen over a cliff
And he'd broken his leg.
Just a mustering dog.
And he looked at me, there on the hill.
Showing no hurt, as if he'd taken no ill,
And his ears, and his tail,
And his dark eyes too,
Said plainly,
"Well, Boss, what do we do?
Any more sheep to head?
Give me a run".
But he'd never head sheep any more.
His day was done.
He thought it was fun
When I lifted the gun.

BRUCE STRONACH

Understand

a) Use your dictionary to find the meaning of 'muster'.
b) What is 'a mustering dog'?
c) Why did the dog not stop before the edge of the cliff?
d) Do you think the dog was in pain? The poet says he was 'showing no hurt'.
e) The dog's tail must have been
   (i) between his legs
   (ii) wagging
   (iii) straight and still
f) Who is 'Boss'?
g) Why does the poet say 'his day was done'?
h) What did the dog think when his master 'lifted the gun'? Do *not* answer 'He thought it was fun'.
i) What actually was about to happen to the dog?
j) Do you like this poem? Give a reason for your answer.

Discuss

If a working animal breaks a leg, it is usually put to sleep. Do you think it should be kept alive or not? Talk about this problem.

Write

John Phillips, a Karoo sheep-farmer, has just had to shoot his best sheep-dog. Write a letter from John to either
a) the sheep-dog breeder to enquire about a puppy as a replacement
   or
b) a friend telling him of the accident.

Research

Find out about one of the following:
a) sheep-dogs
b) guard dogs
c) guide dogs
d) St Bernards
e) police dogs
f) Huskies

Read

There are many interesting stories written about dogs. Walt Morley writes very interestingly. Try *Home is the North* and *Angry Waters*.
White Fang, by Jack London, is a famous dog story and *A Very Small Miracle*, by W. MacKellar, is well worth reading, though very sad.
Working Dogs by C. O'dell is a well-illustrated non-fiction work with chapters on various ways dogs are put to work for us.

Poetry

There have been many poems written about dogs. Make a class book of Dog Poems. Here is one that you might enjoy:

Dogs

When I was once a wandering man,
And walked at midnight all alone—
A friendly dog that offered love,
Was threatened with a stone.

"Go, go," I said, "and find a man
Who has a home to call his own;
Who, with a luckier hand than mine,
Can find his dog a bone."

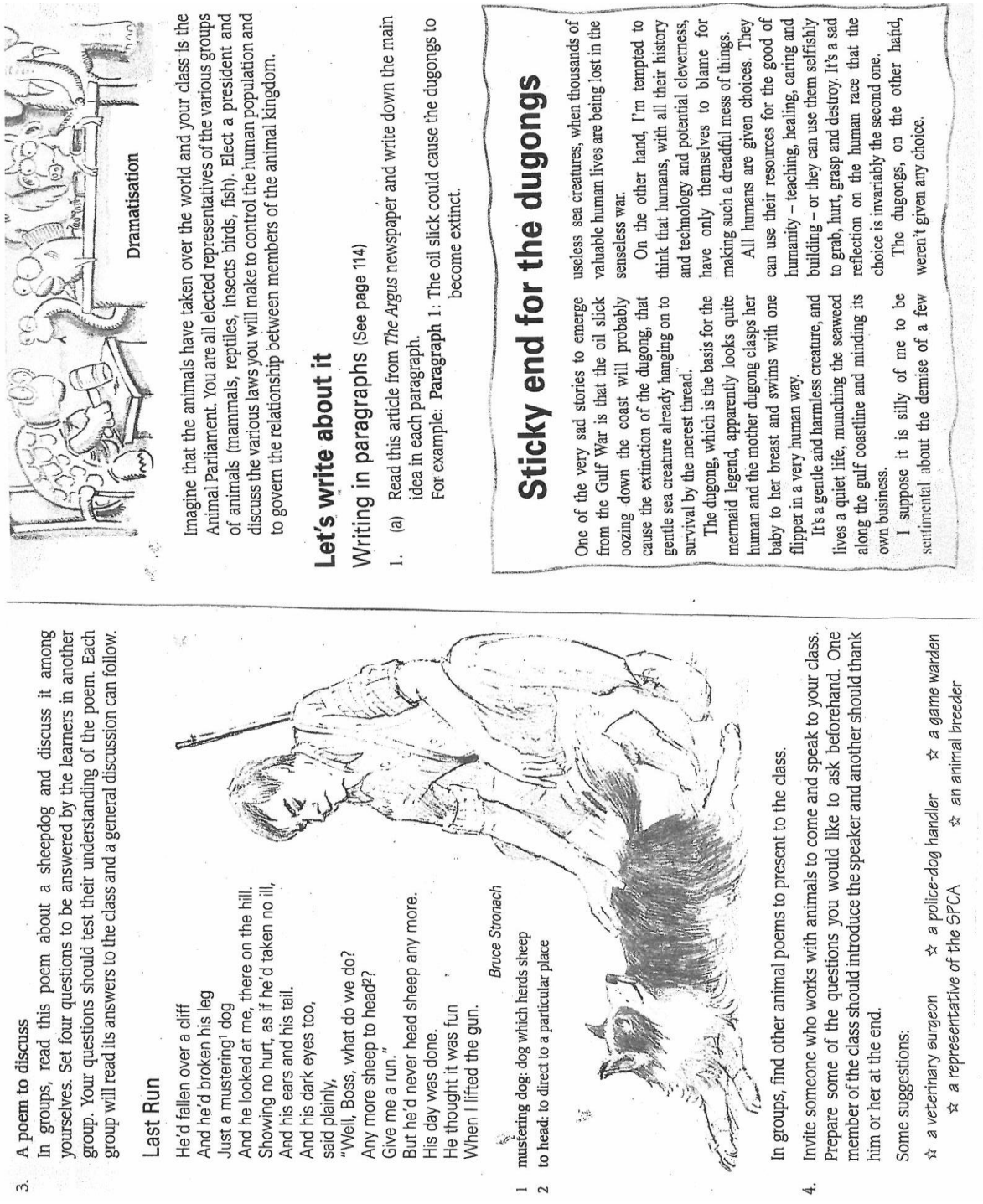
But times are changed, and this pet dog
Knows nothing of a life that's gone—
Of how a dog that offered love,
Was threatened with a stone.

W. H. DAVIES

Did the man keep the dog after all? What do you think?

Figure 8 1978 Edition of the poem "Last Run" and how it is presented in Comprehensive English Practice

2004 Edition of the poem "Last Run" and how it is presented in *Comprehensive English Practice*



Dramatisation

Imagine that the animals have taken over the world and your class is the Animal Parliament. You are all elected representatives of the various groups of animals (mammals, reptiles, insects birds, fish). Elect a president and discuss the various laws you will make to control the human population and to govern the relationship between members of the animal kingdom.

Let's write about it

Writing in paragraphs (See page 114)

1. (a) Read this article from *The Argus* newspaper and write down the main idea in each paragraph.
For example: **Paragraph 1**: The oil slick could cause the dugongs to become extinct.

Sticky end for the dugongs

One of the very sad stories to emerge from the Gulf War is that the oil slick oozing down the coast will probably cause the extinction of the dugong, that gentle sea creature already hanging on to survival by the merest thread.

The dugong, which is the basis for the mermaid legend, apparently looks quite human and the mother dugong clasps her baby to her breast and swims with one flipper in a very human way.

It's a gentle and harmless creature, and lives a quiet life, munching the seaweed along the gulf coastline and minding its own business.

I suppose it is silly of me to be sentimental about the demise of a few useless sea creatures, when thousands of valuable human lives are being lost in the senseless war.

On the other hand, I'm tempted to think that humans, with all their history and technology and potential cleverness, have only themselves to blame for making such a dreadful mess of things.

All humans are given choices. They can use their resources for the good of humanity – teaching, healing, caring and building – or they can use them selfishly to grab, hurt, grasp and destroy. It's a sad reflection on the human race that the choice is invariably the second one.

The dugongs, on the other hand, weren't given any choice.

3. **A poem to discuss**
In groups, read this poem about a sheepdog and discuss it among yourselves. Set four questions to be answered by the learners in another group. Your questions should test their understanding of the poem. Each group will read its answers to the class and a general discussion can follow.

Last Run

He'd fallen over a cliff
And he'd broken his leg
Just a mustering[1] dog
And he looked at me, there on the hill.
Showing no hurt, as if he'd taken no ill,
And his ears and his tail.
And his dark eyes too,
said plainly,
"Well, Boss, what do we do?
Any more sheep to head[2]?
Give me a run."
But he'd never head sheep any more.
His day was done.
He thought it was fun
When I lifted the gun.

Bruce Stronach

1 **mustering dog**: dog which herds sheep
2 **to head**: to direct to a particular place

In groups, find other animal poems to present to the class.

4. Invite someone who works with animals to come and speak to your class. Prepare some of the questions you would like to ask beforehand. One member of the class should introduce the speaker and another should thank him or her at the end.
Some suggestions:
☆ *a veterinary surgeon* ☆ *a police-dog handler* ☆ *a game warden*
☆ *a representative of the SPCA* ☆ *an animal breeder*

Figure 9 2004 Edition of the poem "Last Run" and how it is presented in Comprehensive English Practice

The changes shown in sixteen years are mainly how the book looks and the expectations of what learners need to do with the poem.

In the 1978 edition, the poem is presented unillustrated and the power of the poem lies solely in its content. The textbook pages are unadorned with clear headings and numbered questions or activities. But the text itself is meant to hold the teacher and learners' interest and any surprises are revealed in the text itself. The activities and questions are challenging, as the learners are expected to do a great deal of research (in dictionaries, as well as with other sources) and writing. There is little evidence of "scaffolding" (to use a contemporary term). Yet many of the activities are thought-provoking and contentious. In addition, learners are given quite a wide range of choices concerning activities. There is also a strong emphasis on writing and reading. After each reading activity, the textbook provides suggestions for further reading for pleasure. It is clear that the first poem ('Last run') is meant as a formal comprehension test, but the second poem is for extension and it is meant to be read in a more relaxed fashion. The second poem ('Dogs') stands in deliberate contrast to the first, where the dog is rescued and given a home, so that the shock and sadness elicited in the first poem is offset by the second. It is also interesting that a single font is used for the text on these pages, except for the main headings.

The 2004 version has a busier appearance despite the larger font and bigger-sized pages. There is variety on these pages from the illustrations through to the different genres (poetry and newspaper article) that are presented side by side. In order to draw these distinctions, visual elements are used in the form of fonts, boxes, spacing and headings. The poem is presented purely for discussion. Aside from the group discussions on the content of the poem and where learners have to devise questions for oral discussion, there are also speeches, interview questions and a debate. Almost everything the learners do on these pages is reading and talking. The illustration for the poem is decorative rather than functional (and it could be argued that it is rather sentimental). In contrast, the illustration for the debate is meant to be humorous, and it presumably acts as light relief after the sombreness of the poem.

The headings used on these pages speak directly to the learners in a manner that is meant to engage them, for example, "Let's write about it". But the writing task that the learners are required to do is to summarise. This summary task is surprisingly difficult

to do if you follow the given instructions. Although the piece could be summarised in three to four sentences, it is much harder to summarise it paragraph by paragraph, because some of the paragraphs consist only of a single sentence.

The contrast between the two sets of pages exists largely in what the learners are expected to do and how the texts are presented. Ultimately, the benefit learners derive from these pages will depend on the teacher. In the case of the first set of activities (1978), learners are expected to work mainly on their own and to submit their answers to the teacher who can discuss, correct or praise them. Some of the questions are interpretive questions and learners are expected to do research which places these questions squarely in the domain of higher order work. This requires strong mediation by the teacher in order to create a sense of achievement and satisfaction for the learners. Because the work is almost all recorded in writing, and reflected in the textbook, this means that the learners have a strong record to refer to for the purpose of revision.

In the case of the second set of activities (2004), almost nothing is recorded. It is only strong teacher mediation which ensures that the learners will derive meaningful learning from these exercises. When learners have to devise their own questions on the poem, these could range from entirely meaningless to challenging, and this requires the teacher's intervention to enable the learners to acquire a meaningful understanding of the poem. The questions devised in groups will be on pieces of paper, which presumably will be discarded after the activity. Another activity where the learners find other animal poems could also be meaningful or inane, as the teacher needs to assist an eleven-year-old to distinguish between an interesting, powerful poem and a ditty. By preparing questions, introductions or thank-you speeches, the learners again use pieces of paper which are likely to be discarded. The exercise is challenging, but it will only succeed with clear and active teacher engagement with the learners. A final example is the debate where the learners assume the role of an animal and petition for legal rights. This has the potential to become trivial unless the teacher provides good input and criticism. All these activities are mainly higher order ones, but each has the potential to disintegrate unless there is sound teacher involvement at every level of the activities. There is much expected of the teacher in these activities, and whether learning takes

place is left almost entirely in his/her hands. The "learner-centeredness" of these activities is not exactly a misnomer, but it may detract from the very important role teachers are meant to play for meaningful learning to take place.

The lessons in this thesis which deal with the use of books cover various categories of school information and reading books. A full description of each of the lessons is contained in Appendix A. The following summary indicates the kind of books, the types of lessons and the kind of enactment that I observed:

Summary of observed lessons using books

Lesson:	Type of book	Type of lesson	Teacher-enactment strategy
1	Graded reader of topic book	Grade 6, English, FAL, Shared reading	Some choral reading, some individual reading, recall questions, dictionary work and a calculation (applied knowledge question). It was almost exclusively mediated by teacher.
2	Fiction	Grade 7, English, HL, Listening and shared reading	Enacts the text by integrating interpretive, informational, grammatical and language development elements. Strongly mediated by teacher who gives a dramatic rendering of the text. Learners do some independent reading of technical elements of the book.
3	Fiction	Grade 5, English, HL, Unprepared reading	No mediation of text by the teacher. Learners had to provide evidence of decoding and meaning-making skills through a performative rendition of a random extract from a novel. The use of a rubric provided teacher-learner interaction but without meaningful discussion.
4A	Social Sciences Textbook	Grade 5, SS, Geographical information reading	Strongly mediated by teacher, but with opportunities for learners to explore text and participate in discussion and give their own views. Although focused on factual information and recall of information, learners had to paraphrase and extend provided knowledge from the text. Teacher used interesting examples based on their own knowledge and from outside the text.
4B	Social Sciences Textbook	Grade 5, SS, Geographical information reading	

Table 12 Summary of observed lessons using books

Lesson 1

Teaching and learning coherence

There are instances in lessons when it becomes very clear where the source of coherence lies, but this is rare. In the case of this lesson, the reader (reading book, called "What is an endangered animal") is patently the source of coherence. When the teacher stops to explain, asks learners to answer questions, interrupts the text so that learners can use dictionaries or do a sum based on some statistics in the text, the class returns to the reader after each interruption. Thus, the reader 'holds' the lesson and creates opportunities for various kinds of pedagogical input, such as, vocabulary building and other activities. The text itself is not linear, because it moves from animal to animal, provides various snapshots of different animals, before arriving at an explanation of endangered animals. This approach creates variety and many more opportunities for discussion than is used by the teacher in this lesson. Indeed, the teacher does not discuss the central point regarding endangered animals beyond an explanation of the word "endangered".

The use of the affordances of the materials

Reading instruction usually goes hand in hand with the teaching of reading conventions, for example, the distinction between headings, body text and captions. The lack of distinction between body text and captions, which was shown in the way the learners approached the choral reading of this book, suggested that many learners were unaware of such conventions. There was little in the lesson which introduced the learners to the possible satisfaction of working with a book. The extraordinary photographs were neither noted nor discussed by the teacher. The opportunity for developing visual literacy, as used in topic books, was lost. This lesson's use of the topic book did not differ substantially from work done on the board or other visual materials.

The fostering of learner-support and/or participation and how this influences LTSM enactment

At no point during the lesson did the learners do any independent work with the reader. The reader was treated as a teaching tool to be mediated only by the teacher. There was a keen response by some of the learners to the teacher's invitation to read to the class, and this was the only opportunity for their participation in the lesson. However, certain learners handled their books in ways that were indicative of a desire to work with the

material independently, as shown by those who paged through the book to look at the photographs and those who read ahead. Even those readers who read silently with the teacher, but did not participate in the choral reading, might be showing some independence (although the opposite may also be true). However, the teacher included the use of dictionaries in the process of reading and the learners did work independently with a book. Some learners were successful, because they were able to find the definition of the relevant word in the dictionary.

The topic, the book and some of the issues raised by the teacher ought to be of pronounced interest to grade 6 learners. Yet the teacher did not invite discussion through any open questions or by asking for opinions, and the learners never volunteered any input. The enactment of the lesson is not shaped in any way by the learners' participation. Instead, the teacher shapes the lesson (and times and paces the lesson) around the assumption that all learner participation needs to be controlled.

Cover of the reading book used in lesson 1

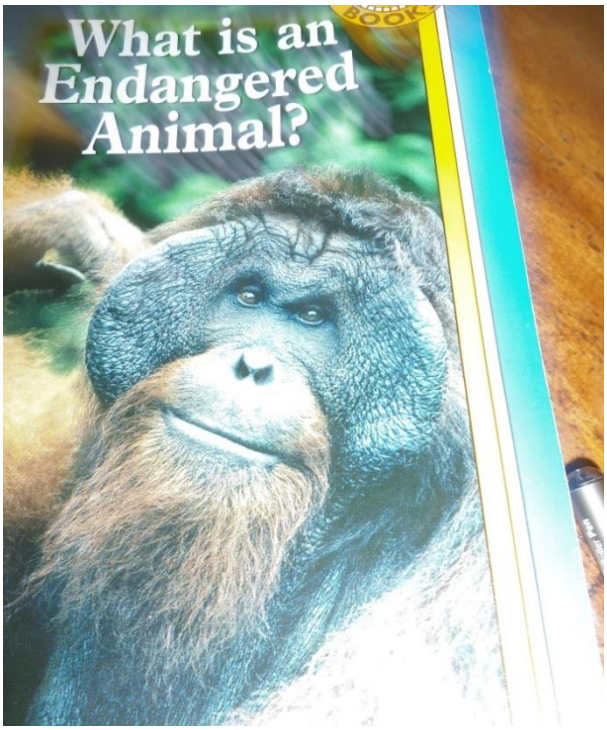


Figure 10 Cover of the reader used in lesson 1

Lesson 2

Teaching and learning coherence

In the second lesson, the reading of the children's novel, "Skellig", by David Almond to a grade 7 class, it is noticeable how the teacher adds a number of elements besides the text to the lesson. She includes some grammar, references to a range of other texts and stories, as well as vocabulary building. It is open to debate whether this is enriching or distracting for the learners. In many ways, her technique mimics the way links and associations are created in the mind during the process of reading. The teacher demonstrates how when you read about a concept, a range of other ideas and associations come to the fore and these influence the way the text is understood. In addition, an aware reader notices the way language is used and how certain words and choice of grammar in sentences make the text more or less powerful. As with the previous lesson, it is the novel that creates a coherent focus with its linear narrative.

The sophisticated level of vocabulary knowledge that is assumed in this class suggests that most learners are likely to be fluent readers and highly proficient English speakers. Shared language proficiency is a powerful element of coherence in the classroom. This language proficiency goes beyond sophisticated vocabulary, because it includes an understanding of intonation, emphasis, and the use of irony (among other linguistic and semantic elements).

It is strange that the teacher never refers to independent reading during the lesson. After the first chapter, learners are not instructed to continue reading on their own. During the lesson, the teacher reads the narrative aloud, although the learners have to read the blurb and the dedication silently. As with the previous lesson, the teacher mediates everything in the reading lesson. The teacher uses her dramatic and expert persona as a tool for coherence. Her enactment of the text is one of literal 'acting' and the use of provocative and challenging questions. She uses these strategies to maintain a high level of focus and attention from the learners. In other words, her enactment serves as a strong cohesive factor.

The use of the affordances of the materials

The conventions of reading novels are strongly emphasised in this lesson with its focus on the cover, blurb, dedication and introductory discussion and preparation for the reading

of the story. A great deal of the introductory session skirts the content or storyline of the novel and serves to alert the learners to the making of books. The teacher wants the learners to be aware that there is an author, cover designers, marketers, and other actors in the production of books that are in the business of attracting readers and making books exciting to specific readership constituencies. Only once this awareness has been established, does the teacher lead the readers into the content of the novel.

Bringing the content of the novel alive by acting the characters' roles, the teacher demonstrates the power of imagination. In effect, she creates an audio-version of the text for the learners as they read. She has faith in her own ability to bring the text to life, and is determined to do this without the learners reading aloud. If their reading is halting and uninspiring, then this will interrupt the flow. Her tacit message to the class is that in their own reading, the learners need to "hear" and "see" the characters on the page. By her role play, she is showing them how they could make the text come alive.

Although the teacher emphasises the narrative through her rendition of the text, she does not discuss its elements, for example, the background, character and story line. This is likely to be done at a later stage in the reading; instead, she focuses rather on the role of production, marketing and influences that may be relevant to the story. The teacher also sets store in creating excitement about reading the novel. She uses the affordances of story (the build-up of tension, the opportunity to experience another reality and to empathise with or analyse different characters) to set the tone for the class's future reading.

The fostering of learner-support and/or participation and how this influences LTSM enactment

The video that precedes the reading sets the mood for the content the learners encounter in the text. The effects of this video will colour the reading of the book, and it is noteworthy that the teacher finds it necessary to create this prelude. In her interview, she stated that many learners are reluctant readers and need to be encouraged to read and shown how reading can be pleasurable and satisfying.

The video and the teacher's questions invite discussion, and this means there is a great deal of learner-participation in the lesson. This participation is based on their own experiences, the voicing of opinions that give rise to debate, for example, whether angels exist or not. They also expressed their appreciation or distaste when certain topics were

raised, such as, homeless people who squat on private property. In addition, the teacher asks questions to check for understanding of the text and information based on the book's structure, for example, the purposes of the blurb and the author's biography.

The multi-layered approach to text, its affordances and ability to create coherence that is evident in this lesson, stands in stark contrast with the next lesson.

Lesson 3

Teaching and learning coherence

The following lesson was conducted by teacher 3B in school 3. It is part of what happens during an English lesson in a grade 5 class which has twenty-two learners. While some learners are writing a test, others are called upon to do "unprepared reading" from a novel called "love, Aubrey" by Suzanne LaFleur. The "unprepared reading" in this lesson involves the reading of random passages from a novel by individual learners for the purpose of assessment. This leads to excruciating boredom and passivity of the learners. The teacher makes no pretence of creating any form of coherence during this lesson, which in fact, is not a lesson in any traditional sense of the word. Instead, the teacher structures the time so that two testing activities take place simultaneously.

Several interesting and important issues are raised by this exercise in "unprepared reading". It is foremost an assessment exercise, which is expected by the curriculum and by school policy. The teacher attempts to combine two assessments to combat the inevitable tedium of the reading exercise, so she allows it to take place at the same time as the writing of a pen-and-paper test. There are many question marks as to what this suggests about the nature of testing. But the teacher makes it very clear in her interview that she wants to instil a culture of informality round assessment to reduce anxiety and to make it part of a "learning exercise", rather than a "judgement exercise". And so there is no close monitoring of learners as they write their test. The teacher encourages the learners to go back and check their work and to ask her questions if they are unsure of what to do in the test. There is a stark contradiction between the relaxed attitude towards the written test and the tension created by the assessment of unprepared reading: firstly, the anxiety-provoking testing required by having individuals read aloud to an inattentive class, and secondly, the importance given to the teacher's marks by the learners.

It is instructive to look at the rubric used by the teacher for the assessment of unprepared reading skills:

Reproduction of rubric used for the assessment of unprepared reading for grade 5s

Un/Prepared reading aloud	**7**	**6**	**5 – 4**	**3**	**2 – 1**
Language level: age-appropriateness ; difficulty	Challenging passage	Passage suitable for age and home language level	Moderate for age and home language level	Easy for age and home language level	Too easy for age and home language level
Topic: suitability and relevance (prepared choice of material)	Topic interesting and original. Insightful interpretation ; well-researched	Suitable, relevant and interesting topic. Well-researched and presented	Topic relevant but lacks new information or interpretation	Topic meets requirements ; inadequate research	Topic not suitable; poorly researched; reader lacks insight
Fluency and pronunciation	Fluent and expressive reading; pronunciation clear and unambiguous	Fluent but lacks expression. Pronunciation clear and unambiguous	A few inappropriate pauses; attempts to modulate voice	Sometimes repeats self; pronunciation ambiguous; sometimes difficult to understand	Hesitant; often repeats self; difficult to follow by listening alone
Audience contact	Makes eye contact with all sectors of audience; expressive, gestures; open body language	Makes eye contact with sections of audience; gestures, but sometimes forced. Open body language	Eye contact limited. Self-conscious	Little eye contact; loses place. Markedly self-conscious	No eye contact. Body language closed
Preparation (prepared reading)	Well-versed with material; (vocabulary list and summary done if required)	Fairly familiar with material; (vocabulary list and summary done if required)	Familiar with material; (vocabulary list and summary not done if required)	Not familiar with material; (vocabulary list and summary not done if required)	Unfamiliar with material; (vocabulary list and summary not done if required)

Table 13 Reproduction of rubric used by teacher 3B for the assessment of unprepared reading of grade 5

Two important issues are raised by this activity: the value and importance of the assessment of unprepared reading and the use of rubrics.

The value and importance of unprepared reading

Teachers need to establish their learners' reading levels in order to remediate where there are any problems since reading is widely acknowledged as the basis of learning in a school environment. The two most widely used methods for establishing reading competence is through reading comprehension tests and reading aloud. The curriculum demands that teachers are familiar with the reading levels of their learners and apportions between 15% (as part of the unwritten part of the end-of-year examination) and 20% (as part of continuous assessment) of the total marks for reading aloud (CAPS, 2011, Intermediate phase, English HL, pp. 94-101). The curriculum gives the following guidelines for prepared and unprepared reading:

> **Prepared Reading (Reading aloud)**
> • Use of tone, voice projection, pace, eye
> contact, posture and gestures
> • Pronounce words without distorting meaning
> **Unprepared reading (reading aloud)**
> • Read fluently according to purpose
> • Pronounce words without distorting meaning
> • Use tone, voice projection, pace, eye contact,
> posture and gestures correctly (CAPS, 2011, Intermediate phase, English HL, p 17)

The only discernible difference between prepared and unprepared reading appears to be the possible reversal of emphasis between reading as performance (use of tone, voice projection, pace, eye contact, posture and gestures) when using a prepared passage, and fluency (reading according to purpose and the pronunciation of words without distortion) when using an unprepared passage. What is striking about the lesson I observed is how the assessment of unprepared reading is mostly a mechanical exercise where a mark is recorded. This appears to be the case for the teacher, who is under pressure from the curriculum. But it also seems to be a mechanical exercise for the learners, who are under pressure to perform well in the environment of an independent school, where academic success and competitiveness is valued very highly (interview with Teacher 3B). Although learners may glean some indication of their reading ability from the rubric (which they receive with their mark), it hardly provides feedback that assists in improving their

reading skills. By reading a random passage from a novel, the learners are not "working with text", even though active reading is required when reading an unprepared passage. No significant meaning-making takes place during this exercise, and the emphasis falls squarely on reading as performance. The usefulness of reading as performance is doubtful for early readers[5], although an argument might be made that it allows for the text to be 'heard'. In addition, this reading aloud helps to establish various inflections and tones, which is necessary when developing fluency.

Two of the three categories for a lesson analysis of materials, namely, teaching and learning coherence, and the use of the affordances of the materials, cannot be applied to this lesson. There is no pretence in this lesson that there is any interest in these two categories. The entire focus of the lesson is ostensibly on elements of the third category, namely, the fostering of learner-support and/or participation and how this influences LTSM enactment. In this case, the rubric acts as a teacher and learner-support tool.

The use of the affordances of the materials

This lesson provides a striking snapshot of how, even under the optimal teaching and learning conditions of an independent school, reading and working with text can be reduced to a tedious process, which shows the minimal relevance of the printed word. It becomes an exercise in expressive decoding, rather than an exercise of reading for meaning. It may be that this lesson only satisfies the curriculum requirement of continuous assessment rather than improving the learners' reading skills or enhancing their reading for pleasure.

The fostering of learner-support and/or participation and how this influences LTSM enactment

The use of rubrics

Rubrics were introduced into South African classrooms as part of Outcomes-based Education, and in the opinions of some teachers (Interviews with teachers 2E and 3B) was the most useful innovation of the time. The intention of rubrics is to create a more standardised way of assessing learners' work, specifically when dealing with tasks that

[5] Studies on the usefulness of reading aloud tend to concentrate on learners who have dyslexia or other problems that have delayed fluency (Berends & Reitsma, 2007; Hintikka, Landerl, Aro & Lyytinen, 2008)

rely heavily of teachers' subjective responses. Rubrics (like textbooks) are tools that have the potential to empower both teachers and learners: Teachers, because rubrics ostensibly provide them with a basis for arguing that their assessment is objective and scientific; learners, because the criteria for performance are made clear.

Rubrics, like textbooks can be of varying quality, and the above example illustrates a poorly designed rubric: it does not draw a clear distinction between prepared and unprepared reading (as if the two activities can be assessed by using the same rubric); in addition, the rubric's criteria to demarcate the different levels of performance do not reduce the teacher's subjective judgement. An important function this rubric plays is that it forces the teacher to think about different elements of the task and not to evaluate the learners on the basis of one overriding element, such as, exceedingly good expression. Instead, this rubric makes the teacher take into account the effects of poor pronunciation too. The use of this rubric contrasts directly with the use of a rubric observed in another lesson where both teacher mediation and the rubric have an educative function (see chapter 7).

In this lesson, the rubric, more than the novel, shapes the way in which learners participate. The novel, although the basis of the assessment and the source of anxiety, does not determine the way learners interact with the teacher, the class or with the text itself. The rubric, on the other hand, alerts the learners to what is "valued" and what the measure is for successful achievement.

Lessons 4 A and B

Teaching and learning coherence

A grade 5 Social Sciences lesson, conducted by teacher 2B, is repeated with different classes consisting of about forty learners. The school is a suburban government school.

It is difficult to untangle how much of the flow of the two lessons on geographical features of different places in South Africa is due to teacher mediation or to the learners' access to a textbook. But the learners have access to this textbook only for the lesson's duration. It is an instance during which teacher enactment and the use of LTSM (as an artefact with its own agency and as an additional prompt for learner interaction) becomes fluid and the one constantly intersects with the other.

The teacher keeps a tight rein on what learners should focus on, and how they do so. Simultaneously, the learners can also keep track of where the teacher is taking them, and what she wants them to learn. Independently, they can access the relevant ideas and information that informs discussion. Although the teacher specifies what the learners need to attend to, they can move forwards and backwards in the book, make cross-references, study and compare graphics and visual material in a way that other materials do not allow. They can see how the teacher's directives dovetail with their future project (the making of a brochure to highlight the natural attractions of a region) and they can establish whether there are other sections in the textbook that might be helpful. In addition, they can see how the curriculum has brought them to a discussion of geographical features in the South African landscape and where this will lead in subsequent lessons.

The use of the affordances of the materials

Learners can receive the message that information is readily accessible in a variety of forms through the design of this textbook which has maps, graphs, visual, printed text, narrative passages, fact boxes, and more. The way the teacher works with the book is to move backwards and forwards: she refers to the text for a while, then she examines the information provided by visuals. The teacher asks questions to ensure the learners' understanding of information, whether in print of in visual form, is clear and that they can apply their understanding more broadly. When questions arise for which the answers are not in the book, she emphasises the idea that the skill required for gaining information is research. Although she does not question or problematise the content of the book, it is clear that the book is not considered as a complete source of knowledge about a particular topic. But by giving the learners the opportunity to handle books, she provides a measure of learner confidence and independence. The lesson is tightly controlled by the teacher, who directs the learners to look for, question and make connections between the different kinds of information. She uses both the text and the visuals as sources of information. The teacher's constant explication of (and expansion on) the text indicates to the learners how engagement with information sources takes place. She models an engagement with the textbook and also invites the learners to participate in the same way by the questions she asks and the ideas she suggests.

The fostering of learner-support and/or participation and how this influences LTSM enactment

The teacher is sufficiently skilled and knowledgeable to allow relevant discussion which reveals and then directs learner thinking. Her manner and the kinds of questions she poses promote learners' participation. Her interest, humour and non-judgemental responses make the learners feel comfortable, even while she keeps them on topic. She is also confident enough to admit ignorance of certain factual questions and requires the learners to do independent research in order to find out the answers. This kind of learner participation is significant in that learners become more overt co-constructors of knowledge (Rodriguez, 2013).

General discussion of books as LTSM

The following table is a summary of how various books were used in observed lessons in relation to the three central elements of the conceptual framework: the degree of coherence of the lesson and the source of the coherence, how affordances of the books were mined by the teachers, and the extent to which learner participation helped shape the lessons.

Books and how these are used in the observed lessons:

Lesson	Coherence	Affordances	Learner participation
1	Reader is source of coherence	Almost none	Lesson shaped only by teacher
2	Novel and teacher combine to create coherence	Extensive exploration of affordances through emphasis on elements of the book	Learners' participation present but lesson is largely shaped by teacher
3	Disjointed exercise of reading random passages from a novel for assessment purposes. Rubric creates some coherence	None, in relation to the book. But an argument could be made that the giving of expression to text through reading aloud has some affordance value	Although learners read passages to the class, they do not shape any learning experience
4 A and B	Teacher and textbook combine to create coherence	Extensive modelling of how informational text can be used	Teacher directs learners' discussion, but the learners' discussion becomes an element in the shaping of the lesson

Table 14 How the use of books shapes coherence, an exploration of affordances and learner participation

The table above reveals that where books form the central text of the lesson, they usually make a significant contribution to the creation of coherence. These texts usually serve to

anchor the lesson. If diversions take place, then the learners can be redirected to a central focus in the book that has a specific structure (a story, chapter in a novel, section in a textbook). Whether affordances are explored, this appears to be the sole domain of the teacher, except in the case of informational texts/ textbooks. In the lessons observed where affordances are considered, the teacher makes either a conscious attempt to point out how the text works and what it can do or she models this behaviour. There was only one instance where the learners had an opportunity to shape the lesson and revealed what and how they were thinking about the texts. The teachers tightly controlled how the learners interacted with them and/or the texts.

Perhaps most instructive about these observed lessons were how the findings of McGill-Franzen, Allington, Yokoi & Brooks (1999) were confirmed: that careful and considered teacher mediation lies at the heart of the successful or valuable use of books. Where affordances were not explored, and where books were used as useful artefacts for the purposes of teaching a skill, rather than working with ideas and meaning-making, the teacher might as well have used any text or alternative LTSM. The position of the book as a third party in the classroom triad becomes irrelevant, as was seen in lessons 1 and 3.

Books are usually a far more substantial force in the classroom triad of teacher-learner-LTSM in contexts where teachers and learners engage with the content as an informational and meaningful source. Herbel-Eisenmann (2011) discusses the authority of the text in the classroom and maps how the positioning of power/authority shifts between teacher, learner and textbook during the course of a lesson. These shifts are accomplished either through the deliberate intention of the teacher, who privileges the textbook, or by the learners assuming a position of power through their own engagement with the textbook (which she claims mainly happens in high school, because primary school learners are more submissive). Cazden (2003) cited by Herbel-Eisenmann (2011, p. 138) defines the textbook as both an authority and as being in authority and shows how the teacher has to share these two positions of authority with the textbook. During the lessons I observed, it was evident how the teachers orchestrated the portions of authority between the book and themselves. For example, in lesson 1, where a non-fictional informational text was used, the factual content stood as an authority about endangered animals. The teacher used her authority as the explicator of vocabulary and pronunciation in combination with the book. The teacher asserts her authority as the orchestrator of the

lesson by determining the pace, where to pause, what questions to ask and how to proceed. When she instructs the learners to do an activity based in the information in the textbook (a sum to determine the difference between the numbers of whales that existed thirty years ago, and now), the book is in authority together with the teacher (in other words, the learners are subject to what the book tells them in order to comply with what is expected of them).

This interplay between teacher expertise and book information, on the one hand, and teacher instruction and book instruction, on the other hand, is evident repeatedly throughout lessons. The significance is that both forms of authority are shared. The teacher and the book validate each other as this interplay takes place. And sometimes learners can enter this complex relationship as they display their own ideas and expertise. Where teachers set themselves as the only authority (both as expert and instructor) a kind of absolutism is created. The system of teaching and learning becomes closed and narrower.

Conclusion

Books have a powerful presence when they are used in the classroom, because they contain and confer agency, power and authority to both the teacher and learners (when they are able to engage constructively with them). How to use books and why requires an understanding of the affordances of books. Teachers need to know that they can provide different kinds of texts for different purposes, and that these need to be read in different ways. The different elements of books (visuals, contents, indices, headings, captions, text boxes, and so forth) facilitate reading and inform the reader in specific kinds of ways about the uses of different kinds of texts. But these require specific literacy knowledge. Teachers need to teach and learners need to learn these forms of literacy. In other words, the textbook as LTSM requires careful exploration and understanding. Learners who gain such knowledge have the possibility to participate in and shape their learning experiences in ways that most other LTSMs do not allow. A knowledge of the construction and uses of texts, exposure to intertextuality (the way in which texts draw on other texts) and the combination of textual elements to enhance clarity and explanation (through visual, graphic, boxed, activity-based pieces of text, for example, as well as the use of headings,

subheadings, and so forth), provide learners with a toolbox for learning. In addition, books create some linearity in presentation that provides a sense of wholeness – a beginning, a middle and an end.

Almost all other LTSM are presented as fragments of the curriculum, either as front-of-class materials used for teacher presentation, of worksheets that deal with specific topics.

The following chapter, looks at materials that teachers design or choose so that the teachers become the exclusive source of knowledge and information.

Chapter 7 Observation data

Introduction

The first part of the chapter will focus on the materials that generally dominated the lessons observed, namely, front-of-class visual materials. The second part will look at materials provided to learners, namely, worksheets. In these particular lessons, the worksheets are used as the LTSM around which lessons are designed. In the third part, two outlier lessons will be discussed: first, the use of group work which relies on guided input for the learners and their presentation based on teacher-provided notes; and secondly, a lesson which uses a tablet as the LTSM, where the presentation and learners' input becomes redundant during a shared learning experience. Each one of these sections will be viewed through the prism of the conceptual framework that foregrounds lesson coherence, LTSM affordances and levels of participation as elements of the teacher-learner-LTSM triad. However, the section on front-of-class materials will foreground how coherence is or can be achieved. Next, the section on notes and worksheets will emphasise the affordances of these material. Finally, the section which requires the learners' participation as a central part of the lesson will look at the effects of such participation and how this affects the interaction between teachers and materials.

Front-of-class materials

The following lessons revolve mainly around materials used as front-of-class focal points. This section will examine the use of posters and charts, chalk board notes and videos.

A general template for the process of these lessons are as follows: teachers briefly refer to previous lessons or work; then they move on to a central image or notes created for this lesson; next they spend the bulk of the lesson explaining the focal point; finally, they provide learners with a worksheet to be started in the last few minutes of the lesson, which has to be completed for homework. Most of the lesson consists of teacher talk and teacher-directed questions. The converse of this is that the learners spend most of the lesson

listening and responding to questions to show evidence of their listening. This means that the teacher is thoroughly in charge and controls the instructional discourse almost in its entirety.

Summary of lessons using mainly front-of-class LTSM

Lesson	Grade	Type of LTSM	Type of lesson	Teacher-enactment strategy	Learner participation
1	6	Poster (soccer match); notes on the board; lesson plan;	Grade 6 English, FAL, Language: vocabulary, especially adjectives	Teacher talk; questions that require single word or sentence answers	
2	6	Poster (soccer match), text frame produced on the board; lesson plan; notes on the board	Grade 6, English, FAL, Sentence construction and understanding vocabulary in context	Teacher talk; questions that require single word or sentence answers	
3	4	Lesson plan; picture chart; notes on the board	Grade 4, English, FAL, Language: concord	Teacher talk; questions that require single word or sentence answers	
4	7	Home-made chart; notes on poster board; notes on chalk board; video; lesson plan; worksheet	Grade 7, SS, Social Sciences: floods	Teacher talk; questions that require single word or sentence answers	Learners respond inappropriately to the video by laughing at panic of tsunami victims
5	6	Smart board; worksheet	Grade 5, English HL, Language: editing	Limited teacher talk	Learners are engaged in copying from the smart board for most of the lesson

Table 15 Summary of lessons using mainly front-of-class LTSM

Some teachers teach with a lesson plan in their hand in order to maintain a specific order of information and activities. Where this was the case, the lesson plan was listed as a LTSM, although generally speaking there is an assumption that all lessons are based on some form of lesson plan or preparation. The visible lesson plan indicates to learners that the teacher is following a script and that specific content and processes need to be covered in a specified amount of time. It is possible that the visible lesson plan acts as an inhibiting

artefact, which leads to diminished learners' participation. However, it might serve as a reassurance to the learners that there is systematic coverage of the content.

The table reveals that the teachers make an extensive use of LTSM, yet their enactment strategies are extraordinarily narrow. This does not mean that the teachers' enactment strategies demand less of them; on the contrary, these strategies require more effort. Teachers conduct their lessons almost in a lecture style, and the lessons' success depends on their presentation. This approach allows teachers to maintain tight control over the learners, which leads to easier management of the classes. At the same time, it makes their interpretation of the front-of-class materials the sole source of knowledge for learners.

Studies on the effects of lecture-style teaching on learners' performance (as opposed to facilitative work done by teachers in constructive learning exercises, such as, group work) suggest strongly that this teaching style is not detrimental to learning, and it is often of benefit (Schwerdt & Wuppermann, 2011; Van Klaveren, 2011). For front-of-class teaching to be effective, as with other forms of teaching, the three elements outlined in the LTSM-teacher-learner triad are required: lesson coherence, the use of the affordances of the LTSM; and, an assessment of how learners are receiving the presentation through their responses.

A description of the lessons and the way they unfolded is contained in Appendix A. The following sections discuss the lessons in relation to the conceptual framework, which outlines the following three core areas: firstly, the sense of coherence in the lessons; secondly, the way teachers use the affordances of the materials; and, finally, the learners' participation as part of the process of teaching and learning.

Teaching and learning coherence

In 1986, Aaron Antonovsky defined the psychological concept of a sense of coherence (SOC). This was devised as a strategy to deal with stress and trauma, which was distilled into three elements: comprehensibility, manageability and meaningfulness (Geyer, 1997, p. 1992). Concepts from one field (in this case psychology) cannot simply be transposed into another field like education, so this is not an attempt to argue that SOC, as conceived

by Antonovsky, is applicable to LTSM presentation or reception. Nevertheless, the categories he outlined provide useful distinctions within the notion of coherence.

I argue that in the presentation and reception of LTSM the three elements of comprehensibility, manageability and meaningfulness do not stand in a linear or hierarchical relation to one another. Instead, they act as a composite where one or the other may become more prominent at different times. However, for coherence to exist, it needs all three elements to be present. The comprehensibility of the content is fundamental, because it shows both teacher and learners how the topic is to be understood. The content is structured according to its different layers, its practical application, and the way it nestles within other ideas and topics.

Secondly, manageability speaks to the level at which the topic is presented so that both the presenter and the receiver can find ways in which comprehension of the topic can be demonstrated. For example, learning about paragraphing is not demonstrated by a fill-in answer to a sentence where a learner confirms that a paragraph contains a single main idea. By writing paragraphs, the learner demonstrates this comprehension. If a learner writes successful paragraphs, then this shows manageability.

Thirdly, meaningfulness is another neglected area. The implicit assumption by all stakeholders is that where a topic is specified by the curriculum, then it is meaningful, relevant and required. However, the necessary linkages to show meaningfulness, (that is, the rationale for learning something) are usually unspoken and learners have to make these connections themselves. This means that there needs to be a conscious attempt by teachers or textbooks to contextualise, explain or demonstrate the relevance of a topic. Without this contextualisation, the topics remain discrete, fragmented and often meaningless, except for the purpose of testing. If the three components as outlined above are accepted as the basis for coherence, then it shows clearly that teachers and textbooks have a larger role to play than simply to present content.

In the lessons I observed, the lack of coherence was a marked problem. I acknowledge that individual lessons often rely on previous lessons or on what follows in order to form a clear coherent pattern. However, in the lessons under discussion, the teachers made little attempt to show the connections to the learners. They also did not provide opportunities

for the learners to interrogate the content so that they could create coherence for themselves.

I observed five lessons that focused on front-of-class materials, and four were English lessons. Out of these four lessons, there were three FAL lessons. It appears that English teachers (whether FAL or HL) are caught between a formal grammar approach and a communicative ESL approach, which allows grammar to be learnt contextually or incidentally without explicit signposting to grammatical or technical terminology, as is shown in the following lessons:

Lesson 1

A full description of the lessons is in Appendix A, and the lesson discussions are limited to the aspect of coherence in the lesson. The teacher provides the following vocabulary list from a lesson plan: *tall, loud, taller, louder, angry, stadium, biggest, province,* and these words were related to a poster about soccer on display. A measure of coherence from such a list might come from making a clear distinction: firstly, between the adjectives and nouns; secondly, between the positive, comparative and superlative forms of the adjectives. If the lesson's focus was on lexical issues and grammar, then the teacher could discuss the relationship between adjectives and nouns, and the adjectival comparative forms. This would help the learners to understand how and when adjectives are transformed into other forms. But if the lesson's focus is on vocabulary expansion, then other forms of extension and coherence could be found.

As it stands, the vocabulary list constitutes eight random words that a grade 6 learner is likely to know, even if the lesson is English FAL. This was borne out by the patent lack of interest displayed by the learners. The teacher, who is following the lesson plan, does not provide the learners with a way to make sense of the list of words, because there is no connecting principle between the words. It is likely that the teacher made a choice within the structure of the lesson plan: either she adopted a formal grammar approach, and created a formal lesson based on the selection of words; or she used the poster to create a context for the learners to generate sentences and discussion, which included the words given in the list. The second approach could have provided opportunities for informal and extensive communicative language use to build proficiency and confidence, which helps

to extend vocabulary. But the teacher adopts neither approach fully, so the lesson has no core and no coherence.

Lesson 2

The second lesson has a more coherent structure through the use of a text frame, which is drawn on the board, and it guides the lesson systematically. The learners identify nouns and verbs (or verbal phrases), which are based on a poster, and these are transcribed into the writing frame. This writing frame fits into the methodologies used for ESL, where the learner is expected to create a meaningful, communicative piece of writing. The intention is for learners to find a logical way to complete the passage, which means that there may not be a consistent single correct answer to the sections that the learners are required to fill in using the writing frame. This approach serves to teach the skill of extended writing and avoids the use of single, discrete and random sentences. The express intention is to work towards coherent and meaningful language use. But the teacher misunderstands the frame and the affordance it provides, so that it becomes an exercise in synonyms. In addition, the teacher is interrupted, or allows interruptions and disruptions to take place, throughout the lesson. The learners never complete an activity before the next one is presented to them. There is constant movement: from the visual poster to a reminder of previous work (a mind map); from the copying of work from the board (interrupted by both outsiders and the teacher's explanation) to a discussion of the missing words in the frame; from verbs to tenses.

Lesson 3

In this lesson, the teacher moves from a picture chart to her chalk board notes, next to previous work in the form of a photocopy from a textbook, and finally back to the chalk board. The movement between the different three LTSM reflects the teacher's scattered approach, rather than the use of a variety of LTSM leading to a lack of coherence. In large measure, this is due to the problematic sentence examples she uses by including personal pronouns. Both the 'I' and 'you' constructions of personal pronouns are exceptions to the concord rule and they need additional, quite technical, explanations. There was a lack of a clear logical reason for doing particular sentences and using specific structures where

the patterns are shown and explained. The teacher fills the lesson time and attempts to hold the attention of the learners by going from one activity to another in rapid succession.

Lesson 4

Although the teacher set out to demonstrate the usefulness of smart boards in classrooms, this lesson did little to do so. The smart board eases teachers' work, because a lesson's text is available with a click of a button, and it is neatly typewritten. It also has certain functions that can be used to highlight the text in ways typical of document programmes on computers, but this could be done equally well on a chalk board or an OHP. What is striking is the impracticality of this particular exercise where the work on the smart board is not readily visible to learners, and they then get up from their seats and walk to the front of the class after each sentence (see figure 12).

There are times when learners have to work quietly and independently on an activity set by a teacher and where it is appropriate for learners to be engaged without teacher mediation. Two issues arise from this lesson: the first is that learners need to have easy access to the text they are working with during a lesson. In this instance, it would have been far more appropriate to use a photocopy of the story for the learners to work with, so that they could work at their own individual pace, and not disrupt others. The second is that one of the features of the smart board is that the size of the text / image on the screen can be manipulated with ease. If the teacher felt strongly that the presentation of the exercise needed to be on the smart board screen, then she neglected to use the very feature of the smart board that illustrated its usefulness.

It might be argued that the teacher spent some time talking about the exercise in a previous lesson. However, the constant movement of the learners, the policing role of the teacher and her lack of any engagement with how /what the learners were doing, gave the lesson an inconclusive feel. On the smartboard is a narrative which is coherent and cogent; however, this narrative has been manipulated to disrupt this coherence and cogency. The insertion of deliberate errors for learners to correct is a contentious activity (see the debate between Truscott, 1996 versus Ferris, 1999), because this activity has the effect of splintering coherence. This exercise creates the possibility that the learners see errors as correct versions of a text. They are also forced to examine words in isolation for possible

spelling and lexical errors, or to identify phrases in sentences for grammatical errors, and to look for punctuation problems. This means that they have to cope with a wide variety of linguistic areas, and it leads to a break between any connecting threads in the text that provide meaning and/or logic. The exercise is a variation on the idea of editing a text, which was a term used by the teacher in the lesson. However, editing in a largely ESL context, with young learners need to be carefully scaffolded (Ellis, Sheen, Murakami & Takashima, 2008). Editing is usually based on their own work, so that it is embedded in their own sense of logic and coherence.

Lesson 5

The five LTSM used in this SS lesson on *Floods* (excluding the lesson plan from which the teacher reads) are as follows: firstly, a graphic drawn by the teacher (and also available in the textbooks on the desks of the learners but not referred to by the teacher); secondly, notes on the board; thirdly, a sheet with more notes pinned to the board, then the teacher moved back to the initial graphic; fourthly, a video; and, finally a worksheet. The learners were not given much classroom time to do the worksheet.

If there had been a clear line of thought or argument, then the variety of materials used need not have served as distraction and confusion. But the teacher covers all of the following topics in short bursts, without linking them to the main topic: Alexandra, mountains, ploughing, erosion, run-off, alien vegetation, fire, the tsunami in Japan, the effects of floods, South Africa and diseases, and the Jukskei River in Alexandra.

This lesson is a prime example of how the central theme of flooding gets lost in the digressions to related topics in a disjointed manner. It mirrors the way in which an internet reader might move from site to site and become familiar with a range of topics, but without a clear idea of the central theme. This form of fragmentation, typical of many lessons in different forms, and where information comes to learners in small, discrete servings, I call piecemeal pedagogy.

The five lessons discussed indicate clearly the important role of teachers as creators of coherence. Even when LTSM contain strong elements of cohesion, such as in the case of the writing frame, and possibly the posters or video, where the teacher is the single controller of the instructional discourse, the possible coherence provided by the LTSM can be lost. Where teachers elect to place themselves as the central element of a lesson,

and the lesson hinges on their presentation, the role of the LTSM as part of the triad is diminished. The teacher carries almost the entire load of coherence creation. Where such creation does not happen, the possibility for incomprehension, unmanageability and meaninglessness of curriculum content increases.

The use of the affordances of the materials

In the five lessons observed, the teachers used posters, notes, picture charts, a video and a smartboard as front-of-class LTSM. The posters, picture charts and videos expose learners to visual modes of learning, and in the case of the written notes (whether on a chalk- or smartboard) the learners are exposed to "shared" reading. In all instances, these materials afford the teacher a prompt and structure for the lesson, and the learners an opportunity for discussion. The materials also serve the purpose of demonstration, and this compensates for the need to make linguistically complex explanations. This aspect is particularly useful in ESL, because the materials are specifically designed to be a shared experience between presenter and audience. In addition, the visual materials expand the focus of the topic by instantaneously providing an overview for both the presenter and audience. This means that multiple elements of the topic are simultaneously available, which is avoided when using print media, where the focus remains narrowly on words and sentences.

When visual materials are carefully selected, and used in pedagogically thoughtful ways, they provide a strong source of coherence. They provide the opportunity to home in or expand on a central topic or theme, to contextualise and to make linkages. This coherence depends crucially on an acknowledgement of all these affordances by the presenter. When only a small part of the visual material becomes the focus, then the bigger part of the LTSM (if unacknowledged, as in the lessons where the soccer poster and video was used) becomes a distraction. This was particularly noticeable in lesson 5 in the instance of the video on the tsunami, where the panic of the people in Japan overrode the geographical issue and topic of the lesson of floods. With the use of the soccer poster in lesson 1, where the teacher focused on a small number of random words, the best she was able to do was to point to the illustrations of some of the words. For example, "loudness" could be suggested, but not really depicted; "province" could be inferred, but it was not possible to depict it at all. The way the teacher used the poster in this lesson was mostly redundant

to learner enrichment. While the text frame in lesson 2 described the spectators in the stadium, the teacher did not refer to poster at all, except to remind the learners the theme for the week was "soccer" and that it was based on the poster. In none of the lessons were the learners invited to talk about the visual materials other than to answer specific closed questions asked by the teacher. This means that the affordances of visual material were ignored or went unused.

In the case of print material (whether in the form of chalkboard notes or the text produced on the smartboard), teachers and learners can focus on topic progression, component issues and expression (the kind of language that is appropriate for describing what is being taught). It means that the joint reading of such texts needs to be done and then interrogated. Ideally, what is being taught or described, then also needs to be broadened, generalised and/or contextualised. For example, in the case of lesson 3 on simple present tense, the teacher needed to explain the patterns of concord and general rules about how verbs change to make the isolated examples meaningful. Similarly, the text frame in lesson 2 needed to be explored to make the meaning of an extended piece of writing clear. In addition, the teacher needed to explain how the learners could express these ideas in other ways, without resorting to a mechanical search for synonymous phrases. In lesson 4, that the teacher did not engage with the text on the smart board exacerbated the fragmentation introduced by the exercise. In other words, coherence in materials often needs to be created. It requires the participation of the user to expand the focus, make various links and contextualise the materials. Bezemer & Kress (2008) points out that this is also the case with many modern textbooks. Where learners as users are unable to do this, the onus falls on the teacher.

Other than the presented material there were no other sources for learners to consult on the topic. And once the presentation is over, all the learners are left with are usually a worksheet. Contextualisation through the preceding and proceeding parts of a book, or focused a discussion in a book on the topic itself to serve as revision does not exist for the learners. Worksheets do not usually contain a great deal of informational text and are designed for the demonstration of a skill or some key knowledge points.

Figures 9 and 10 are examples of the writing books of grade 6 learners which illustrate the loose-standing exercises, which are based on either single word answers or phrases.

This provided the only record of what was discussed in the class, there was a lack of a teacher's feedback on the written work, and the teacher has not marked the work, or it was marked by the learners themselves. The work in learners' books is by and large also their most substantial contribution and participation in the teaching and learning process.

Figures 7.4 and 7.5 are part of the grade 5 lesson where the smartboard was used. It was an interesting (and telling) observation that in public schools all the classroom decorations consisted of published poster and flashcard materials, as well as with some materials made by teachers. In contrast, almost all the work on walls (and ceilings) was work produced by learners in the independent schools. The photo of the smartboard indicates how much text was presented to the learners. Because the text was illegible even to learners sitting close to the front, the learners had to walk to the front of the class to read and copy it.

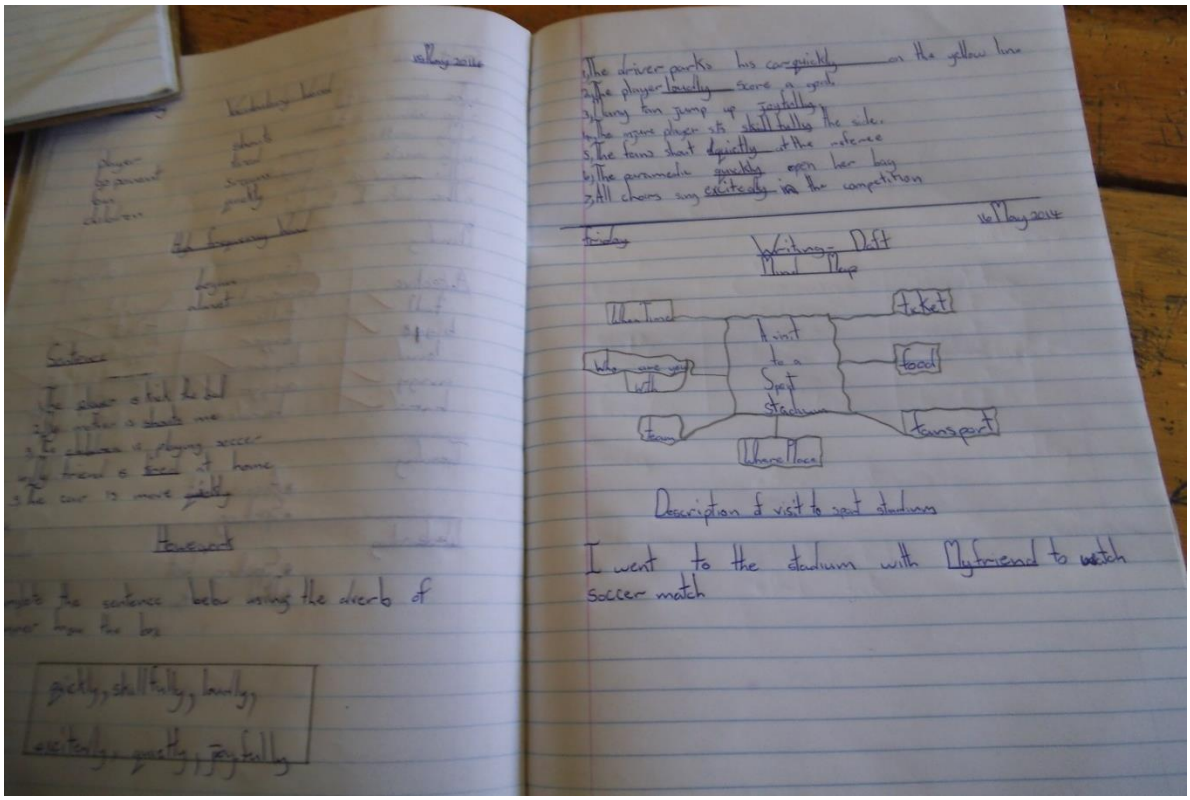


Figure 11 Part of lesson two given by teacher 1A

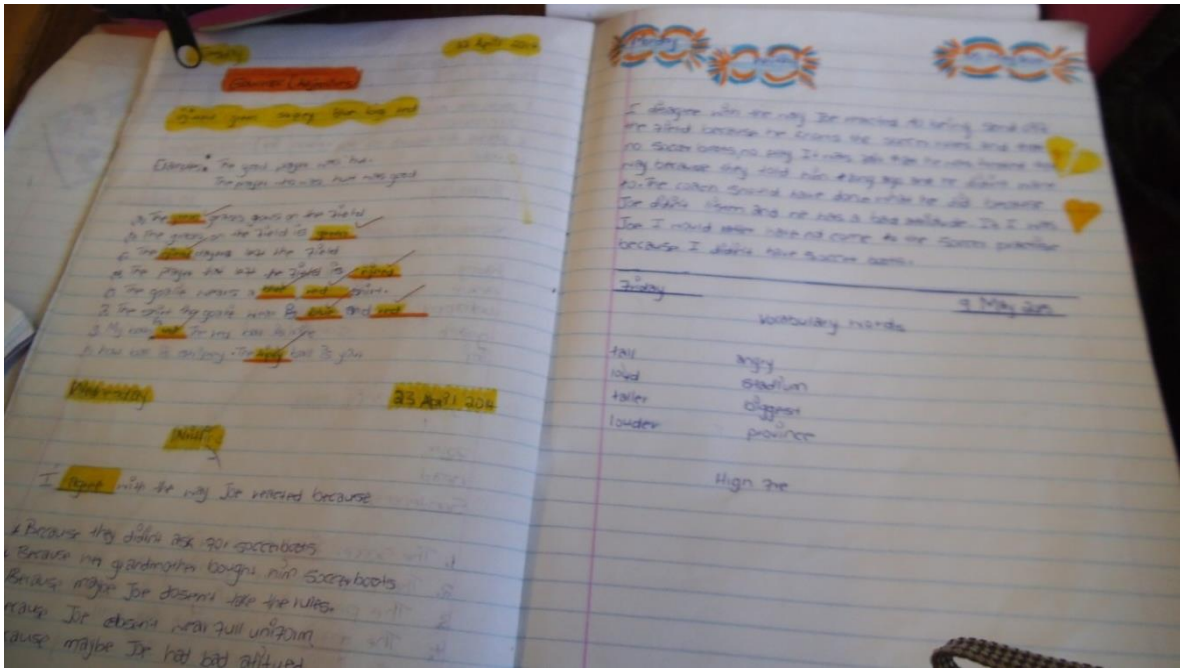


Figure 12 Part of lesson one given by teacher 1A



Figure 13 Classroom walls of teacher 2A at school 2

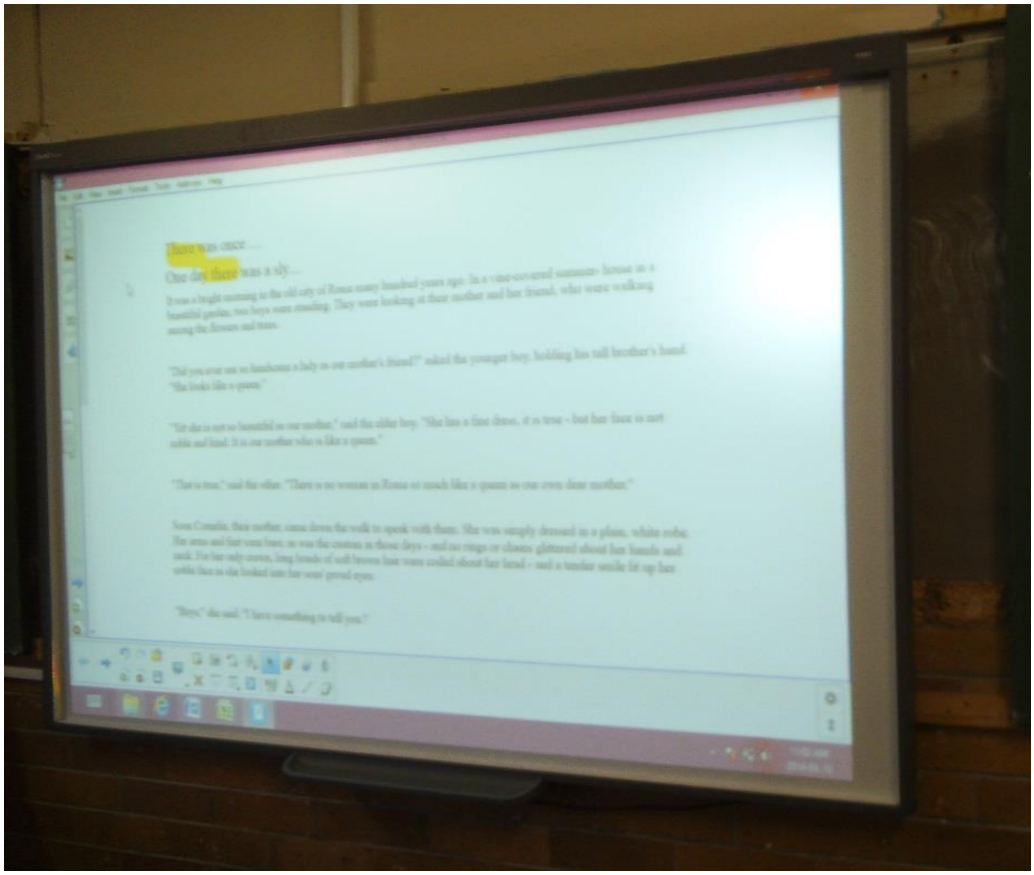


Figure 14 Part of lesson by teacher 2A at school 2

The fostering of learner-support and/or participation and how this influences LTSM enactment

Front-of-class materials, as has been pointed out previously, have a powerful affordance for teachers as a structure and as a prompt. Teachers work within constraints: the pacing required for curriculum coverage; the size of classes, which may become unruly when broader discussion is allowed; and, the anxiety that there may be a loss of focus. This means that many teachers feel they have to keep a very tight rein on the learners' input. However, by asking recall questions that only require single word or single sentence answers, the teachers have almost no opportunity to establish the extent of the learners' understanding. In turn, learners have a limited opportunity to shape the lesson around the issues that puzzle or interest them.

A deeply worrying aspect of the lessons is how passive and accepting the learners are of materials that sometimes bear little relation to what they are meant to learn. This was evident in all except the fifth lesson, where the teacher's total lack of engagement with what learners were doing made it difficult to see whether the learners understood their

task. In the lessons on language structures or grammar, the teachers did not tell the learners about the purpose of the lesson. The learners were also not shown the patterns of the structures so that they could transfer this knowledge to another context. In addition, the teachers did not alert the learners to possible problem areas. Neither did the teacher nor the learners pick up on errors that occurred in the lesson that contradicted some of the teaching that was taking place. The learners' behaviour seems more than a lack of curiosity or confusion about the topic. Instead it suggests a kind of 'schooling' into an acceptance of the teacher's authority as more important than their own understanding. Learners do not appear to view school as a place where learning happens, but rather as a place where they spend time compliantly and obediently following a teacher's instructions. There appears to be little understanding that they themselves have any role to play in their own education. Even in instances such as lesson 1, where the teacher uses her own high energy to engage the learners, she provides the additional examples to the lesson, rather than drawing these out from the learners.

For the duration of the 30-minutes in lessons 2 and 3, the learners did not appear to find either lesson new or stimulating. A palpable boredom dominated much of the lessons, and there was a strong sense of mechanical, rather than thoughtful answers. This does not mean that all school lessons have to be new and stimulating, and boredom may well be an inherent part of schooling. But it becomes an important issue when a pre-arranged lesson for observation, which is based on what the teacher chooses to teach (and this allows teachers to display their most attractive and interesting teaching) results not in a boredom associated with a school routine, but with learning itself.

In lessons 4 and 5, I witnessed a more active withdrawal from the learning process by the learners. The learners were disruptive and behaved inappropriately in lesson 4, because the lesson had no strong core to hold the different aspects together. In lesson 5, the learners may or may not have been following the teacher's instructions, as they were walking around (often to see what was on the smartboard) and whispering while ostensibly working on the editing exercise. The level of disengagement from teaching in these lessons took an extreme form and the consequence may be that neither teaching nor learning was taking place.

Worksheets and notes

A major shift has taken place in many South African classrooms, where the materials created by teachers have replaced the use of a textbook. According to publishers, this phenomenon is widespread and not restricted to primary school (Koornhof, 2011). The primary significance is that learners have a limited entry into independent learning, and no access to the curriculum except as presented on a day-to-day basis by teachers. This means that learning happens in a largely decontextualised way, and is entirely dependent on what the teacher chooses to provide for learners.

Textbooks vary from excellent to dismal, but, even where they are excellent, they have different kinds of strengths: some have exceptional visual content; others have areas of ideal explanation; and, many have interesting, inventive and rigorous activities. There is good teacher support built into some of the textbooks and they help the teacher with ready assessments and lesson plans. It is understandable that in an age of extensive choice and photocopy machines at almost all the schools, many teachers resist the idea of using a single textbook.

In addition, where teachers (and often learners) have access to digital technology, then the idea of being bound to a particular textbook, however good, may feel antiquated and unnecessary. These ideas were expressed by many teachers in their interviews. In a digital era, the notion of a single source of knowledge is anathema and the design of the Internet leads to users visiting many sites. Articles or knowledge presentations are often partially read or watched on these sites, before the users move rapidly to another knowledge source. Search engines lock users into this kind of strategy, and it has become the norm as to how to access and work with digital knowledge (Lanier, 2010). The user usually takes what is available on these sites at face value or accepts the knowledge uncritically because it corresponds to some preconceived ideas. The users' criteria for suitability often rest on whether the sites are entertaining or sensationalist. Many users are increasingly interested in comments from others, and these are also often accepted uncritically. Teachers, learners, parents, and almost every stakeholder in education endorse what is described as a "digital literacy". But this literacy is often interpreted as the ability to press the correct keys on a keyboard, and not as the ability to evaluate and make critical judgements about the content and validity that can be found on the Internet.

Abundant choice is a double-edged sword. Prensky (2009) describes the benefits of this choice applied to digital technology as follows:

> Digital tools already extend and enhance our cognitive capabilities in a number of ways. Digital technology enhances memory, for example, via data input/output tools and electronic storage. Digital data-gathering and decision-making tools enhance judgment by allowing us to gather more data than we could on our own, helping us perform more complex analyses than we could unaided, and increasing our power to ask "what if?" and pursue all the implications of that question. (Prensky, 2009, no pagination)

But then he counterpoises with the following:

- We make decisions based on only a portion of the available data.
- We make assumptions, often inaccurate, about the thoughts or intentions of others.
- We depend on educated guessing and verification (the traditional scientific method) to find new answers.
- We are limited in our ability to predict the future and construct what-if scenarios.
- We cannot deal well with complexity beyond a certain point.
- We find it difficult to hold multiple perspectives simultaneously.
- We have difficulty separating emotional responses from rational conclusions (no pagination).

Prensky (2009) describes the very core of what digital literacy is: understanding the benefits of access to digital information and the choices it provides, but with the awareness that such choice and the particular information it provides need to be scrutinised, seen in a broad context, thought about imaginatively and used with reason and logic.

In relation to the materials that teachers make available to their learners, the most crucial question must be the basis on which they make choices about the particular content and format. The idea that teachers select, and put together or devise their own materials rests on an assumption that this strategy is superior to conventional textbook use. This assumption suggests that the teachers serve their learners better since the design is tailor-made for their constituency.

This approach overrides the potential advantages of textbooks, namely, that there is a (presumably) comprehensive central text that makes its intentions, biases, and inclusions and omissions clear. Such a text could (in optimal conditions) become the basis for comparison, contrast, critique and endorsement. At worst, it becomes a tool in the

learners' hands who are (potentially) empowered through access to ready information and ideas about the content of the curriculum, which is presented to them (more or less) in full. Skilful textbook use cannot be assumed, and this skill comes with conscious teaching and much practice. However, lack of access to textbooks means learners are entirely reliant on what teachers deem appropriate for the lesson's purposes. The reasons for providing the kinds of materials teachers decide upon can be based on careful and considered reasons, but they can also be based on convenience.

Almost all lessons are followed by an instruction to learners to do some written work based on the lesson's focus. The following lessons (Lessons 7 – 12 in Appendix A) are ones where the materials provided formed the basis of these lessons. This section will focus on the affordances of these materials, because even if other LTSM might have more to offer in terms of explication of curriculum content, these are the materials that the teachers choose to give their learners and what the learners then have for future reference. Understanding what can be gained from these LTSM is important because worksheets are so ubiquitous. I will also give a general overview of the lesson's coherence and the learners' participation, once the affordances of each lesson have been discussed.

The following six lessons are discussed:

Summary of lessons that used mainly worksheets

Lesson	Grade	Type of LTSM	Type of lesson	Teacher-enactment strategy
1	4	worksheet	SS on calibration	Teacher talk; Learners respond to direct questions by the teacher
2	7	2 worksheets, smartboard, textbook, dictionaries	English HL on adverbs	Teacher talk; Learners respond to direct questions by the teacher
3	4	Worksheets from textbooks, notes on the board	SS exam revision of Geography and History	Teacher talk; Learners respond to direct questions by the teacher; Learners ask questions and a discussion develops
4a and b	5	Notes, information books, notes on the board	SS on Ancient Egypt	Teacher talk; Learners respond to direct questions by the teacher; Reading; Learners ask questions and a discussion develops
5	6	Worksheet in the form of a drawing	English HL on listening skills using a poem	Teacher talk; Listening activity; Learners draw their response to the teacher's talk; Learners ask questions and a discussion develops
6	4	2 worksheets	English HL on the building blocks of stories	Teacher talk; Listening activity; Learners respond to direct questions by the teacher; Learners ask questions and a discussion develops; Learners' own writing (interpretive)

Table 16 Summary of lessons that use mainly worksheets

The use of the affordances of the materials

Lesson 1

It is likely that the worksheet used in this lesson of a grid on which learners have to calibrate where objects are located came from an existing body of work designed for teachers' use. If it came from a workbook, then it is an example of very shoddy editing and production. The same holds true if this worksheet was taken from the Internet. Even if the worksheet was produced by a teacher, then it was done in a hurry without thinking through exactly how a lesson could or should be generated from it. Irrespective of where the worksheet was found, it reflects poorly on the person who chose this as an exemplar of the skill to be taught.

The most likely source of this worksheet is from some assessment file, where teachers were required to use it for testing. This is shown in worksheet's format, which is like a test, because learners have to fill in their names, and the heading also shows that the worksheet is part of a series that tests particular skills. The worksheet consists only of a clean grid. This means that the teacher is required to teach the learners how to "coordinate" the grid, and to provide them with the items that need to be placed correctly on the grid. The teacher does this by putting up a chart on the board with the items listed on it and the learners copy the chart. If the learners are slow writers or copy the information inaccurately, then the exercise will be a failure, as the learners have only this lesson to refer to the crucial information on the board.

The first thing the teacher tells the learners about the grid is that they need to scratch out the bottom row. The reason for the teacher's instruction to scratch out the bottom row was unclear. No learner questions this instruction, and the teacher provides no explanation. Although the learners use the grid for counting and calculating which square to use for the various objects, the teacher does not explain why this might be an important or useful skill. She also does not explain the differences between rows and columns, and why these are demarcated by different symbols. The learners are in grade 4, and even if their language capacity in English is inadequate, the teacher makes no effort to assist them in making sense of what they are doing, and why it is part of a larger competence. Teachers, during interviews, constantly lament the limited capacity of their learners. However, many teachers do little to stretch their learners or to make explicit to them what they are doing when filling in a worksheet. This problem was demonstrated in this lesson, and the exercise became entirely mechanical.

It is likely that past experience taught her that the learners confused the bottom row with the bottom line. This made it even more important for her to show and teach the learners that they are working with rows and columns. Even though learners understand the teacher when she tells them to scratch out the 'row', she seems to assume that they do not have the capacity to read the table (that is, rows and columns) for what it is.

In addition, the teacher interrupted the exercise to have the learners cut and paste the worksheets into their books. At times, she taught off parts of the worksheet which the learners could not see, because she held up the worksheet from the front of the class. If

the teacher treated the worksheet as a shared printed text and not as a visual object that she needed to use for demonstration, then she might have had more success. Her experience in using visual objects, rather than a printed text, did not alert her to use the different way in which one might work if both learners and teachers shared a text. By not making the learners focus on what can be read, and attempting to demonstrate off a worksheet in front of the class which cannot be seen by learners, neither the teacher nor the learners capitalise on what makes printed matter different and accessible in an alternative way. Indeed, the teacher only gets into her stride when she reproduces the grid on the board – now clearly visible to learners.

The emphasis in the lesson on the technical management of the materials (cutting, pasting, colouring and being neat) sends a message to the learners that this is what the teacher values most about their work. This also leads to the teacher and the learners treating the topic as an exercise in accuracy (which, off course, it needs to be), with the counting of blocks, and drawing, with the colouring in of pictures. Accuracy is seen as necessary, but understanding the reasons behind this need for accuracy is not touched upon in the lesson at all.

The presence of unused textbooks on each desk raises difficult questions about the teacher's view of the role of textbooks in the classroom. In interviews, teachers repeatedly commented on the importance of keeping sets of textbooks clean and intact, and spoke about the learners' destructiveness when they use textbooks, because some books are written in, pages are torn and they become dog-eared. This is a significant reason why teachers prefer workbooks and worksheets in class books, because they can be discarded at the end of each year.

Worksheet on calibration in an English lesson in a grade 4 classroom

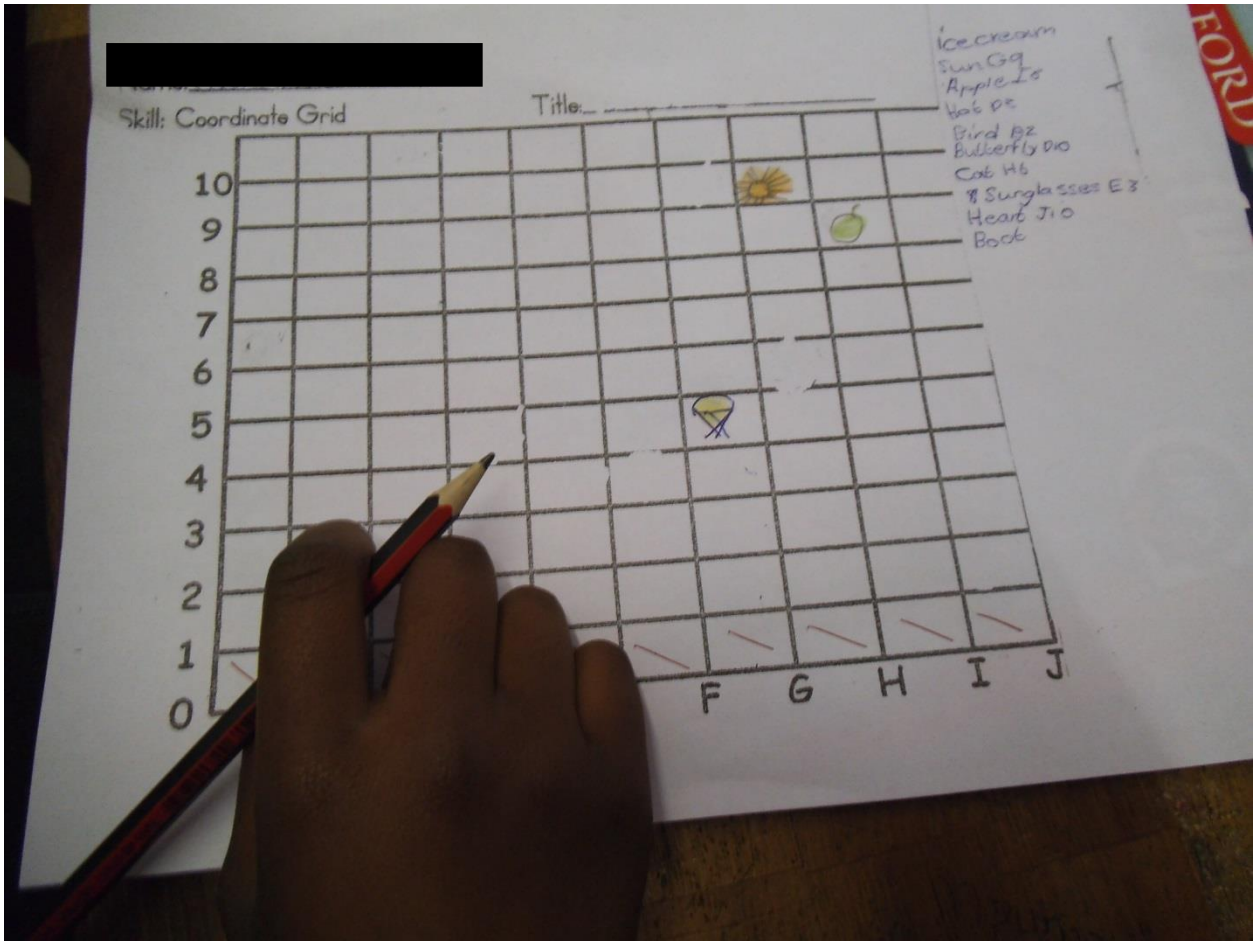


Figure 15 Worksheet on calibration in an English lesson in a grade 4 classroom

The worksheet has no explanatory text and it announces that it is demonstrating the skill of using a coordinate grid. Learners have to follow instructions, that were written on the chalk board, to fill in the grid by drawing pictures of certain objects or creatures. This worksheet provides a record of whether the skill of using a coordinate grid was accomplished. It is a stand-alone part of the curriculum in a writing book without any textual explanation to accompany it. The success of the exercise depends on the teacher's ability to convey what needs to be done and then to check that the learner has understood her instructions. There is a small space for the instructions, which are copied from the board, to be written onto the worksheet. These instructions are compressed into a small space on the side of the worksheet, and they are incomplete (the first and last item do not have the coordinates written down). There is a constrast between the neat and structured

grid with the learner's handwriting, which is legible, but it is untidy and not clearly delineated.

A great deal of what happens in the classroom is reflected only by the worksheets that appear in the learners' writing books. The composite of their learning appears, then, as something they have produced themselves, so that, if there are errors, learners learn these as correct. This work is sometimes marked by a teacher and sometimes it is not. Although the worksheets have clearly been produced by an outside agency, the learners' experience is that the only thing of importance is their own input in the form of the answers they fill in, and not of a third 'voice' participating in their education. Their own efforts also become their reference point, so that when they study for tests or exams, they learn what they themselves have produced, whether accurate and comprehensive, or not.

What learners and teachers experience as learning materials is a photocopied page of what the teacher has compiled. This is done either by cutting and pasting from textbooks or the Internet, or by drawing on a ready-made worksheet, also from a textbook or the Internet. The result is a decontextualised and often unattractive presentation. Colour is removed during the process, and often the original formatting is changed and/or removed. Sometimes the teachers resize elements to fit more onto a page in an attempt to save paper. The result is usually a set of exercises with blank spaces that learners have to fill in and where those spaces are not always big enough. Neat and precise learners may have an inviting book which allows them to revisit their work at a later stage. However, this is not the norm: learners encounter their own errors; their own incomplete work; their work corrected by teachers; or, simply work that is unclear and untidy. As a semiotic experience, (Kress and Bezemer, 2010), various issues arise, such as, knowledge is tentative, it is derived from one's own resources and it is subject to correction and revision. This is a far better definition of knowledge as seen from a postmodernist or a social realist perspective. There may be an argument that knowledge, which is presented as polished and final, which is in neat categories, and is definitively cogent and coherent, is deceptive. However, this is a sophisticated and philosophical position that is not age appropriate for learners who are in primary school. It is an inappropriate position for learning, where proficiency in reading and writing becomes the primary criterion for

success, and where the modelling of such texts presented in published form are the usual way in which this is accomplished (Bartholomae, 1985). When learners have a high opinion of their own work, and where teachers' input has ensured a high degree of neatness, accuracy and completion, then learners have a better chance of using self-created learning materials for the purpose of studying. Where a cursory approach is adopted, significant learning problems may occur.

Almost all the teachers observed for this thesis, relied heavily on their presentation styles to maintain the attention of learners. Many teachers have worked hard on voice, facial expression, gesture, humour and a variety of other presentation skills to ensure that learners remain engaged during lesson presentations. Learners who are in the classes of these teachers, day after day, sometimes year after year, become very familiar with the presentation styles of their teachers, and their focus inevitably shift to what they are being taught, rather than only to how they are being taught. Teachers know this, and the trend towards entertaining or striking visual materials speaks to this dynamic for retaining learner attention. However, there are instances, where it becomes clear that only the clarity that comes from a highly coherent presentation (where comprehensibility, manageability and meaningfulness are present), can hold the attention of learners. The following lesson is an example of this.

Lesson 2

The teacher has a powerfully engaging style, which is based on his extensive knowledge, and his use of a variety of ways to explain ideas. He chooses interesting examples that relate to the realities of his learners. His use of humour and his active, caring engagement with individual learners means that he exudes the energy of an actor on stage when he enacts what he is describing. The learners are wholly involved while he is speaking and are keen to show their competence. Despite the teacher's energy, they become easily distracted and less disciplined when he does not hold their attention through active mediation. It may have been the nature of the topic (formal grammar) that the learners find unexciting. Another possibility is that the learners found the content disjointed, and this contributed to their lack of consistent attention.

There is a great deal of debate about the place of grammar teaching in the curriculum. Some educationists believe strongly that formal grammar has only an "incidental" place in the curriculum and that it should be taught as and when it becomes relevant in the

course of teaching communicative competence (Fraser & Hodson, 2003). This is generally the kind of approach favoured in ESL teaching, and the South African curriculum repeatedly refers to the communicative approach to be used in language teaching.

The alternative approach is a formal one, which tackles different parts of speech and grammatical structures as topics to be taught formally. This is seen as a systematic effort to understand the structure of language. Proponents of this approach claim that it empowers users when they can clearly define the function words and phrases play as they use language. Teachers (in interviews) talked about the need for formal grammar teaching, and the curriculum specifies individual grammar topics to be covered during the year. As can be seen in this lesson, where the teacher refers the learners to a textbook exercise, many textbooks also adopt the approach of a decontextualised tradition of formal grammar teaching.

The teacher shapes the lesson around two worksheets. The first consists mainly of lists of examples of different kinds of adverbs. There is no prescribed activity, and the "openness" allows for the teacher to talk extensively and generally about the content of the worksheet, where he explains, devises examples, as well as eliciting examples from the learners. The worksheet explains that the adverbs are responses to different questions (*how*, for manner; *when*, for time; and *where*, for place), and the teacher demonstrated this repeatedly. This worksheet lends itself to a variety of different possible exercises – from a mundane 'learning of the content' to the requirements of the specified question words. The teacher decides how to use and expand the worksheet, and in this instance, he chooses to refer learners to an exercise in their textbooks (see figure 16), where only the sentences that are part of the exercise are read and discussed. However, the surrounding information in the textbook is ignored, although the same content was covered by the teacher in his discussion of the worksheet. The seven sentences in the textbook (at the bottom of the right-hand page) are unconnected and in the vein of traditional drill exercises, which entail a mechanical identification of certain words in those sentences.

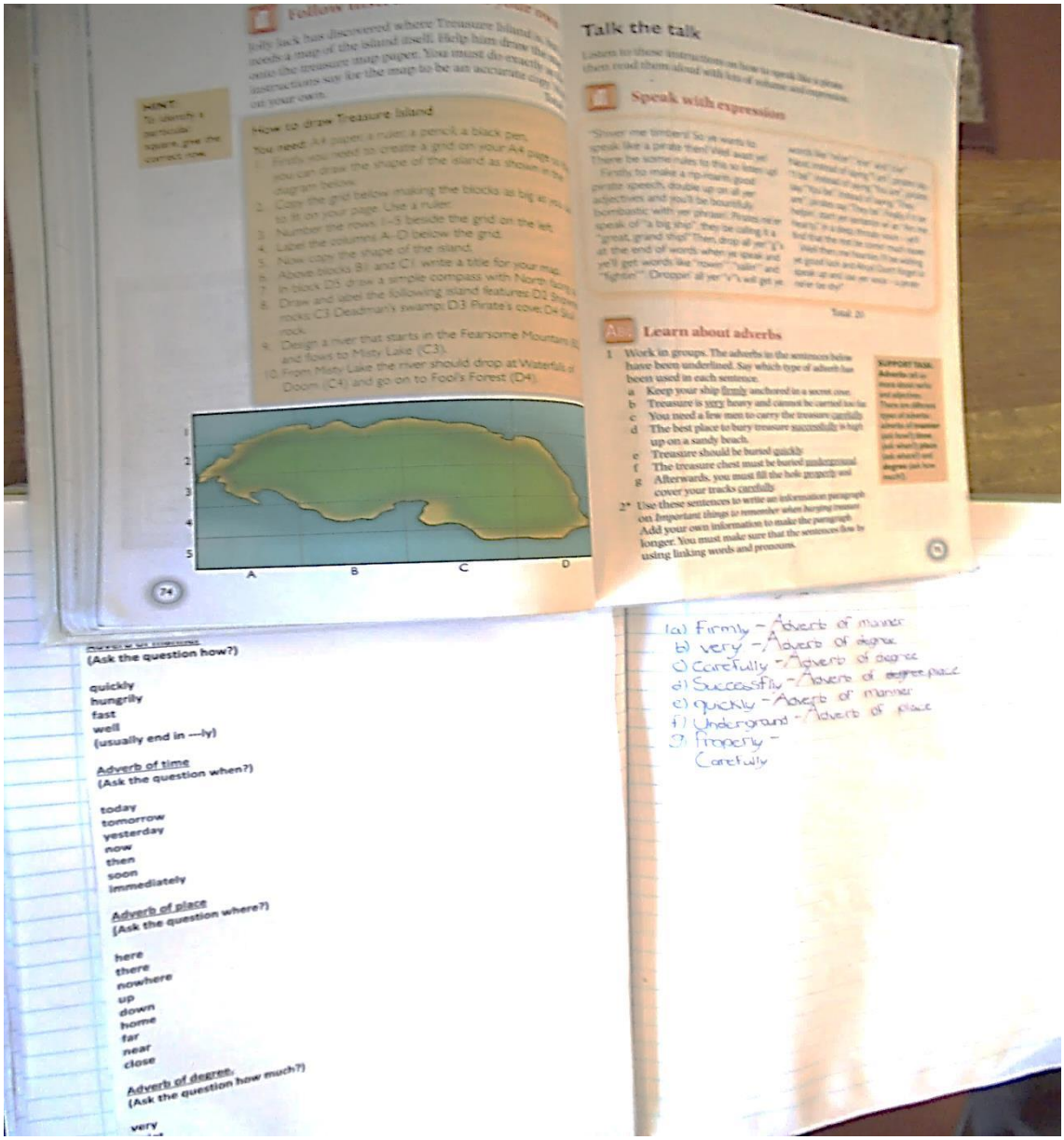


Figure 16 Worksheet and exercise on adverbs used by teacher 2C

An additional exercise that the teacher includes is based on the first worksheet, where the learners convert adverbs to adjectives. During this exercise, the learners request dictionaries, and the teacher responds positively to this request, which is interesting. It could be that the Hawthorne effect is implicated. Dictionaries indicate which part of speech a word is, and they show different forms of a word. This knowledge and how to source this information is known only by a fairly sophisticated user: either the teacher has taught dictionary skills and is keen for learners to revisit them; or, he does not think

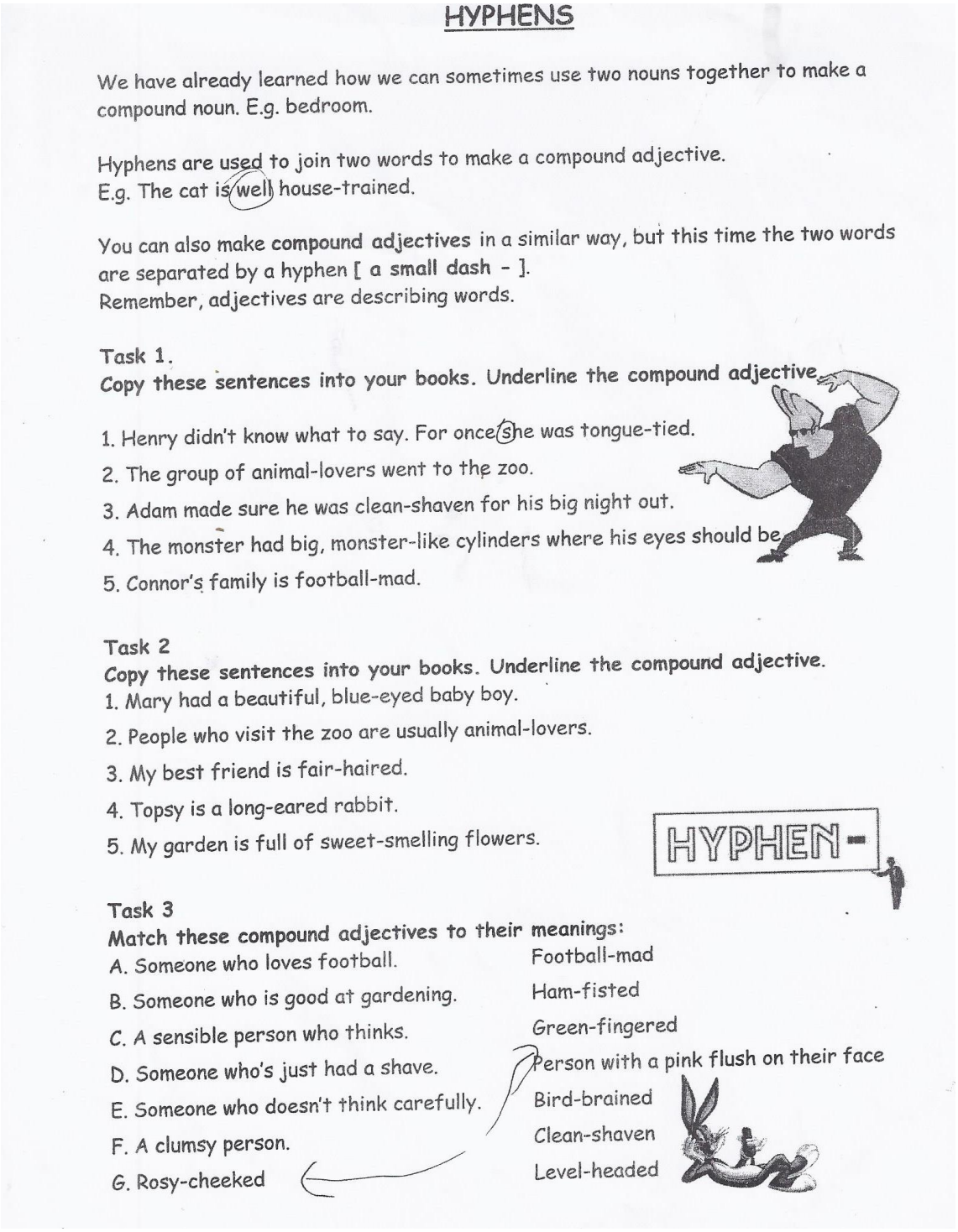
through the learners' request carefully. Coupled with the simplicity of the exercise where words were easily changed, for example, quickly – quick, it seems likely that the teacher liked the idea that the learners were keen to use dictionaries, regardless of how they used them. The learners barely looked at the dictionaries once they had them.

Then the lesson moves to compound adjectives as presented on the second worksheet. The poor explanation on the worksheet is remedied to some extent by the teacher who reminds the learners of compound nouns, which they had done earlier in the year and he explains briefly again.

This worksheet was particularly problematic, because the heading 'hyphens' is inaccurate. Although the hyphen is used to denote a compound adjective, the lesson is about these adjectives and not about hyphens. The first sentence used to illustrate a compound adjective is exceptionally clumsy and obtuse, as it sets two adjectives side by side: The cat is *well house-trained*. The sentence that follows on this example is confusing: "You can also make compound adjectives in a similar way, but this time the two words are separated by a hyphen" This is a non-sequitur, which makes it impossible to detect what is meant by "a similar way". This brief and confusing explanation is followed by three tasks. The first two tasks are identical. Learners have to copy sentences into their books and underline the words containing a hyphen. In task one the first sentence refers to "Henry" as "she". In the second sentence, the hyphenated word is a noun, and not an adjective. In task two, the identical mistake is repeated in the second sentence. In task three, where learners have to match words to phrases from two columns, the last example in the first column should be a phrase instead of a compound adjective.

The worksheet was devised to be amusing, as there were cartoon characters used as decoration. However, the illustrations were not integral to the content in any way. The look of the worksheet was clean and neat, and it used a font that mimics handwriting. In a class where there was not a single white learner, I was uncomfortable that three examples referred to white features, such as, "blue-eyed", "fair-haired" and "rosy-cheeked". Neither the teacher nor any of the learners referred to any of the problematic elements within the worksheet. Not only were the learners provided with a discrete piece of the curriculum in the form of a task-based worksheet, but also their record (pasted in their writing book) was filled with inaccuracies.

Worksheet on compound adjectives, used in a grade 7 classroom



HYPHENS

We have already learned how we can sometimes use two nouns together to make a compound noun. E.g. bedroom.

Hyphens are used to join two words to make a compound adjective.
E.g. The cat is well house-trained.

You can also make **compound adjectives** in a similar way, but this time the two words are separated by a hyphen [**a small dash -**].
Remember, adjectives are describing words.

Task 1.
Copy these sentences into your books. Underline the compound adjective.

1. Henry didn't know what to say. For once she was tongue-tied.
2. The group of animal-lovers went to the zoo.
3. Adam made sure he was clean-shaven for his big night out.
4. The monster had big, monster-like cylinders where his eyes should be.
5. Connor's family is football-mad.

Task 2
Copy these sentences into your books. Underline the compound adjective.

1. Mary had a beautiful, blue-eyed baby boy.
2. People who visit the zoo are usually animal-lovers.
3. My best friend is fair-haired.
4. Topsy is a long-eared rabbit.
5. My garden is full of sweet-smelling flowers.

HYPHEN -

Task 3
Match these compound adjectives to their meanings:

A. Someone who loves football.	Football-mad
B. Someone who is good at gardening.	Ham-fisted
C. A sensible person who thinks.	Green-fingered
D. Someone who's just had a shave.	Person with a pink flush on their face
E. Someone who doesn't think carefully.	Bird-brained
F. A clumsy person.	Clean-shaven
G. Rosy-cheeked	Level-headed

Figure 17 Worksheet on compound adjectives, used in a grade 7 classroom Markings on the worksheet made by researcher during the lesson.

The teacher goes methodically through task 1 on the worksheet, and gets the learners to do task 2 on their own. After checking their answers to task 2, he instructs them to copy

task 3 into their books. This means that he systematically withdraws levels of support, so that by the third task the learners are working entirely without his input. Generally speaking, the teacher works very hard to mediate the materials effectively, skilfully and clearly, and he uses each of the materials in different ways. He improvises a great deal around the first worksheet, and relies far more heavily on the second, which has the specific tasks learners need to do to demonstrate their competence. The choice of the first worksheet works well with the teacher's teaching style, which is independent and self-assured. It allows him ample scope to manipulate the material in a variety of interesting ways that suit his teaching purposes, and it allows the teacher to exhibit his considerable teaching skill. The second worksheet consisting of matching exercises is a problematic choice, and the teacher might have been aware of the problems with the worksheet, but chose to ignore them in the presence of the learners (and observer).

The use of a textbook in this lesson is entirely instrumental – like a worksheet, it provided him with a ready exercise that he could use with the learners. It appears that dictionaries are seen as resources that learners use independently without a teacher's mediation.

The smart board has the single advantage of making the worksheet available from the front of the classroom at a size that the learners could access, which is the same role that an OHP might play, calling into question the very substantial financial investment into smart boards. It is instructive that the teachers I observed hardly exploit the possibilities of smart boards in their teaching.

The lesson discussed above made use five sets of LTSM: two worksheets, a textbook, dictionaries and a smartboard. Worksheets are very much the LTSM of the moment in South African classrooms (Koornhof, 2011), whereas textbooks and dictionaries are generally associated with more traditional and independent learning (Olson, 1989), while smartboards are intended to bring the benefits of the digital age into the classroom. I would argue that different materials carry different ideological and pedagogical positions in their design – although these positions need not necessarily be fixed. However, worksheets are designed to demonstrate and test the immediate skills that have been taught; textbooks are designed to provide the user with complete curriculum coverage and some activities and exercises to indicate how knowledge might be tested; and smartboards are designed to give users the openness and freedom of the Internet, so that

both prepared and spontaneous use can be made of knowledge, ideas and activities available in the digital world. Worksheets are (and were) a direct response to a skills-based curriculum. It may have been the most facile response, but nevertheless the speed and efficiency with which it can be used to 'demonstrate' that a skill had been achieved, made it a popular choice of teachers under OBE. Textbooks (and reference books and dictionaries) are largely knowledge-based (especially older textbooks). It speaks to an approach which had as its primary aim the transfer of specific ideas and knowledge – usually with the intention that these would be tested through memorisation and interpretation. Smartboards would be part of a digital approach to education which would see knowledge, skills and the way in which one might work with either as fluid and subject to multiple interpretations and entry points, in other words, it coincides with a postmodernist view of knowledge and ideas (Young, 2013). Many versions of knowledge about topics, as well as many ways to use such knowledge would be available to teachers and learners as they explore different topics.

In line with the study conducted by Valencia et al. (2006), where teachers all chose, as far as possible, materials that matched their personalities and interests, I suspect that teachers who favour particular approaches to knowledge, ideas and skills, are often drawn to the kind of LTSM that correlates with those approaches. But even when teachers use LTSM that are not closely associated with a particular approach, the LTSM is remoulded to the teacher's approach, as is evident in the following lesson.

Lesson 3

This Social Sciences lesson at grade 4 level.is a revision of both Geography and History content. Throughout the lesson, the learners were focused on the teacher and what she produced on the board. Although their books had worksheets which included the lesson's information, the learners did not read them. Instead, the learners repeated the information verbatim, and this showed that they had memorised much of the information. The lesson ends when the teacher tells the learners that they will continue with their 'discussion' in the next lesson.

The worksheets in the learners' books were designed to be memorised, and the teacher spells out the rewards for memorisation when she praises their exam results. This is a message that the teacher sent out strongly to her learners. In her interview, she stresses

how the teaching of mnemonics and other memorisation techniques livens up her lessons and has tangible results for the learners. This is the way materials have been widely used over the centuries, and it was the favoured way of impressing religious dogma on young people. But memorisation is the way many people taught themselves to read in the early days of mass literacy (Graff, 1987). Memorisation was (and still is) a powerful means for learning and access to knowledge where materials are in short supply. In this case, learners have only their memories to rely on in classroom and test situations. A number of teachers recalled the role of memorisation from their own school days. This approach is out of vogue in modern education, and it is seen as counterproductive to "real" learning. In recent times, it seems that application and discovery learning are punted as the most appropriate ways to gain knowledge and understanding.

This teacher has created a closed system: her learners perform well if they can reproduce verbatim what she teaches them supported by the worksheets' information. There are two important positive implications for her learners. The first is given the memorisation techniques she shows them, the simplicity of the answers expected, and the use of drill, almost every learner is guaranteed success. This means that this clear strategy may give learners who have low self-esteem and difficulties with other teaching methods a much-needed boost in morale. The second advantage is that learners memorise more than single word answers and dates, as they also learn sentences which have a sophisticated vocabulary. These sentences are memorised so that spelling and sentence construction becomes internalised in ways that some other methods might not accomplish.

However, the critiques of rote learning stand. In clarifying the distinction between "retention" and "transfer of knowledge" (also deemed meaningful learning) Mayer (2002) refers to Bloom's Taxonomy in the following way: "…the revised Taxonomy includes six cognitive process categories – one most closely related to retention *(Remember)* and the other five increasingly related to transfer *(Understand, Apply, Analyse, Evaluate,* and *Create)".* This suggests that retention stands at the lowest part of the spectrum of cognitive development and skill. Active or meaningful learning takes place when the learners develop and expand the higher order skills. For the purposes of this particular observed lesson, it is important to examine closely what the learners are encouraged to memorise, and whether any of this knowledge gained moves towards transfer.

Some of the learners responded negatively to her emphasis on recall all of the time, as was evident in the learner's question demanding to know why they were learning the material. Her response did not explain the significance of learning history; neither did it indicate that history is an ongoing, contested narrative nor that current events are informed by the past. She varied the lesson by asking the learners to describe the attributes of leadership. This idea was not explored, and by moving into the opposite of leadership, the exercise became one about vocabulary. In other words, the teacher foregoes the opportunities for transfer, which does not exist in the materials, but might have come through the teacher's mediation.

In the geography part of the lesson, however, it seemed that the teacher has the intention that this knowledge could be applied to activities in other subject areas. She talked about geography as being a more practical subject, therefore this allowed her to find avenues for application of geographical ideas elsewhere. But she described history as "text-based" and "for swotting", so that it was difficult to make it meaningful for other areas.

The information used for her history worksheet is riddled with inaccuracies, semi-factual information, oversimplifications and value judgements. It appears that the worksheet was drawn from a variety of sources, and there was no consistency or double checking of information. In her interview, the teacher said she preferred to work off worksheets that she produced herself, because "they [the learners] find the textbooks boring – they can't really understand some of the content…I make my own worksheets to try and make it more exciting." This teacher clearly produces worksheets with the intention of making them useful for the purpose of memorisation, so information for short questions and definitions predominate. In order to produce the worksheets, the teacher claims to use "…textbooks and Internet for my worksheets. I also choose more than two sites – three or four".

If a knowledge-based approach, which relies heavily on memorisation, is adopted, at least the information needs to be well-presented, clear, logical and as accurate and thorough as possible. The value of a knowledge-based approach (as opposed to a skills-based and/or discovery approach, or constructivism) lies, among other factors, in the opportunities for developing interpretive skills. Young (2013) argues in favour of a knowledge-based approach to the curriculum, but emphasises the role of the teacher as subject specialist

and one that can give learners access to 'powerful' knowledge. Such knowledge shows the coherence of a discipline and ways to challenge the boundaries of knowledge (Young, 2103, p. 110). The following two lessons set out to just that, but with distinct differences in the ideological positions of the teachers in relation to what History is.

Lessons 4a and b

The materials used in these lessons were designed by the teachers. The "Egypt" theme is specified by the curriculum (CAPS, Intermediate Phase (IP), Social Sciences, p. 40) in the following way:

CAPS curriculum section on grade 5 Intermediate Phase History Term 3

GRADE 5: INTERMEDIATE PHASE HISTORY - TERM 3

Topic: An ancient African society: Egypt Suggested contact time

One term/15 hours

This content must be integrated with the historical aims and skills and the associated concepts listed in Section 2

Focus: The way of life in ancient Egyptian society.
Content and concepts
• The Nile River and how it influenced settlement - 2 hours
• Way of life in ancient Egypt - 8 hours
- Social structure in ancient Egypt
- Beliefs and religion
- Pharaohs
- Sphinx, pyramids and temples
- Hieroglyphics
- Mathematics and astronomy
- Medicine and physicians: diseases, anatomy, physiology and clinical examinations

• Case study : The tomb of Tutankhamen - 2 hours
- Discovery of the tomb, who, when, why
- What the discovery revealed about ancient Egyptian society

• The spread of Egypt's advanced knowledge to other places, such as Europe and the Middle East - 1 hour
Revision, assessment (formal and informal) and feedback should take place on an ongoing basis - 2 hours
Learners should read and write for part of every lesson.
Evidence of learner's work, including assessments, should be kept in the learner's notebook

Figure 18 CAPS curriculum section on grade 5 Intermediate Phase History Term 3

The teachers compiled their own notes to cover the content, but they also liaised with other grade 5 teachers so that some of the content was covered in other subjects. A large part of the time spent in the SS classrooms was used to collect and to collate information

for the projects that the learners were doing in groups. These projects included the building of models, writing up of information that was not included in the notes, and the acting out of scenes from ancient Egypt.

Both lessons I observed took the form of reading and discussion. The notes were clearly intended to stimulate debate and to encourage the learners to find out more, rather than for the notes to be comprehensive on their own. Nevertheless, the notes served as the basis for formal assessment, while the learners' own research and applied knowledge formed the basis for ongoing assessment.

The two teachers agreed on what to include in the notes, and how to include teachers in other subject areas to cover some of the content. They also concurred on assessment criteria, and the structures to use for the project work. Their classes were at the same point at the end of each lesson, as they followed the same pace and sequence. However, there was a marked contrast in the mediation process of the notes by the two teachers. This was the result of their underlying approaches to the subject of history and what they believed to be the ideal way to draw the learners into the content.

The curriculum makes its agenda clear: it promotes Africa as a site of ancient knowledge, wisdom and civilisation; and, it wants learners to understand that other parts of the world derived some of their scientific understanding from the pioneering work of Africans. This means that the entire IP Social Sciences curriculum is constructed to foster pride in being an African and to develop an understanding of the struggles that Africans have had to endure. There is a strong ideological underpinning in the curriculum, which many argue is necessary and healthy in the wake of apartheid education. It is also important given the general western discourse that dominates much of South African society.

The two teachers in question both subvert the curriculum's intention, but in different ways. Teacher 4D homes in on the sensationalist aspects of the Egyptian's "way of life", and her presentation and emphasis lies largely on the weird and the wonderful. History, for her, appears to be about narratives that allow a glimpse into other worlds and eras. The picture that emerges is of a society that was interesting, but also strange. Learners marvelled at the strangeness of ancient Egypt and viewed the Egyptians almost as a breed apart, as the emphasis remained firmly on what set the ancient Egyptians apart from modern society.

Teacher 4E has a far more respectful and academic approach to the material. Her approach to history is that there are many sources, and all sources provide only a partial, perhaps even an untruthful account of what existed. Everything needs to be questioned. It is only through the bringing together of evidence in various forms that one can begin to form a sense of what a previous era might have been like. Her emphasis is on how we acquire knowledge of other peoples, worlds and times, and nothing can be seen as definitive.

The LTSM used, took the form of compiled notes, much as might be found in a textbook. These notes, consisting of about ten pages, formed a kind of booklet, and learners filed these for the purposes of learning for tests and assessments. Learners are given identical notes, assessments and in other subject areas that cover the same topic, identical exposure to literature, poetry, art and project work involving the making of models, using mathematics, science and technology. And yet the learners will have been subjected to strikingly different approaches to history that are likely to shape their reception of content in history. This was evident even in the use of informational books which learners had brought to class, and in the kind of questions they asked during the lessons, for example in discussion on the Egyptian practice of the removal of the brain after death, the one class was repulsed, whereas the other class was curious.

The above lessons provide, again, evidence of how the learners' experience of materials is subject to teacher mediation (Sosniak & Stodalsky, 1993; Collopy, 2003; Valencia et al, 2006).

The following English lesson also combines different disciplines for the appreciation of poetry, and uses LTSM in a wholly different way.

Lesson 5

The main LTSM used in this grade 6 poetry lesson is a sketch to which learners have to add details of a poem that is read to them three times. Their drawing is the evidence of how they have listened and what they have heard.

The sketch that the learners used to embellish with details, as they listened to a poem



Figure 18 The sketch that the learners used to embellish with details, as they listened to a poem

This lesson is unusual and interesting from a number of different perspectives. Learners seldom have to rely heavily on one sense only. Listening comprehension is a skill that is specified in the curriculum, but it is rarely foregrounded in either LTSMs or observed classrooms. It may be a problematic exercise in environments where teachers and learners are not confident about their language skills, pronunciation or how to develop such skills. Interestingly, the same can be said for poetry. Listening, understanding and appreciating poetry require highly developed language proficiency. The presentation of evidence for comprehension by using a drawing is also an unusual technique. This teacher is pushing

the learners well beyond the conventional and comfortable ways in which either listening skills, poetry analysis or art is taught. By bringing these three aspects together in a single exercise, she expects the learners to do challenging work. It is generally speaking more demanding to listen to a poem than to a narrative. This poem is beautiful and challenging, and it employs both sophisticated vocabulary and poetic techniques. The skill required to draw the animals and creatures is also difficult.

In her presentation of the poem, the teacher emphasises the performative aspects of reading poetry through her use of voice and in doing so she brings together three realms of the aesthetic: performance, poetry and art. The confluence of these submerges the learners in aspects of art – well removed from more functionalist aspects of teaching and learning. Although this is a listening exercise, the learners remain active participants in the learning process, through questions and discussions and the teacher peppers the lesson with grammatical and vocabulary explanations. The lesson (and the teacher) demonstrates the integrative nature of language teaching, where grammar, poetry, listening, and comprehension are not packaged as separate skills or outcomes. If a checklist was necessary to show what was covered in the lesson, then the teacher could check a number of boxes, but this was not the purpose of this unconventional lesson.

The teacher uses her voice as the LTSM, and the learners are required to close their eyes while listening. Learners have to rely heavily on their language knowledge, understanding of poetry conventions (the abundance of anthologies in the classroom attests to regular exposure to these books) and their memories in order to execute the instructions. None of these resources are available to them in an alternative LTSM format.

Many teachers in their interviews commented on how heavily they had to rely on their listening and memory skills when they were at school, because learning materials were not available. Some lamented the demise of those skills, as the visual and oral predominate in classrooms nowadays. Educationists like Alloway (2006) argue that the neglect of skills such as listening and remembering what was heard leads to learning difficulties and compromised academic success.

Lesson 6

This lesson is also a listening lesson, but the intention is not to recall specific information, but to apply it. At the beginning, the teacher makes the purpose of the grade 4 English lesson clear when she foregrounded the elements of a story. The learners knew they had to listen to understand the structural elements of the story and not only the storyline.

Because the learners are hearing a narrative, it is easy to interrupt its flow for discussion, and then to pick up the story again where the teacher left off. The discussions maintain the thread of the story and it also means that any confusion or misunderstandings are cleared up. This is a sophisticated form of listening, which the teacher scaffolds through the discussion points she raises as she reads to them. The listening exercise becomes an exercise in analysis and critical awareness of what an author does when a story is constructed, and the task set for the learners is also sophisticated. Although they listen to the story's skeleton, the learners have to devise a setting with characters, where a problem arises and then is resolved. In other words, the learners have to produce writing based on their own ideas, but this is an application of a model they had listened to and analysed.

The grade 4 learners in this classroom are mostly ESL learners, although they have been at an English medium school since the beginning of their school career. There are learners who grapple with some of the vocabulary, but they are able to work conceptually with the content the teacher presents.

The nature of the worksheets is also instructive. The first provides an opportunity for the learners to read how the four elements can be used for the construction of a narrative, however, it does not allow learners to simply fill in short answers or phrases. Learners have to think through the makings of their own narrative. The second worksheet is a reference sheet, which outlines the skills required to produce original writing, and the table acts as additional incentive for learners to follow the process.

Worksheet used by grade 4 learners for story planning

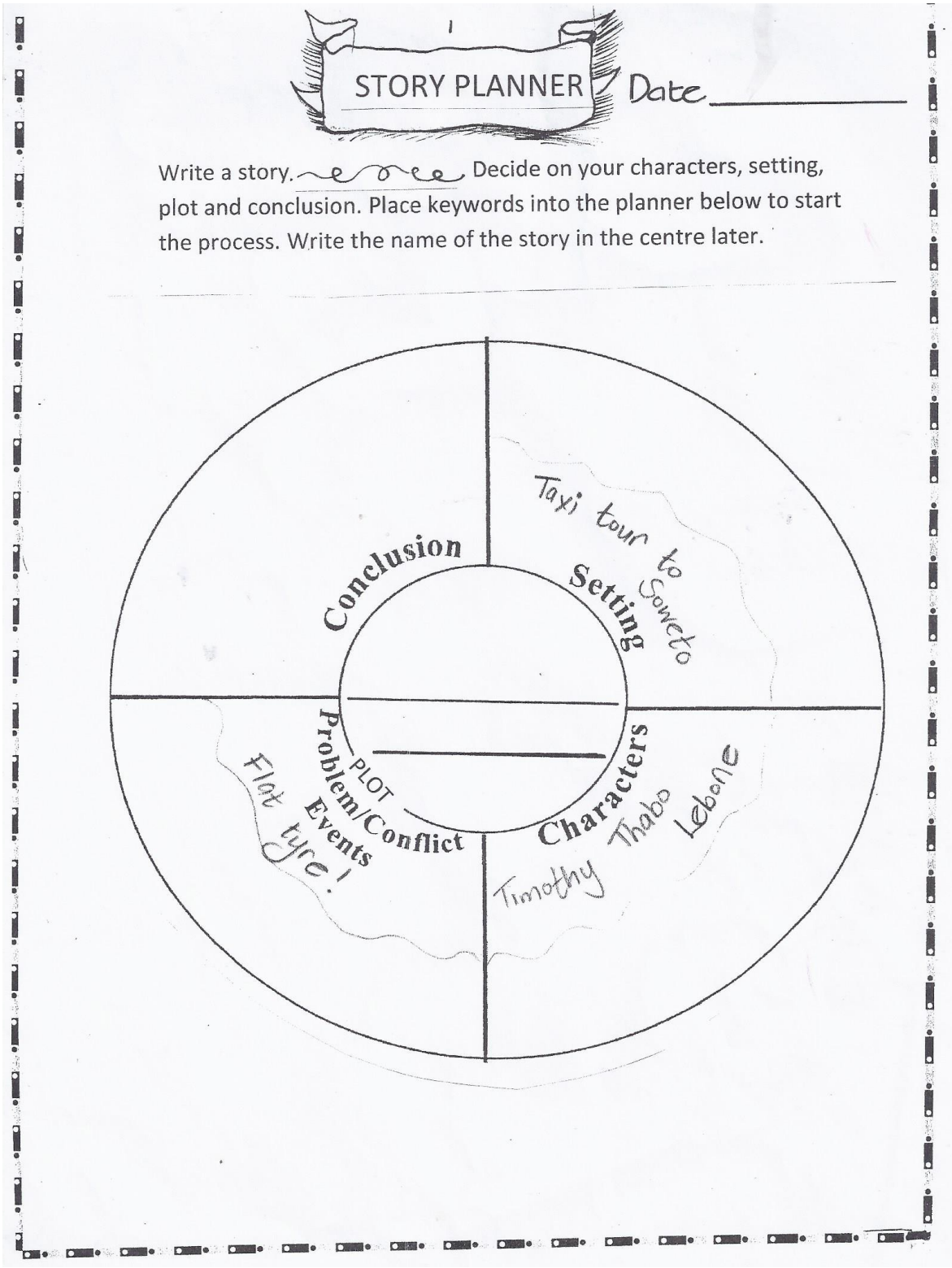
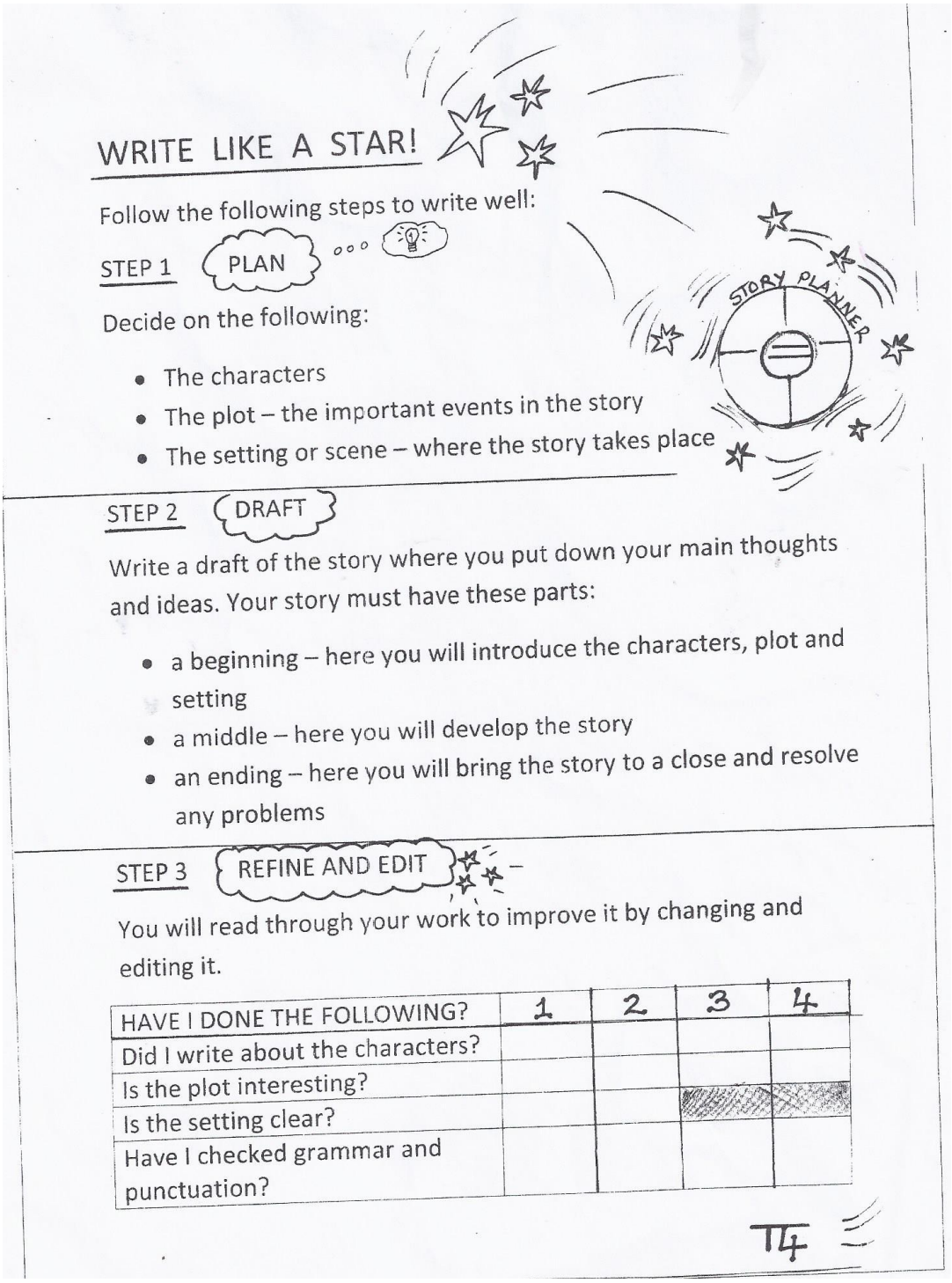


Figure 19 Worksheet 1 used in the story-telling lesson described above

Worksheet used by grade 4 learners for checking themselves and self-assessment



WRITE LIKE A STAR!

Follow the following steps to write well:

STEP 1 PLAN

Decide on the following:

- The characters
- The plot – the important events in the story
- The setting or scene – where the story takes place

STORY PLANNER

STEP 2 DRAFT

Write a draft of the story where you put down your main thoughts and ideas. Your story must have these parts:

- a beginning – here you will introduce the characters, plot and setting
- a middle – here you will develop the story
- an ending – here you will bring the story to a close and resolve any problems

STEP 3 REFINE AND EDIT

You will read through your work to improve it by changing and editing it.

HAVE I DONE THE FOLLOWING?	1	2	3	4
Did I write about the characters?				
Is the plot interesting?				
Is the setting clear?				
Have I checked grammar and punctuation?				

TT

Figure 20 Worksheet 2, used in the story-telling lesson described above

Questions of coherence during all the lessons

There is not a single instance in the lessons described above where teacher mediation is not the primary method for the creation of coherence. It is fair to say that teacher mediation is a necessary and essential part of making worksheet-based lessons meaningful, unless the worksheet's purpose is to test or to drill. The teacher's skill, rather than the quality of the materials, becomes pivotal during the learning experience. In many cases (with the possible exception of extended notes), the worksheets on their own would be meaningless to learners. The lack of contextualisation, which might be provided by either a textbook or a mediator, means such worksheets are isolated from any programme or sequence. It was noticeable in many of these lessons how the demands of teacher-led lessons made the learners become compliant and passive. However, if the teacher is confident in her subject knowledge and has a comfortable relationship with learners, then the learners participate more actively in how the lesson unfolds.

In a number of lessons, more than one worksheet is used, and in most cases, the use of worksheets is complemented with chalkboard-use. The primary worksheet acts as the holding force for the secondary materials that come into play. In this way, the worksheet acts to maintain coherence and demonstrates the confluence of various themes and ideas. But where teachers either lacked the skill or knowledge, or where the materials were particularly unsuitable, then this thwarted the best efforts at coherence.

Learners' participation

Access to worksheets (as opposed to having mainly visual front-of-class LTSM), expands the possibilities for the learners' participation in the learning process. The learners have the opportunity to engage individually with the worksheet itself, and to test or demonstrate their respective understanding. They also have a greater opportunity to ask questions about particular aspects of the topic as presented on the worksheet, as it remains visible and "material" to them. But in the majority of lessons that there was a lack of the learners' active participation in the form of discussions and learner-led questions.

In independent schools, there is a particular culture of encouraging the learners' participation and it was in one of these lessons that the pitfalls for a teacher showed itself when the learners' discussion revealed the teacher's lack of subject knowledge and undermined the integrity of the lesson. In the hands of proficient teachers, however, there

is a complementary interplay between teacher, materials and the kind of learners' input which can be used to clarify and extend ideas.

Combining coherence, LTSM affordances and learners' input: an exercise in group work

This was the only lesson (lesson 11, English, grade 4) I observed where group work took place. In her interview, the teacher talked about how she had to work hard to learn the skill of using group work as a technique, but that she had grown to enjoy it.

It was evident from the lesson that the learners have been schooled in how to work effectively in groups. The teacher adopted an approach that encouraged a great deal of free association and play. Yet, this approach was combined with concentrated and productive work using the provided material, and this involved both extensive reading and writing.

She also monitored the groups without interfering with the processes already in motion and simply directed learners in a mild way. The lesson's aim was clearly to have the learners reveal their own understanding of issues and ideas as much as possible. The teacher's input became sharp and critical at presentation stage. But this was after the learners had had ample time to prepare, think and consult one another and the teacher on the content of their presentations.

As with other lessons where the learners' input becomes the basis for the teaching focus, this teacher has the opportunity to teach "ambitiously" (Cohen, 2011) by engaging with what learners know and how they think about the learning content. In this lesson, although the presentations and group work form the most substantial basis for learning, it is also based on information notes compiled by the teacher. This means that a combination of teacher and learner material is used, but learner material and learner input is foregrounded during this lesson. Learners have an active hand in shaping their own learning and those of their peers.

Significant about the lesson described above is the interaction between the different elements of the triad. This stands in contrast with the majority of lessons where the elements of teacher and material dominate. The final lesson in this chapter looks at an instance where the material dominates.

The tablet as LTSM and its affordances

This lesson (lesson 16, an English lesson for a grade 6 class) may be atypical, because it did not need any preceding explanation of the activities to be done on the tablet and the teacher does not follow up on these activities. The only input the teacher gives the class is to explain which application to use, and then the class becomes very quiet. All the learners focus, individually, on their respective tablets. Once they have logged on, they are intent on playing the vocabulary games with great concentration. The learners engage in a variety of activities that require typing and moving objects on the screens, and these activities stand almost entirely independent from active teacher mediation. Without doubt, the teacher selected, screened and evaluated the benefits of the activities before the lesson. Now the learners are enthusiastic participants in the games/activities.

This suggests an interesting possibility that tablets provide equal opportunities for teachers and learners to be engaged with learning materials. This is a phenomenon which is not readily encountered with other LTSMs. It also seems that when learners work with technology in class time and space, then the role of the teachers becomes diminished. This makes the flipped classroom (where learners do preparation on tablets before a lesson, and the lesson becomes a feedback session on what transpired when activities, research or viewing was done) a more attractive way for teachers of working with tablets than having learners engage with tablets during lesson time. As with other LTSMs, many forms of mediation will probably emerge as teachers and learners become accustomed to the affordances of tablets.

Conclusion

Working with LTSMs that are produced by the teacher for their sole use, rather than for the learners' use, places the teacher at central stage. As can be seen by the lessons described in the first section, it is the teacher's interpretation and engagement with the LTSMs that provide the sole avenue to transmission for the learners. If the teacher does not bring the learners' ideas, questions and issues on board, then the learners have to accept the teacher's explanation as the final word. Moving from the teacher's use and mediation of a central LTSM to some form of application, this gives the learners an opportunity to test their understanding. It also provides an opportunity for the teacher to establish whether she has achieved her goal for the lesson.

In many instances, the only way learners are expected to signal their competence is through overly simple work sheets. By the teachers' admission (see interviews in chapter 9) the learners often do not complete their homework. The teachers feel that they have no recourse to enforce the doing of homework, because either the parents are uncooperative or they are unavailable. In addition, the schools usually do not have effective disciplinary measures to deal with incomplete homework. This means that many learners are subject only to what the teacher says when they mediate from the front and LTSMs designed for the learner's use. This constitutes a piecemeal pedagogy which drip feeds information and discrete topics to learners on a day-to-day basis.

The lessons on worksheets describe how teachers work with materials that they have put together themselves as the basis for their teaching. They work with the learners on these materials, and in most instances the interactions are very teacher driven. It shows how the teachers' visions for their respective lessons framed the choice of materials. However, it is also clear that teachers do not always think carefully enough about the materials they use. In several cases the lessons were compromised by poor materials or poor mediation, because the teachers showed a lack of understanding or background knowledge to the materials.

As research has shown, how teachers understand materials, shapes the learners' experience of content (Crawford, 2004; Kauffman, 2002; Remillard, 1999; Stodolsky, 1988; Valencia, et al., 2006). In independent schools, the learners interact considerably more with both teachers and materials than in public schools. Unless the teacher has a very clear and strong focus, there is a tendency in classrooms where individual worksheets or notes are used for the lessons to become disjointed. Having a separate worksheet (or two) for each lesson, creates a sense that there is little integration between the knowledge or ideas presented in the lessons that come before or after this lesson.

From the perspective of the learners, it is interesting to work extensively with LTSM (such as one might do in the flipped classroom) in preparation for a lesson. This has the potential to challenge the learners, to make them independent thinkers and it encourages the development of their reading, writing and presentation skills. This approach requires a wholly different form of interaction between the teacher and learners, where the learners' work is subject to critique (mainly from the teacher, but also from other

learners). It is also based on strong teacher knowledge and preparedness to engage with the learners' understanding. In such circumstances, there is a strong degree of equality between teacher, LTSM and learners as part of a lesson's creation and enactment. In the following chapter, I discuss the implications of the observation data for this thesis.

Chapter 8 Discussion of observations

Introduction

In this chapter, I will start by examining the patterns and trends in lessons. The types of curriculum materials are examined first by how these are distributed by grade and learning area. A further distinction is made between public and independent schools in the presentation of this data. After that, the distribution of teacher-enactment strategies is shown, also by grade and then by learning area, with the same distinction between public and independent schools. The data is then discussed under eleven main points, all pertinent to what these distributions reveal.

These points are discussed under different headings and include the fairly marked distinction between government and independent schools' use of LTSM and enactment strategies. Furthermore, there is an overriding preference for teachers to use front-of-class focal point teaching, which is mainly dominated by teacher talk. This applies widely to the government school lessons that I observed, but also (to a lesser extent) to independent school lessons. Significantly, there is almost no use of textbooks in the lessons. In the case where printed materials are used in independent schools, these materials were mainly created by the teachers.

Patterns and trends in lessons

I observed twenty-six lessons, and thirteen in public schools of various types, and thirteen were in upmarket independent schools. The following table indicates what materials were used in each of the lesson and the main strategies used to enact these.

Types of curriculum materials used in the observed lessons
Written or creative activities, investigations, experiments done with materials produced by learners under the teacher's supervision
Textbooks
Content resources like reference books and dictionaries
Video/DVD
Images, posters, notes on board, flashcards, and these include different materials produced on a smart board
Story books / stories
Technology, including cell phones, tablets and work done on computers
Student worksheets
Teacher's talk based on teacher's knowledge
Printed notes prepared by teacher for use in the classroom
Rubrics
DBE workbook

Table 17 Types of curriculum materials used in the observed lessons

The following table indicates the main enactment strategies used with the LTSM under discussion:

Enactment strategies and learning approaches used in the lessons observed	
Enactment strategy	**Learning approach**
	Passive → Active → Teacher dependent
Teacher's talk	TT
Learners' response to closed questioning by teacher	LQ
Learners' writing activity (reproductive)	LA
Reading	R
Learners' own writing (interpretive)	LW
Learners' questions and discussion	D
Learners' talk / presentation	LT
Teacher's response to/ feedback on learner presentation	TR
Listening activity	L
Learners' written response to teacher talk	LWR
One-on-one teacher's talk with learners	T1x1
Learners' interaction on tablets	T

Table 18 Teacher-enactment strategies and learning approaches used in the lessons observed

For the purposes of easy identification, these categories have been divided into strategies which lead to either active or passive learning. This is a broad generalisation, and I acknowledge that generalisations have notable exceptions.

Under strategies that encourage passive learning (and I note that there were exceptions, but this is what I observed for most of the lesson) are the following: teacher's talk; learners' responding to direct questioning by teacher for recall purposes; and reproductive writing activities (like filling in short answers on a worksheet or copying notes). Active learning strategies include learners' interpretive and creative writing activities; learners'

questions and extensive discussion; learners' talk/presentation and learners' interaction on tablets. There are activities that fall between these two broad ones, and they are dependent to a large extent on the lesson design as well as the teacher-learner dynamics. These include: reading, one-on-one teacher's talk with learners, listening activities and learners' written or drawn responses to the teacher's talk.

The following table traces the materials used by teacher in each of the observed lessons, as well as how these materials were enacted. Where the teacher used, for example, posters, flashcards and the notes on the blackboard to convey the lesson content, these various images or focal points in front of learners and mediated through the teacher were indicated as 3 images.

LTSM used and enacted in observed lessons

Teacher	Grade level	Learning area	Materials used	How enacted?
1A	6	English	Visual materials x3; Worksheet	Teacher talk; learner response to direct questioning; learner writing
	6	English	Visual materials x2	Teacher talk; learner response to direct questioning; learner writing
	6	English	Book	Reading; teacher talk; learner response to direct questioning
1B	4	English	Visual materials x 2	Teacher talk; learner response to direct questioning; learner writing
1C	7	SS	Visual materials x 5; worksheet	Teacher talk; learner response to direct questioning
1D	4	SS	Visual materials x 2; worksheet	Teacher talk; learner response to direct questioning; learner writing
	6	English	Worksheets x 3; Book	Teacher talk; learner response to direct questioning; learner own writing
2A	6	English	Visual materials x3	Teacher talk; learner response to direct questioning; learner writing
2B	5	SS	Book; Visual material	Teacher talk; learner response to direct questioning learner questions and discussion
2C	7	English	Listening	Teacher talk; learner questions and discussion
	7	English	Worksheet; Visual material; Book	One-on-one teacher talk with learners; reading, learner own writing

	7	English	Worksheets x 2; Visual materials; Book	Teacher talk; learner response to direct questioning; learner writing
2D	4	English	Books x 3; worksheet;	Teacher talk; learner response to direct questioning; learner writing
2E	4	SS	Visual material; worksheets x2	Teacher talk; learner response to direct questioning
3A	7	English	Learner materials; Visual material	Learner talk; teacher response to learner presentations
	7	English	Visual material x 2; Book	Teacher talk; reading; learner talk;
	7	English	Learner Materials	Teacher response to learner presentations; learner questions and discussion
3B	5	English	worksheets x 2; Visual materials x 2; Book	Teacher talk; learner writing; reading; one-on-one teacher talk with learners
	6	SS	worksheets x2; Learner Materials	Reading, learner writing, learner questions and discussion, learner talk; teacher response to learner presentations
4A	6	English	Listening; worksheet	Listening; learner written response to teacher talk
4A	6	English	Tablets	Learner interaction on tablets;
4B	4	English	Listening; worksheets x2; Visual materials	Teacher talk; learner response to direct questioning; listening; learner questions and discussion; learner writing
4C	4	English	worksheets x3	Learner questions and discussion; listening; reading; learner own writing
4D	5	SS	worksheets; books	Teacher talk; learner response to direct questioning; learner questions and discussion; reading
4E	5	SS	worksheets; books	Teacher talk; learner response to direct questioning; learner questions and discussion; reading
4F	6	SS	worksheets	Reading; learner response to direct questioning; learner questions and discussion

Table 19 LTSM and enactment strategies used by teachers in the lessons observed.

The table above serves as an overall summary of what was observed, whereas the following tables provide an opportunity to examine the implications of the data.

These 3 tables reflect LTSM and enactment per various categories

Spread of LTSM used in observed lessons (shaded cells – independent schools)

Teacher	Grade	Subject	Books:					Visual Material	W/sheets	Learner Materials	Other:	
			TB,	SB	WB	D	Ref				Listening	Tablet
1A	6	English						✓✓✓	✓			
	6	English						✓✓				
	6	English		✓								
1B	4	English						✓✓				
1C	7	SS						✓✓✓ ✓✓	✓			
1D	4	SS						✓✓	✓			
	6	English			✓			✓✓✓				
2A	6	English						✓✓✓				
2B	5	SS	✓					✓				
2C	7	English									✓	
	7	English						✓	✓			
	7	English				✓		✓	✓✓			
2D	4	English	✓			✓			✓			
2E	4	SS						✓	✓✓			
3A	7	English							✓	✓		
3A	7	English		✓				✓✓				
	7	English								✓		
3B	5	English		✓				✓✓	✓✓			
	6	SS							✓✓	✓		
4A	6	English							✓		✓	
4A	6	English										✓
4B	4	English						✓	✓✓✓		✓	
4C	4	English							✓✓✓			
4D	5	SS					✓		✓			
4E	5	SS					✓		✓			
4F	6	SS							✓			
Total events:			2	3	1	2	2	29	24	3	3	1

Table 20 Spread of LTSM used in observed lessons (shaded cells – independent schools)

The most notable pattern in this data is the widespread use of front-of-class focal point teaching. This is shown in the column that indicates the use of visual materials, which

shows the popularity of such materials. It also reveals that in many instances visuals are used as a substitute for almost all other forms of materials. There are lessons where visual materials are not used, either because learners are listening to stories or they are using their own project or poster work as the front-of-class focal point. Only in isolated cases do teachers have alternative teaching methods, such as, the use of printed materials (2B, 4D, 4E and 4F), or (in one instance) teacher talk in the form of a lecture without any props (2C lesson 1). The use of learners' own efforts as the focal point of the lesson is also quite rare and mostly restricted to the lessons at independent schools.

Student worksheets are used more widely than any other learner resource. Where there are indications of more than one worksheet in a lesson, this is because the worksheets usually pertain to different activities, rather than act as an extension of one.

It is remarkable how few textbooks are used. Even in instances where these are noted, the textbooks are peripheral to other materials used. In lessons observed at independent schools, particularly in school 4, the teachers worked with the learners on materials that the teachers had tailor-made for a series of lessons on a specific topic. Two of the teachers (4E and 4F) created their notes together and taught them in tandem. The policy in school 3 was that teachers needed to produce their own notes for learners, but such notes were not in evidence, except in one class (3B, lesson 2). In only one lesson was the DBE workbook used. Resources used by the teacher at the front-of-the-class (whether commercially produced, such as posters, or teacher-produced notes, or learner produced, such as, the work on individuals for the purposes of presentations), do not belong to the learners in the class for further reference. These visual materials form the basis of the teacher's preparation for learners to look at, listen to or perhaps to discuss. For study and reference purposes, the learners rely on what the teacher provides for them in the form of worksheets, textbooks, printed notes or the DBE workbooks. These mainly come to the learners in the form of bite-sized worksheets or teacher's notes. DBE books, which are available, remain firmly on the margin.

The main content resource used by teachers is dictionaries. In one instance, the teacher used a globe, and during the 2 parallel lessons taught by teachers 4E and 4F, the learners brought relevant resource books to class for the purposes of a project. Despite the ready availability of dictionaries in almost all classrooms, the kind of enactment strategies used

by teachers (which relies mainly on talking and listening) means these are not used frequently.

Technology is popular where it is available. The table did not put the use of smart boards in the same column as tablets, because the smart boards were used (for the most part) to display exercises and pictures (more suitable to visual materials). However, where videos were shown, these were usually on smartboards. Teachers in independent schools seem to be far more comfortable with the idea of using tablets and cell phones. For example, learners used cell phones to google information in class. Many teachers enjoy using tablets as a resource to find instantly a relevant image to show to learners during the course of discussion. Only in one instance were learners observed working with tablets on their own, and this exercise excluded the teacher. In this instance, LTSM and enactment became one and the learners became insular, which some teachers might find problematic. It appears that teachers enjoy being able to wield the tablet as resource in preference to learners working with tablets on their own.

Rubrics became the tool which allow for one-on-one interaction between teacher and learners. The clarity and specificity of the rubric gave the teacher the freedom to look at learners' work in categories that appeared to be objective. There was polite acknowledgement by the learners of the teacher's input, but they were focused mainly on the final mark. This was evident when the learners keenly compared marks as soon as the teacher handed back their work / rubrics to them.

In general, visual materials were chosen to provide a central focal point for the lesson. This focal point was at the front of the classroom where either the teacher or a learner (in one instance a group of learners) presented material and explained it to the rest of the class.

The total of each column tells the story of the probable prominence of visual materials in many South African classrooms. It is possible to deduce from this data that teacher materials have a high priority, with twenty-nine instances of teacher materials used for the purpose of demonstration, and this led to front-of-class teaching. When it comes to materials for learners, there is a range, but worksheets (24 events) outnumber all the other resources. Books are very scarce, and as has been described in previous chapters, these are barely used productively. Story books require the most engagement from learners,

while dictionaries, reference books and workbooks are for learners' independent use. An important aspect of these figures is that they neither reflect what happens on a consistent basis in classrooms nor do they reflect an even spread of use. The worksheets, for example, are used in many but not all classrooms. In some cases, several worksheets are used during one lesson. In other classrooms, there are occasions where the only learning materials are the ones used by the teacher for the purpose of demonstration.

A question, which remains unanswered, is whether particular learning materials lend themselves better to certain types of teaching, but the evidence in this study suggests that this is not the case. There needs to be a controlled study which compares the use of materials on the same topics, which might reveal more about this question. Instinctively (and policy makers appear to have the same instinct) the notion of the widespread use of materials which include learners in the curriculum might deliver stronger results. These materials should be textbooks, and possibly tablets. It was abundantly clear in this research that the learners experience little interaction with text, whether from a reading or writing perspective.

The following table shows the distribution of the use of LTSM per grade level.

The distribution of the use of LTSM per grade level (shaded cells = independent schools)

Teacher	Grade level	Learning area	Books:					VISUAL MATERIAL	W/SHEETS	LM	Other:	
			TB,	SB	WB	D	Ref				Listening	Tablets
1B	4	English						✓✓				
1D	4	Social Sciences (SS)						✓✓	✓			
2D	4	English	✓			✓			✓			
2E	4	SS						✓	✓✓			
4B	4	English						✓	✓✓✓		✓	
4C	4	English							✓✓✓			
2B	5	SS	✓					✓				
3B	5	English		✓				✓✓	✓✓			
4D	5	SS				✓			✓			
4E	5	SS				✓			✓			
1A	6	English						✓✓✓	✓			
	6	English						✓✓				
	6	English		✓								
	6	English			✓			✓✓✓				
2A	6	English						✓✓✓				
	6	SS							✓✓	✓		
4A	6	English							✓		✓	
4A	6	English										✓
4F	6	SS							✓			
1C	7	SS						✓✓✓ ✓✓	✓			
2C	7	English									✓	
	7	English						✓	✓			
	7	English				✓		✓	✓✓			
3A	7	English							✓	✓		
3A	7	English		✓				✓✓				
	7	English								✓		

Table 21 The distribution of the use of LTSM per grade level (shaded cells = independent schools)

In the above table, which is presented according to grade, shows how the use of visual materials expands until grade 6. This is logical, because it demonstrates a looking-reading-and-writing intensive way of working with visual materials. However, although there is an increase in the number and kinds of visual materials used, as will be seen when the enactment strategies are examined, it is not necessarily the case that reading and writing becomes a part of the enactment strategy. While it appears that there is a greater degree of flexibility in terms of the kinds of materials used, it does not signify more

reading and/or writing. There is certainly an abundance of worksheets, across grades 4 to 7, but these require mainly the filling in of short answers. The most intensive engagement with printed matter that I observed was with materials produced by some teachers. This material consisted of a small booklet, which was information rich, with some activities built in – much like a conventional textbook.

Where textbooks are used, the learners are generally referred to the activities in the textbook which have a worksheet format. The teacher occasionally uses visuals, but almost never the printed information in the textbook. There is a spread of materials across grades 4 to 6, which suggests that teachers are consciously using many different resources to maintain learner interest. This is particularly significant in the light of what happens in classrooms: there is listening, looking and some talking (mainly teacher-talk, but some learner-talk too) and that this variety of materials becomes necessary as part of classroom management.

The following table shows the distribution of LTSM per learning area:

The distribution of the use of LTSM per <u>learning area</u> (shaded cells = independent schools)

Teacher	Grade	Subject	Books:					Visual Materials	W/sheets	Learner Work	Other:	
			TB	SB	WB	D	Ref				Listening	Tablets
1A	6	English						✓✓✓	✓			
	6	English						✓✓				
	6	English		✓								
1B	4	English						✓✓				
	6	English			✓			✓✓✓				
2A	6	English						✓✓✓				
2C	7	English									✓	
	7	English						✓	✓			
	7	English				✓		✓	✓✓			
2D	4	English	✓			✓			✓			
3A	7	English							✓	✓		
3A	7	English		✓				✓✓				
	7	English								✓		
3B	5	English		✓				✓✓	✓✓			
4A	6	English							✓		✓	
4A	6	English										✓
4B	4	English						✓	✓✓✓		✓	
4C	4	English							✓✓✓			
1C	7	SS						✓✓✓ ✓✓	✓			
1D	4	SS						✓✓	✓			
2B	5	SS	✓					✓				
2E	4	SS						✓	✓✓			
	6	SS							✓✓	✓		
4D	5	SS					✓		✓			
4E	5	SS					✓		✓			
4F	6	SS							✓			

Table 22 The distribution of the use of LTSM per learning area (shaded cells = independent schools)

The above table shows the differences between how LTSM are used in English and SS during the observed lessons. Although there are fewer lessons in the SS category, it is noteworthy that in almost all instances this is where reference books and textbooks are used. Whereas all the English lessons use story books and workbooks from time to time, factual and informational texts are missing. SS lessons make more use of information that is accessible in print form for learners, and most of the content resources used in SS are reference books. Surprisingly, there is only one instance where a video is used – a resource that is singularly suitable for SS. This video was shown in a school with very limited resources, which made its use all the more remarkable. The data is of course far too limited to draw any firm conclusions, but it seems that SS teachers use as much a spread of visual materials and worksheets as English teachers.

In English, the concentration of resources remains in the worksheets category, accompanied by learners' worksheets. The thin spread of LTSM resources in other areas suggests that teachers venture occasionally to use alternative forms. But the use of technology by English teachers is restricted to independent schools. This may be indicative of the way teachers in these schools have greater access to technology, and also think about English as a subject which lends itself to using technology.

The following table shows the enactment strategies used during the observed lessons. The shaded area indicates lessons that were observed in independent schools.

Enactment strategies used in observed lessons (shaded areas =independent schools).

Teacher	Grade	Subject	TT	LQ	LA	R	LW	D	LT	TR	LWR	L	T1x1	Tech
			Generally passive learning			Generally active learning							Teacher dependent	
	6	English	✓	✓	✓									
	6	English	✓	✓		✓								
1B	4	English	✓	✓	✓									
1C	7	SS	✓	✓										
1D	4	SS	✓	✓	✓									
	6	English	✓	✓			✓							
2A	6	English	✓	✓	✓									
2B	5	SS	✓	✓				✓						
2C	7	English	✓					✓						
	7	English				✓	✓						✓	
	7	English	✓	✓	✓									
2D	4	English	✓	✓	✓									
2E	4	SS	✓	✓										
3A	7	English							✓	✓				
	7	English	✓	✓				✓	✓	✓				✓
	7	English	✓			✓		✓	✓	✓				
3B	5	English	✓		✓	✓							✓	
	6	SS			✓	✓		✓	✓	✓				
4A	6	English	✓								✓	✓		✓
	6	English												✓
4B	4	English	✓	✓	✓			✓				✓		
4C	4	English				✓	✓	✓				✓		
4D	5	SS	✓	✓		✓		✓						
4E	5	SS	✓	✓		✓		✓						
4F	6	SS		✓		✓		✓						

Table 23 Enactment strategies used in observed lessons. Shading indicates independent schools.

As to be expected, almost every lesson was enacted through a large degree of teacher talk. In rows where the first column is not ticked, the teacher talk comes in other forms – notably teacher response to learners' presentations or the reading and talking about a book. Only in two instances did the teacher interact by reading notes and directing

questions to learners or with a one-on-one discussion of a rubric with learners, while the rest of the class read and wrote on their own. Hand in hand with teacher talk seems to go the formula of teacher questioning the learners to elicit specific answers, which is followed by learners' activities in the form of completing worksheets or writing exercises copied from the board.

The table reveals the differences between lessons observed in government schools and independent schools. In government school classroom, the enactment strategies repeatedly follow a small set of practices that were used in a similar combination. However, the lessons observed in independent school classrooms show a far wider spectrum of enactment strategies. There is a greater degree of learner talk and discussion, which leads to the learners' own writing and formal listening activities. A great deal of interaction is based on materials produced by the teacher or the learners, but mostly the learners.

The following table shows the enactment strategies used during the observed lessons at each grade level:

Enactment strategies of the observed lessons at each grade level (shaded cells = independent school)

Teacher	Grade	Subject	TT	LQ	LA	R	LW	D	LT	TR	LWR	L	T1x1	Tech
			Generally passive learning			Generally active learning							Teacher dependent	
1B	4	English	✓	✓	✓									
1D	4	SS	✓	✓	✓									
2D	4	English	✓	✓	✓									
2E	4	SS	✓	✓										
4B	4	English	✓	✓	✓			✓					✓	
4C	4	English				✓	✓	✓					✓	
2B	5	SS	✓	✓				✓						
3B	5	English	✓		✓	✓					✓			
4D	5	SS	✓	✓		✓		✓						
4E	5	SS	✓	✓		✓		✓						
1A	6	English	✓	✓	✓									
	6	English	✓	✓	✓									
	6	English	✓	✓		✓								
	6	English	✓	✓			✓							
2A	6	English	✓	✓	✓									
	6	SS			✓	✓		✓	✓	✓				
4A	6	English	✓									✓	✓	✓
	6	English										✓		
4F	6	SS		✓		✓		✓						
1C	7	SS	✓	✓										
2C	7	English	✓					✓						
	7	English				✓	✓				✓			
	7	English	✓	✓	✓									
3A	7	English							✓	✓				
	7	English	✓	✓				✓	✓	✓		✓		
	7	English	✓			✓		✓	✓	✓				

Table 24 Enactment strategies used in observed lessons at each grade's level – shading indicated independent schools

As with the use of LTSM, the number enactment strategies used increase from grade 4 onwards. There is a greater spread of LTSM grade 7 level, and this was irrespective of whether this was at an independent or a government school.

The following table shows LTSM enactment strategies during the lessons per learning area level:

LTSM enactment strategies during the lessons per learning area

Teacher	Grade	Subject	TT	LQ	LA	R	LW	D	LT	TR	LWR	L	T1x1	Tech
			Generally passive learning			Generally active learning							Teacher dependent	
1A	6	English	✓	✓	✓									
	6	English	✓	✓	✓									
	6	English	✓	✓		✓								
1B	4	English	✓	✓	✓									
	6	English	✓	✓			✓							
2A	6	English	✓	✓	✓									
2C	7	English	✓					✓						
	7	English				✓	✓				✓			
	7	English	✓	✓	✓									
2D	4	English	✓	✓	✓									
3A	7	English							✓	✓				
	7	English	✓	✓				✓	✓	✓		✓		
	7	English	✓			✓		✓	✓	✓				
3B	5	English	✓		✓	✓					✓			
4A	6	English	✓									✓	✓	✓
	6	English										✓		
4B	4	English	✓	✓	✓			✓					✓	
4C	4	English				✓	✓	✓					✓	
1C	7	SS	✓	✓										
1D	4	SS	✓	✓	✓									
2B	5	SS	✓	✓				✓						
2E	4	SS	✓	✓										
	6	SS			✓	✓		✓	✓	✓				
4D	5	SS	✓	✓		✓		✓						
4E	5	SS	✓	✓		✓		✓						
4F	6	SS		✓		✓		✓						

Table 25 Enactment strategies used in observed lessons per learning area, where the shaded areas are independent schools

During English lessons, there is consistent teacher talk, and then a scatter of other enactment strategies. But the patterns in SS lessons are far more fixed, albeit in different ways in government and independent schools. In government schools, the pattern is teacher talk followed by direct questioning of learners to elicit content answers, and maybe a writing activity. Whereas in independent schools, there is a consistent focus on

reading and discussion during the lesson. The differences between English and SS enactment strategies are unsurprising. This is because English covers a broad area of skills and study fields (like grammar, literature and different forms of writing), whereas SS is primarily about understanding and the analysis of information. These differences are also embedded in the way the curriculum presents what needs to be covered: many skills and exposure to different kinds of media and written forms are advised for English, whereas in the SS the content is based on themes (one per term for history and one per term for Geography). These themes are meant to have a greater degree of depth and internal coherence (DBE, 2011, CAPS, Social Sciences, p. 33).

Discussion of the data

In summary, the data shows the following:

1. A fairly marked distinction between government and independent schools' use of LTSM and the way these are enacted, and where there is a greater range of enactment strategies observed in independent schools.
2. An overriding preference for teachers to use front-of-class focal point teaching, which is mainly dominated by teacher talk. This applies widely to the government school lessons that I observed, but also (to a lesser extent) to independent school lessons.
3. There is very little reading in government schools, and there is considerably more reading in independent schools.
4. There is limited writing that takes place in the classroom. This applies across the spectrum, with only a little more writing in independent schools.
5. There is almost no discussion or learner-driven teaching in government schools, whereas discussion and learner-driven teaching seem the norm in independent schools.
6. There is almost no use of textbooks in the lessons. In the case where printed materials are used in independent schools, these materials were mainly created by the teachers.
7. There is almost no use of DBE workbooks, although, as will be seen in chapter 9, teachers said in interviews that these are used for homework purposes and preparation for ANAs.

8. There is a noticeable lack of coherence and thoroughness within lessons and across lessons. This is qualified by the small sample, the limited number of lessons I observed and the time spent in schools. But in a substantial proportion of lessons, the teachers would jump from topic to topic, and make assumptions about learners' understanding based on the question: "Do you understand?" Inevitably, the learners would respond positively to this question, and then the teachers move on at a pace that could have left many learners behind. In independent schools, the fact that many lessons are learner-centred helped, but this approach did not necessarily eliminate the problem of coherence.
9. With the exception of one class, no group work was observed.
10. Technology is an exciting development in schools, but it is used mainly in independent schools' classrooms. It is used mainly as a teacher's tool, and learners have to engage with technology outside the classroom as part of their homework.
11. Not much topic enrichment takes place in government schools, either through teacher knowledge, content resources, realia or technology. Some enrichment takes place in independent schools. The norm in both sets of schools is to adhere to the curriculum in a close way.

Next, the implications of each of the above points will be discussed in more depth.

The distinction between government and independent schools' use of LTSM and enactment strategies

Although the particularities of this distinction will emerge in subsequent sections, it is important to discuss some of the reasons for such a distinction. Affluent independent school settings often form the template for the ideal conditions under which education takes place. These include excellent facilities, hand-picked teachers, an involved parent body and small classes. Each of these factors has some impact on the use of LTSM and its enactment.

In both the government and independent schools, there may have been greater access for teachers to a greater variety of LTSM for their own personal use in the latter context, but there was not a big distinction between the two kinds of schools in terms of what was available to learners in the form of printed matter. In fact, learners in both contexts had access to materials prepared for them by teachers and the learners worked primarily in exercise books, where there was evidence of lots of worksheets. However, a strong

difference between the two kinds of schools was the presence and use of tablet and cell phone technology in independent schools. This has more to do with teachers' choices, than levels of affluence, although the material conditions in some schools could have been a factor. Most teachers, across sectors, are likely to have access to some form of technology, but teachers in independent schools chose to make technology part of their lessons. In interviews, teachers across all sectors spoke about their use of the Internet as part of their lesson preparation. The big difference in independent schools is that the Internet makes its way into the classrooms itself in the form of cell phone use and smart boards which are used to access internet information during a lesson. Insofar as having resources available in the classroom, there was little difference between classroom decoration and facilities between both sectors. However, in independent schools' classrooms walls (and even ceilings) were decorated with learners' work, whereas in government schools, teacher and commercially produced posters were the norm.

In all the schools visited, there were libraries. In some of the government schools, the library was a popular and well-attended space. While the library facilities were not a focus of this research, in interviews the teachers often complained that libraries were not well-used. In independent schools, there were computer facilities for learners in what was termed a "media centre" rather than a library.

The teachers in these diverse settings differed in distinct ways. Teachers in the independent schools displayed a far more relaxed and comfortable attitude towards their work. It was clear that the teachers felt free to adjust, experiment with and extend the topics they worked with in the classroom. However, this did not mean a departure from the curriculum; it meant that topics within the curriculum could be explored in ways that interested both the teachers and learners. The pressure to conform to and cover the curriculum within a specified time period that most public-school teachers experienced stood in sharp opposition to the more relaxed approach of the independent school teachers.

In both contexts, I witnessed a variety of teachers' skill and commitment. There was also a great degree of commitment to learners and their achievement. At the same time, I observed that some teachers were under-prepared, rigid, and they used LTSM in scattered, poorly considered ways. There were also examples of poor classroom management in

both sets of schools. In independent schools, there was evidence of collegiality, cooperative planning and teaching in lessons and this was mentioned with greater frequency in the interviews. But at the same time, at least one of the teachers mentioned that it was difficult to work too closely with colleagues all the time (see chapter 9). In contrast, at government schools there seemed to be little or no attempts for teachers to work together or to share materials. Meetings seem to consist of technical planning discussions (e.g. what needs to be covered on which days), rather than what the topic might demand and which teaching methods might be most interesting or conducive to learning.

The involvement of the parent body was an immediate and very prominent feature of independent schools. Because parents pay high fees, they want to ensure that the fees are warranted, and they also want to ensure that their children take advantage of the education at their disposal. Parents seem to take a strong interest in supervising and participating in their children's homework. The projects in several of the classes, as well as discussions in the classroom, showed the role parents played in their children's education. This goes hand in hand with making available a great deal of resources to children at home. These include quick and easy access to computers and printers, books and excursions. Teachers at independent schools talked extensively about their regular interactions with parents. But this was not the case at government schools, where teachers complained about the lack of parental involvement.

There were small classes at only one of the two independent schools, and the second school had class sizes which were comparable to some of the public schools. What seems to be a factor, more than class size, is teacher work load. Teachers in the independent schools claimed that they had more time for preparation and extra work with their learners. This was not the same for teachers in government schools who complained about their mark load and work load. In school 3, where the class sizes were considerable smaller than elsewhere, there did appear to be a greater level of physical comfort as a result of extra space and opportunity for interaction.

The most salient differences between the independent and government schools I observed were a strong sense of teacher autonomy and freedom in independent schools; the use of handheld technology as a teacher and a learner's tool in independent schools; greater

teamwork and cooperative ventures in independent schools; considerable parental involvement in school and learner activities in independent schools; a more comfortable work load for independent school teachers

The next most striking issue that arose from the observation data, was the powerful emphasis on front-of-class teaching.

Front-of-class focal point teaching

Cogburn (1998) in a Unesco paper coined the phrase the "the sage on the stage" as opposed to the "guide on the side" in relation to how technology redefines the role of the teacher in modern education environments. These phrases capture the divide between traditional teacher-centred teaching methods and progressive learner-centred teaching and learning. Teacher-centred teaching makes the teacher the source of knowledge, expertise and director of activities in the classroom ("the sage on the stage"). While "the guide on the side" corresponds to the teacher as facilitator of processes through which learners discover information for themselves. Although the phrases have a neat and pithy tone to them, they present a crude binary position, which is contradicted in almost any classroom.

With the exception of a single lesson, all the teachers in this study chose to be "the sage on the stage". It is possible that for the purposes of observation, teachers chose to teach in this way, because it was the most comfortable role for them. Using front-of-the-class focal point teaching is usually a variation of the proverbial 'chalk and talk' teaching. For many educationists, this approach runs counter to methods such as experiential learning, constructivism and enquiry-based learning. There are countless debates regarding the merits of different teaching styles, with traditional "chalk and talk" experiencing something of a resurgence (Tobias & Duffy, 2009). What is important in the South African context is that the education department spent two decades trying to promote alternative forms of teaching (DBE, RNCS, FAQ, 2003, p. 6; Carrim, 2013). But these efforts do not seem to have left many traces in the sphere of pedagogies relating to knowledge or ideas transmission.

It is significant that the practice of front-of-the-class focal point teaching is widespread regardless of contextual conditions. This does not mean that front-of-the-class focal point teaching is a uniform teaching method that has the same effect on teaching and learning,

but the manner in which information is presented to learners is the same. However, from the point of view of LTSM it has implications that require consideration: for the most part, learners are presented with oral input, which they have to process aurally. There is usually some (fairly limited) visual input – sometimes in the form of pictures or some notes on the board or a screen. Learners "read" with the teacher, if they read at all. The material read is usually in short point form. This is true, too, of the materials produced by learners which teachers adopt as the focal point of the lesson. Much of the presentation resides in the mind of the teacher who prepares a topic based on the CAPS / GPLMS schedule. The teachers follow what the curriculum states should be done at a particular time of the year. This piecemeal pedagogy is accompanied by some activity, usually in the form of a worksheet. The learners' input is mostly mechanical and minimal during the activity.

As learners progress through school, what changes is that the front-of-class focal input becomes more varied and sophisticated – a factor that makes smart boards highly desirable. With smart boards, the learners' boredom can be held at bay with the instant provision of a video, novel visual input, or another activity sheet. Teachers place themselves under considerable pressure when their performance becomes the mainstay of each lesson. The template of lessons for the most part seems to be: teacher input, some cursory questioning of learners to establish how well the information has been heard, and an easy-to-mark worksheet (or similar activity off the board or from a workbook). This routine appears to be adequate for the fulfilment of assessment criteria and the coverage of the CAPS curriculum.

What is striking about the lessons across the spectrum of schools is an approach that treats the curriculum (and learning and knowledge in general) as a series of topics to be explored. The aim appears for the learners to glean some surface knowledge, and that this "new" knowledge does not need to be integrated with any other knowledge. Furthermore, the knowledge is secondary to a largely mechanistic approach to some or other skill, which requires the accurate representation of simple (and also simplistic) knowledge in an activity that is done quickly and marked quickly. This situation could be interpreted in a variety of ways, but the process resembles nothing so much as the way in which technology has influenced the way in which the working world, as well as the playing world, works with vast amounts of information. It resembles modernist and postmodernist

ways of looking at information, which is both individualistic and utilitarian. It is individualistic because individual teachers decide what the appropriate materials are for a presentation together with a worksheet (either self-made, taken from a textbook or the Internet). It is utilitarian in the sense that the topic needs to be covered in the most efficient way, which also conforms to a method of testing that ensures the reputation of the school as well as the teacher. The curriculum's fast pace dictates that topics are covered quickly and discretely, which turns lessons into snapshots of bits of knowledge or ideas. Teachers try to create some variety in the presentation of these ideas, rather than to explore them in any depth. This is reflected in the limited writing and reading that takes place in most lessons. In particular, this is shown by a kind of reading that tries to find the key points of any topic, and I will discuss the role of reading in more depth during the next section.

The role of reading

In chapter 6, the role of books and the reading of them were discussed at some length. The key argument was that from grade 4 onwards, there is a shift from "learning to read" to "reading to learn". This shift is made complicated and complex by the simultaneous introduction of English as the LoLT for the majority of learners in South Africa in grade 4. Although English is the LoLT, it is treated as a FAL. i.e. a far less demanding version of English that does not include the language and skills required for CALP.

Regardless of the complexity of this situation, a fundamental strategy is to increase learners' exposure to a diversity of texts. Reading for enjoyment that helps learners to practise the skill of reading is as important as teaching the learners how to work with various kinds of informational texts and formats. A shift to reading to learn assumes a certain level of proficiency. If this proficiency does not exist, then both teachers and learners contrive to avoid reading. However, when reading is encouraged and the practice becomes embedded, then learners experience the kind of academic advantage that is incalculable (Meek, 1996).

Furthermore, Kintsch (2009) argues that reading (and by that he means working with texts) is a quintessential constructivist activity (in contrast to oral instruction). He explains it as follows:

> The input is a text, that is, a series of written words, organized into sentences, paragraphs and higher-order discourse units. The end result is a situation model

> that faithfully represents the meaning of that text, both at a local and global level, and integrates it with the reader's prior knowledge and learning goals. (Kintsch, 2009, p. 224)

This means that a learner with good reading strategies will be able to construct learning through reading, which is a task that needs to be reproduced in writing for school assessment purposes. Reading competency is a prerequisite for scholastic success. Good reading strategies are acquired when learners are taught how to make inferences, retrieve background knowledge, identify the structure of an argument (aside from familiarising themselves with the vocabulary and the particular ways in which certain subject areas articulate knowledge). This requires daily guided reading practice throughout primary school.

The scant attention paid to reading in many classes is a worrying phenomenon. Although lessons were observed where extraordinary care was taken to use a text constructively, the majority of lessons, even where reading took place, made little effort to develop the learners' reading skills. As with writing, the reading was confined to notes on a board, or some exercises on a worksheet. The teacher generally read with the learners and the aim was mostly to read for retrieval of surface knowledge.

Reading and writing are integrally linked. The next section looks at the implications that limited reading has for writing.

Limited writing

Writing to learn is "a methodology that is extremely influential in strengthening the learning potential in second language students in any discipline and at all levels from primary to tertiary" (Waters, 2014). The theory (largely formulated by Zamel, 1989, and expanded by Kraschen, 2007), is that writing is a complex process that requires the writer to plan, to draft, to review and to edit the writing. This means that there is a constant working with ideas so that an articulation of these ideas can take place. As Ivanić (2004) pointed out, there are a number of discourses relating to writing to learn, as well as learning to write. He outlines six: namely, a skills discourse (where the emphasis is on syntactical patterns and the assessment criterion is accuracy); a creativity discourse (where the writing is on creative topics and the assessment criteria are the production of interesting content and style); a process discourse (where there is an awareness of the

mental and practical processes that are required to produce a text); a genre discourse (where the production of different text types is assessed); a social practices discourse (where writing is for real-life purposes); and, a socio-political discourse (where understanding the power relations and social identities that underlie the different kinds of language and writing is assessed).

Other models exist which also flesh out the differences between a mechanistic and a more sophisticated approach to writing that has analysis as its base (Freebody, 1992). What is important about these classifications is the general agreement that when writing remains in the domain of a skills discourse, then it does not allow for immediate learning or the learners' development as a writer.

It appeared that only minimal writing was done in the observed classrooms, across all the grades in the intermediate phase. I observed exercise books, which consist of pages and pages of worksheets, some of which were only partially completed. The writing required as part of the worksheet culture is based mainly on single words, short phrases, or at best, a sentence or two. However, in the independent school classes and one government school class, there was evidence of more extensive writing.

Writing is, of course, part of the process of learning how to express ideas and information. This necessarily needs to be preceded by discussion which allows for looser and more experimental ways of learning how to articulate what one thinks.

The role of discussion

In the lessons observed in independent schools, discussion formed an integral part of every lesson. This stood in sharp contrast with government school lessons where, for the most part, little or no discussion took place. In all classes, teachers used questions that required direct recall answers, and in almost all the classes there was some recitation. However, when these are the only forms of interaction, then it becomes problematic. Cohen (2011, p, 53) describes how teacher-learner interaction lies at the heart of this process:

> … teachers can severely limit their acquaintance with students' knowledge by lecturing all the time, by calling on a few students a bit of the time, by searching only for the right answer and dismissing all other answers, or such means. Students can limit teachers' acquaintance with their knowledge by speaking little

or not at all, by not doing written work, by reading comics behind their schoolbooks or by sending text messages.

The little discussion I observed during lessons in public schools took place in the SS classes. Although this is not surprising, it indicates how in the English classes there is a strong emphasis on formal, grammatical, or technical skills rather than the way in which language is a communication tool.

The leaning towards skills-based teaching finds further form in the way the LTSM of choice used by teachers across all sectors is worksheets.

The form of printed LTSM

In the majority of classrooms, the learners work with sheets of paper, which are either printed worksheets or teachers' printed notes. Learners rarely work directly with books. There does not appear to be research on whether the form of printed LTSM makes a difference or not, but it is worth noting.

Encountering information and ideas in piecemeal and unintegrated ways, could be problematic for the teaching and learning process in two ways. While good mediation might eliminate some of the negative effects, learners could develop the idea that integration of knowledge is unnecessary and undesirable. The ability to link knowledge and ideas more broadly is partly about being able to see sequence and the kind of connections a good reference or textbook would make. An approach which presents information and ideas in isolation, is likely to affect how learners think about topics. The second issue is that learners come to rely on what knowledge the teacher supplies, and the teacher's judgement on what is relevant and useful. Learners who have textbooks may not engage with material other than what is dealt with in class, and some researchers suggest most learners do not (Stodolsky, 1988). However, if the learners did have access to textbooks, then they have a choice. They could choose to read the textbook more broadly and thoroughly. Textbooks give learners an overall idea of where the individual topics lead and how they fit together, because a book creates a broader context.

In many developed countries (and in South Africa in the not too distant future), tablets have become the teaching tool of choice where textbooks and other materials are downloaded for the learners' use. When materials are presented in such a form, it may

not increase a sense of integration or coherence either, although learners would have access to a variety of materials on their own. The question arises as to whether materials need to be embedded in something more than what is teacher-provided or in teacher-guided printed or digital materials. Another question is whether lack of textbooks has a negative impact on the way the learners experience learning and knowledge.

In public schools, learners have DBE workbooks. These are designed specifically to give learners opportunities to practise the skills listed in the curriculum (although not in the order of these appear in the curriculum) and mostly resemble worksheets. The colour, and interactive design make these books very attractive to learners.

The role of the DBE's workbook

Learners have DBE workbooks, but it was used only once during the lessons I observed. The DBE has spent considerable sums on the production of these books, and it has also become an important advertisement for the department's efforts into ensuring that all learners have "textbooks" – part of its strategy to improve learners' outcomes.

In interviews, public school teachers talk animatedly about the workbooks and how the learners enjoy them, and how they themselves believe that the quality of the workbooks is good. However, teachers repeatedly claim not to have time to use the workbooks and they explain that they refer the learners to the workbooks for homework (very often not done) or for assessment preparation. In independent schools, teachers are unfamiliar with the workbooks and these materials do not feature as part of their teaching at all. An analysis of the DBE workbooks is necessary to confirm whether the definition publishers use for workbooks apply, because publishers define workbooks as a series of activities put together in a single book for consolidation purposes (Koornhof, 2011).

It may be reasonable for teachers to set aside the DBE workbooks as homework books or assessment preparation books, but it provided a great deal more than an exercise or drill activity during the particular lesson I observed. There was a passage for reading, some explanatory notes, which were boxed for easy reference, illustrations in colour, and a model of how the learners were to proceed with the activity and activity instructions in the DBE workbook. In other words, it was structured far more like a textbook than a workbook. As with a textbook, the teacher and learners are guided by the texts and

activities in the DBE workbook, and not simply by the input and activities set by the teacher.

The DBE's injunction that the workbook is optional and additional to other materials may also be a reason for the non-use of these books. Although this needs to be investigated more closely, it is clear that the DBE workbook does not follow the curriculum in an exact and systematic way. The prescriptions of the curriculum may be another reason why teachers avoid the use of the DBE workbook.

Textbooks and workbooks create opportunities for learners to work independently of teachers. Another way to create some learner independence is through group work.

The lack of group work

Group work is closely associated with constructivist and experiential learning. It is an approach that were actively encouraged in C2005 curriculum documents. The teachers (in interviews) have internalised the notion that not only is group work associated with OBE, but also with "good teaching". Group work is also associated with a host of other factors, such as: the difficultly presented by large classes in a limited space; the high teacher skill levels required to ensure productive activity and focused learning; and, decisively, the use of well-designed materials.

Most importantly for this study is that group work cannot happen in a vacuum. It requires, as central element to this approach, material (self-produced or commercially produced) that learners can work with independently from the teacher, who may or may not act as facilitator. But good materials are indispensable for successful group work. The technique that teachers often use where learners discuss a topic for a few minutes in groups, cannot be seen as group work in any real sense.

It is instructive that out of thirty observed lessons, only one made use of group work. This is indicative of several issues: the central role of the teachers in the classroom, which they did not want to relinquish even in the smallest measure; the limited opportunity learners had to engage with learning that required their independence or for them to take their own initiative; and, the limited opportunity learners had to work independently with LTSM.

Technology is punted as a tool that could revolutionise education. One of the reasons for such a view is the broadening of exposure to almost endless materials – most of it audio-

visual. The suggestion is that far richer input into curriculum topics and ideas become possible, and that this would also entail a greater degree of learner independence.

The role of technology

The GDE plans to spend R400 million on supplying 88 000 Huawei Android-powered tablets, with Wi-Fi and 3G connectivity, to all the province's 2 200 schools from January 2016, which is according to a 2014 press release by Nomvula Mokonyane (then premier) and Barbara Creecy (then Member of the Executive Council, known as the MEC for Education). Already many public and most independent schools are using tablets and/or smart boards in their classrooms.

The evidence which shows the inevitability of technology in classrooms emerged in some government schools and the independent schools during my classroom observations, and also in interview discussions. Where smart boards are present in classrooms, the teachers use them as a more sophisticated chalk board or overhead projector. In one of the classrooms, the teacher switched to a website because the discussion in class prompted her to find additional information. But the majority of teachers' preparation was based on specific materials they wanted learners to look at and to use during an activity.

Tablets were used in various ways in the independent schools. In one instance, the learners "demonstrated" their use of tablets by sitting quietly and playing on prescribed sites that the teacher had specified. In a second example, teachers used personal tablets to show learners visuals that complemented the topic. In a third example, the teacher used the smartboard in conjunction with cell phones, her own, while the learners used theirs. Learners felt comfortable using their cell phones to look up topics on Google as these arose during the discussion. Technology formed a naturally integrated and easy extension of the lesson. This lesson included the following: learners' work on paper, a video, the teacher's notes on the smart board, the learners looking up information on their cell phones, and the teacher taking pictures on her cell phone in order to demonstrate the topic. The technology was not the main focus of the lesson nor did it distract from the topic, although a lot of time was spent trying to find relevant sites and there was much to-ing and fro-ing between web sites. Nonetheless, this incorporation of technology in the lesson created a different mind-set to information and its role and accessibility in the education process. On the one hand, resources from the Internet were brought into the classroom,

and it created the sense that any and all information was accessible. On the other hand, the teacher and learners experienced the frustration of having to sift through information which was irrelevant. As an LTSM, the Internet requires a great deal of training and preparation for it to be useful. Learners during the lesson clearly felt empowered by their ability to search in conjunction with the teacher, and there was a sense that everyone became an equal player in the information game. But how to use this resource effectively in the classroom needs to become part of teachers' training.

Where tablets and technology provide almost automatic extension and enrichment of information and ideas, where such tools are not used, or used inappropriately, other forms of extension and enrichment might be used.

The role of extension and enrichment

Extension and enrichment of knowledge is made visible by the use of content resources, realia and also by the discussions that teachers have with their learners in relation to topics in the curriculum. However, I observed the use of a few dictionaries and reference books, as content resources, in a few isolated instances. Teachers in one of the SS lessons (4E and 4F) planned for enrichment to be part of their lesson, and they used reference books (brought by learners in the respective classes) to illustrate and expand the topic under discussion. In an English lesson (4C), the teacher had additional reading books available for the learners to look at that were related to the topic (diaries). During classroom discussions, some extension occurred in a few of the SS classrooms, and also during one English lesson in an independent school.

The majority of teachers worked with a single focus on a topic, which had to be covered in a particular week according to the curriculum. Teachers tended to work with topics in ways that would lead to the learners demonstrating sufficient understanding of them to satisfy simple assessments.

In other lessons where some extension took place, this was the result of questions raised by the learners. This led to further discussion among the learners, as well as the teacher expounding on the topic from their own personal knowledge, which meant that the learners became the initiators of extension and enrichment. Without the learners' input, this extension would not have taken place. This is in line with Cohen's (2011) category of ambitious teaching, where the teacher is in conversation with learners to probe their

train of thought, their misconceptions, as well as connections they make so that this discussion enriches and extends the topic.

Conclusion

Although I observed a widespread use of both LTSM and enactment strategies across different kinds of schools, there were certain trends that were markedly present in this small and context-specific sample. However, there needs to be an investigation on a larger scale to confirm these patterns. In the following chapter, which is based on interviews with the teachers, it becomes clearer how they think about the LTSM they use and also their concerns about the ways in which learners work with LTSM.

Chapter 9 Interview data presentation and analysis

Introduction

Social 'texts', within a specific institutional or cultural setting, can also be described as discourses. School is seen as a major area for the reproduction of social relations, but it may also be a site for change (Blommaert, 2005, p. 26) and this is captured by the discourse that is used in educational institutions by teachers, learners, and the larger school community. Policy makers are acutely aware of these possibilities and create prescriptions that have the intention of producing either or both social reproduction or change. South Africa provides an example where these operations can be shown in sharp relief: from the language and strategies used in apartheid classrooms to the language of social redress and idealism that permeated Curriculum 2005; and, in the new intervention strategies that are being employed to reverse poor teaching and poor performance. The various discourses not only employ a particular language – easily deconstructed for the agenda that so overtly underlies them, but they also use particular "school" ways of transmitting the ideas that inform those agendas.

In the current context, part of the government intervention strategy is contained in the use of testing and textbooks. These ideas take a specific format in policy documents and LTSM, which is currently indicative of a discourse of remediation, scaffolding and systematic reform. Teachers, who have taught during different curriculum periods, have absorbed the discourses used at the time to different degrees. They have also internalised the critiques against the various curricula that has led to reform and/or change of the curricula. The result is that teachers are quite thoughtful and aware of different debates about teaching methods, assessments, curriculum content and emphasis. Through the many workshops conducted by the various provincial education departments, first to

induct teachers into OBE and later into CAPS and the ANAs, teachers know that there are different agendas and social and educational requirements that they need to fulfil. One of these revolves around the use of LTSM.

Ideas are expressed differently by individuals, but there seems to be the unanimous notion that worksheets are the central LTSM in 2016 classrooms, which is in opposition to the culture of textbooks that was apparent during apartheid. The use of worksheets appears in line with notions of C2005 professionalism that is interwoven with the idea of teachers creating their own materials. Under CAPS, although there is a call for the use of textbooks, worksheets are viewed as a way to deal with a tightly scripted curriculum, and often difficult classroom dynamics. Teachers are monitored on whether the curriculum is covered, and not on the quality of their teaching. The primary way in which curriculum coverage is monitored is through the inspection of learners' class books. In addition, worksheets are useful in a culture of testing which demands the kinds of responses that are found in the completion of worksheets.

The issues that arose from the interviews held with teachers are discussed under the following headings: teachers' own school experiences of LTSM; training on LTSM; specific practices that are interwoven with LTSM-use; the value of LTSM to learners; the role of the curriculum in LTSM-use; criteria for choosing LTSM; and, the place of LTSM in the education process. In these sections, they show how and why teachers approach and think about LTSM from different angles with the result that a coherent picture begins to emerge of their views. Their discourse reveals how many teachers have arrived at a point where LTSM holds a very ambiguous and contradictory pedagogical position, but it has a less ambiguous classroom management function. The interviews also reveal that there are often two discourses reflecting the bimodal divide in the South African education system running side by side but with interesting areas of overlap.

Teachers' own school experiences of LTSM

The reason for focusing on the teachers' own experiences of LTSM was in part because their experience as learners often informs the way that teachers teach (Walker, 1989). Another reason was that the exploration of experiences of LTSM-use some decades ago provides an important and interesting counterpoint to present-day use of LTSM. Two

important contrasting views emerged. The first: *"For us, a book was like a treasure"* (teacher 1F), and this view reflected the scarcity of textbooks in the majority of South African schools under apartheid. In contrast, an interviewee's teacher flung the history textbook outside the classroom door, and exclaimed: *"'I'm not going to teach you that rubbish (he meant political content)', because it was full of apartheid propaganda… that was about 25 years ago"* (Teacher 2C). This view reflects the opposition to textbooks based on racial bias.

The racial stratification of the apartheid era is painfully evident in the way teachers talk about their experiences with materials during their school years. Those who were deprived of materials, yearned for them. When the teachers had access to textbooks, they embraced them with a fervour that forgave (and perhaps ignored) the quality and content of the materials. The notion that *'education was the only way out* [of poverty]' (Teacher 1D) played a large role in showing the tenacity and determination African teachers displayed. Teacher after teacher described financial hardship as a result of study costs and academic hardship because of their struggle with English. It also explained their uniform attachment to textbooks, which most only experienced in the final two years at school or at a tertiary institution. Some of the teachers describe their textbooks when they were at school as follows:

> *I loved the textbooks I had access to at school. It was knowledge-based and relevant. It was well-structured and based on the curriculum. It was interesting, especially Afrikaans reading books. I remember an Afrikaans short story book. The grammar books had grammar and relevant vocabulary that helped with the reading.* (Teacher 1G)

The notion that *"older textbooks had far more information"* (Teacher 1E), is a feature that teachers emphasised approvingly and repeatedly. It reveals how the teachers felt about the belated and sudden exposure to the treasure troves of information found in textbooks. The specific references to structures and relevant information (presumably that were used for tests) indicated how these textbooks helped the teachers to make sense of what previously could have been experienced only through auditory means or chalk board notes. It also showed how they discovered the way to academic success, because relevant information could be read, and if necessary, memorised.

Teachers who were educated in "Indian" schools under the apartheid system all spoke of how extensively textbooks were used in their schools. They also stated how important these textbooks were and the high value they attached to them: *"Textbooks were significant to me at school – I loved Brighter English –it had no colour, but it was so wonderful."* (Teacher 2A); and

> *Textbooks played a massive role in my school education… Those books were excellent – it was like doing a course. If you missed a day, you could just consult the textbook. We hardly skipped anything and we followed the exact sequence. And we took the textbooks home.* (Teacher 2C)

The teachers quoted above demonstrated a strong attachment to their school textbooks. This was either for emotional reasons (with the use of words such as "wonderful", "significant" and "love") or for practical reasons, such as, catching up or studying from them. It is clear from the way these teachers talked about textbooks that they not only learnt to enjoy and prize their books, but that they also learnt how to use their books for learning. These teachers clearly saw their books as an integral part of the learning process, and sometimes (as with Teacher 2C) even as the most integral part of process. There are also strong indications (although not mentioned explicitly) that these teachers used textbooks from a young age and that textbooks featured strongly throughout their schooling careers.

Teachers who were taught in white schools remember textbooks, but did not seem to feel any great attachment to them. In the following two quotations, the teachers foreground methodology: *"I don't know that I remember much about that at all; I think high school was just chalk and talk"* (Teacher 4A); *"And basically when I was at school it was more the sort of chalk and talk and textbooks, as far back as I can remember"* (Teacher 4D).

"Chalk and talk" has had a lot of bad press in the last few decades, and it is clear that these teachers are referring to this methodology in a derogatory way. This approach means that the teacher is central, and that knowledge is embedded in the person rather than in a separate third source. Textbooks are mentioned in the second quotation, but are not given any prominence. The implication is that these teachers remember the teaching and learning process as being mainly mediated through a teacher.

In the following two quotations, textbooks are centralised: *"It was very textbook-based …So it was very much the teacher sticking to what the textbook had to say and what was laid out in the curriculum. It was not much deviation from that or creativity away from that"* (Teacher 4B); and,

> *Yes, just the textbook. Yes, that was it! And they'd been going for years so they were really outdated, the stories were not relevant, we couldn't relate to them even in those days. They were terrible, all dog-eared and you could see they'd been read too often.* (Teacher 4C)

In both these quotations the use of textbooks is viewed negatively. Teacher 4B associates creativity with deviation from the curriculum and textbook. She clearly felt that teachers, who followed the textbook closely, were subject to the curriculum to such an extent that it compromised inspirational teaching. Teacher 4C rejected textbooks because she found them irrelevant. In doing so, she used particularly emotive language: '*that was it!'*; '*terrible';* and, '*all dog-eared'.* A well-thumbed book had lost all its freshness and modernity and she felt it was like a hand-me-down object, where her teachers used textbooks in repetitive cycles without thought. Both teachers imply that the centralised textbook is symptomatic of an uncreative teacher.

It is noteworthy that those learners who had easy and ample access to textbooks felt such a disregard for them. White learners, under apartheid, were guaranteed a privileged existence and a ready entry into tertiary studies or apprenticeships if they so wished. At the same time, a lack of desperation for access to materials may have given them a greater objective ability to see the textbook's flaws, and also the way they were mediated.

Based on the small sample of this study, three patterns emerge from the above about the use of textbooks in the past. Those teachers who were part of the majority of South African learners who had no access to materials, desperately longed for them. Those who went to "Indian" schools, felt there was a strong systematic use of textbooks that appealed to the them, possibly because the they felt a sense of agency in their own learning. But those teachers who attended white schools, indicate that there was a strongly systematic use of textbooks that did not appeal to them, perhaps because they experienced teaching as inordinately rigid and teacher-centred.

In schools where textbooks were scarce, learners copied notes and this was the way they accessed knowledge. Inevitably, this meant the focus of teaching and learning was based on what the teacher provided on the chalkboard, and the learners had to find inventive ways to access other information. In highlighting listening, memory skills and attentiveness, these teachers also emphasised the importance of recalling information and factual knowledge. Academic progress and success depended on the learners having a high degree of concentration and their cooperation with the teacher: *"I remember copying from the board endlessly – only the teacher had a textbook …You learnt through listening"* (Teacher 1B) "*…we were taught to pay attention"* (Teacher 1C); *"It taught me how to be a good listener. It trades on one method. Especially comprehension – you rely only on your memory – there is nothing else to refer to"* (Teacher 1F).

Teacher 1D's views are particularly interesting, because his recollections of how independent he had to be in order to gain access to the curriculum and his equation of memory with "thinking":

> *Even though we would not have the textbooks, it was not the main issue. You would hustle around to get the information and you would even go to the extent of going to somebody in high school to come and help you. You really made an effort. The learners [today] don't have to use their memory and the learners are lazy to think.* (Teacher 1D)

Clearly this teacher (and perhaps many other learners like him) required alternative strategies beyond classroom listening and the copying of notes. For learners who could not concentrate well or remember what had been imparted, school became a matter of negotiation with other learners. Memorisation was hard work for him (if learners today are lazy, it is because they do not have to memorise work). In his description, it shows that the effort embedded in memorisation is not separated from what should be the exploration of ideas, that is, thinking.

In schools, which were heavily textbook-driven, other dynamics emerge: memorisation and homework was associated with textbooks, and in some instances, there was a clear distaste for the content and the way textbooks were used: *"I didn't open them unnecessarily – they were very boring, especially because I did a commerce course."* (Teacher 2D); and *"Matric, I remember, the history book which was from Boyce, which*

was completely… we had to memorise and it was completely biased" (Teacher 4D); as well as*, "Everything was handwritten, and it had to be neat, because neatness was… So if you made mistakes you started all over again basically"* (Teacher 4E).

The sense that textbooks were part of a punitive and punishing system is probably a reason that these teachers cannot imagine using textbooks in different ways to what they experienced at school. Even when teachers extol some modern textbooks, they are clearly averse to the idea of textbooks as the main LTSM. The following quotation reveals a particularly strong aversion:

> *I actually really never wanted to become a teacher because it was such a terrible experience being at school. Yes, it was just about the textbook … or the teacher would write a whole board full of notes and you would just copy it down, like osmosis.* (Teacher 4C)

Whether learners did or did not have textbooks, their experience of copied notes, memorisation and "boring" work turned school into a mostly negative experience. In schools where textbooks were available, these became the same as copied notes on the board, where a teacher explained the textbook by using chalk and talk, and in many cases textbooks lost their appeal. Teachers who talked about their schooling often felt that the way textbooks were used went against the grain of "real" education. Some spoke in ways that suggested an inherent contradiction between textbook use and constructivist learning:

> *It was very textbook-based. What I missed and what I enjoy now that I do with the kids is all the group work. We didn't really have too much of that, and we didn't have that opportunity to discuss and share your opinion and investigate, like children do today.* (Teacher 4B)

Although there is a mixture of responses to textbook use in these teachers' personal histories, it is clear that textbooks were viewed as central to learning. This was the case even if the textbooks were missing, biased or boring, teachers were the central distributers of information and the most pervasive teaching method was chalk and talk. There seemed to be a sense that the learning programmes were cohesive and based on a visible "course" in schools where textbooks were available.

In both the interviews and observations, the contradictions created by a past where textbooks played a different role and were seen differently, emerge in the ways teachers

grapple with the place of LTSM and their own role. This raises the following questions: How central are materials? How do teachers make these materials accessible to learners? How do teachers prevent negative attitudes towards materials; how do teachers develop appreciation for materials? How do teachers create a balance between materials-centred and teacher-centred teaching? Where does cohesion lie: With the materials or with the teacher? Teacher responses to interview questions address these questions, at least in part, and how they experienced the use of LTSM during teacher training, often formed the basis of their responses.

Training on LTSM

As with studies in other countries, trainee teachers in South Africa are taught that good teachers do not rely on textbooks, but that they should rather produce their own materials (Ball & Feiman-Nemser, 1988; Crawford, 2004; Grossman & Thompson, 2008; Kauffman, 2002; Spielmann & Lloyd, 2010). This approach stands in contrast to both the teachers' own experiences as learners in the past and as teachers in a classroom in the present where textbooks are ordered and provided for use. Teacher education that promotes the idea of using your "own materials" usually links this idea to teacher competence, professionalism and pedagogical knowledge and skill. Many lecturers of student teachers believe that making materials builds the development of subject and pedagogical knowledge, because it forces student teachers to think carefully about what and how to present information. This means that student teachers are actively discouraged from using textbooks, because textbooks are dismissed as narrow, limited and too convenient for a student needing to build up subject expertise. Other arguments against the use of textbooks are that the one-size-fits-all approach of textbooks is dismissive of the diversity of learners; and, that the use of textbooks makes teachers lazy. Issit (2004, p 689) identifies the following as commonly expressed criticisms of textbook which cover the way in which knowledge is presented and represented in textbooks:

- the text and the learner are positioned such that *the learner has a subordinate* epistemological status;
- *what counts* as knowledge is clearly circumscribed by the text and, by default, alternative claims on the same knowledge arena or alternative lines of exploration are cast as irrelevant;

- *the purpose* of reading the text is end-directed towards an exam or outcome reflecting a goal-carrying social value.

Although there is decided merit in teaching student teachers the pitfalls of uncritical textbook use, it is also clear that no training in textbook use can be problematic.

Three positions emerged from the discussions on in-service training and these will be discussed under separate headings in the next section: teachers should produce their own materials; if the training course is structured so that a great deal of time is spent in classrooms, then teachers are taught to produce materials and work with textbooks; thoughtful university courses demonstrate how materials should be seen as discipline-specific, and generalisations about materials are not very useful.

"Good teachers produce their own materials"

Although a few of the teachers interviewed for this study produced their own materials, most of the teachers relied on selections of materials from various sources such as published materials and the Internet or on carefully scripted materials produced by the GPLMS. In their discussions about the production of their own materials during pre-service training, the teachers usually referred to the making of posters, games and flashcards. In other words, these materials are supplementary to the kinds of materials available in textbook form. There was only one teacher who talked about the creation of materials, such as, effective worksheets or information booklets. Other teachers learnt to create material once they were employed teachers, and did so through trial and error and working with colleagues, but mainly they drew from existing materials.

There may be an argument that this kind of pre-service training provided, led teachers to think about the quality and content of published materials in a more critical and concerted way. However, as is evident in the quotations below, it is clear teachers were encouraged to find ways to circumvent the lack of materials, rather than to make substitute materials:

> *Training taught me to be flexible and think for myself. I had to work out for myself how to do things. They taught me how to make my own materials, using any useful materials – waste materials and your own charts – not fancy charts. I am so proud of Soweto College, they really taught us. You become creative and innovative. It was not just an affordability issue – you are taught to improvise.* (Teacher 1F)

The discourse in the above quotation indicates how creativity, improvisation and innovation is linked to the making of own materials. Student teachers were clearly taught that flexibility and independent thinking were divorced from a dependence on textbooks.

This is echoed by teacher 4B:

> *My materials were mainly things that I could easily access. It was about improvising; it was about being creative. So, it wasn't about which textbook you could use, how to switch on the OHP, and those kinds of things. What we looked at was what the learner could use and what the teacher could use that were easily available, which was not necessarily always paper, or something that needed [an electrical] switch to work.*

In other instances, the substitution of textbooks was clearly the aim: *"Our lecturers [from Wits] didn't believe in textbooks – we never worked with textbooks. We had to go to the library and research on our own and make our own materials"* (Teacher 4A).

This suggests a narrative of the teacher as an independent judge of what may be suitable for pedagogic purposes. Lecturers, if asked, might well deny an intrinsic aversion to textbooks, but they could claim that independent research is a necessary strategy for trainee teachers to improve their content knowledge and to give careful thought to their pedagogic practice. In addition, it provides teachers with the skill to devise their own materials if commercially produced materials are unavailable or unsuitable. Trainee teachers, however, experience these instructions as a drive away from the use of textbooks. It seems that lecturers dismiss the reality that most practising teachers almost inevitably have to work with commercially produced materials. There is an assumption that through the creation of their own materials, the trainee teachers will develop a sense of how to judge materials and how to use commercially produced materials.

As Teacher (1D) said in relation to training from the GDE: *"We were told not to rely on textbooks – we needed to use a variety of resources. It was part of OBE – we called it micro-wave training – it was so quick."* This demonstrates a ready compliance with and acceptance of an OBE position that discourages the use of textbooks. The teacher shows that she has internalised the notion that a variety of resources needs to be used. Her criticism of OBE is for the cursory training, but she does not question the pedagogical content of the training. OBE and the use of many different resources becomes an integrated notion in this teacher's mind.

For ideological and strategic reasons, the GDE under OBE shied away from textbooks. The ideology dictated that independent, creative and progressive teachers could instil independent, creative and progressive thinking in their learners. As a strategy, it aimed to use teachers' knowledge and understanding of their learners to remediate where there were gaps and problems in the education system by finding materials that would inspire and suit their learners. An inflated notion of the teachers' capacity created a strategy that not only failed, but led to a further deterioration in learners' performance. Many teachers felt at a loss for strategies on how to proceed (Robinson & Soudien, 2009, cited by Soudien, 2013, p. 116).

Many students are encouraged to make resource portfolios as part of their undergraduate degree. This is not only for the purposes of teacher training, but also to alleviate some of the pressure full-time class teaching demands when new teachers no longer have the time for the careful work required to make resources:

> *We had professional studies which was taught by very effective lecturers, that you would actually sit and make learning materials, make overhead transparencies, work cards and flash cards. I suppose we should really still be working with flash cards and those kind of things, … But there was a lot of how to make those things and how to create lettering using coins, coin lettering and that kind of thing.* (Teacher 4C)

Professionalism, effectiveness and meticulous care in the making of materials are interwoven in the way this teacher talks about the creation of materials. But at the same time, she states that she no longer works in this way. The examples she mentions (overhead transparencies, work cards and flash cards) are the kinds of materials that are easily computer generated or substituted. However, there are also pedagogical choices that exclude the use of aids like flash cards that the teacher believes may reflect negatively on her practice.

Some teachers felt the kind of resources they were made to produce was not particularly valuable:

> *No, we weren't trained, well we weren't trained but we had to make a lot of games, I remember. I don't know whether it was the one section that it was always bingo games, and it was all the language across the curriculum.* (Teacher 4D)

While teacher 4D talks in snatches and without much consistency, she reveals how materials development probably was linked to education theory and the affordances certain materials could offer (language across the curriculum). Her experience appears to have remained in the theoretical realm, since she does not see it as part of "training".

What emerges from the above quotations is how absent the training on materials is in terms of how to produce them, how to judge them and how to use them. There is no mention of textbooks and the training on the production of informational materials is minimal. It seems that this training with materials was more part of the subject content training than on learning how to use materials in the classroom. The materials the student teachers are required to make feeds into a skills-based approach. This is remarkable, because it leads to them designing specific tools for particular skills. It seems that knowledge and meaning-making are far removed from the kinds of materials teachers talk about when they reminisce about their training on materials.

"One week at school and one week on campus"

One teacher (2D) spoke enthusiastically about her training with materials, which reveals, importantly, that the structure of the training course was a large determining influence:

> *We were trained on teaching materials – how to do research and make worksheets. My job is a breeze for me – I have been taught at college whatever I need to be a teacher. One week at school and one week on campus – a whole year to gain valuable experience. A week really gave you an opportunity to teach. What an excellent college [Embury College].*

Teaching materials are linked to research and worksheets. As the teaching year unfolded, the student teacher had the opportunity to think about, read, research and test materials. In line with what teacher training facilities promote, she made worksheets, which were based on other materials and on theory. The practical aspect of the course is why the teacher is enthusiastic, because she feels that her preparation for the classroom was exemplary, as it released her from the pressures that many other new teachers experience.

The reality of constant classroom work meant that the course had to home in on the immediate needs of teachers. This meant that the structure of this course avoided the criticism that students do not have sufficient practical experience to prepare them for teaching. Although the teacher stresses the importance of a week in the classroom, it was

equally important to have a week to reflect on the problems and issues with the feedback of peers and experts in order to prepare for the next week in the classroom.

In this course, the student teachers seemed to develop a greater degree of understanding of what the classroom requires, and they were also not working with hypothetical materials. Instead, they were dealing with the materials that were either prescribed or available and used in a classroom. These students will encounter both the difficulties and advantages of working with prepared materials before they enter the classroom as practising teachers. They will also learn how to incorporate these materials into their own lesson preparation: how to decide what needs to be discussed; what the learners' can do as a self-study; what to emphasise; and, what to underplay (and why). They learn what the kinds of affordances are of different texts and to develop strategies on how to vary their approach to teaching them.

"You have to think about the discipline"

Teacher 4A spoke extensively about the kind of training she received at Wits in three different subject areas: isiZulu, mathematics and history. She illustrated how the use of materials in the three areas differed substantially and how she became aware to think in terms of the discipline and subject area when it came to materials. In relation to isiZulu as a second language, she recounts:

> *So, their approach is an oral one, and it is all with…focused on material, on games, on changing activities, so you're keeping the kids interested all the time. It's not a writing thing as much, that's the end process, but it's so much a talking/engaging thing. So as such you're engaging with material all the time. But the material is secondary… Ah, ja, ja… Because the talking really is... It's the talking, the talking. But everything is reinforced by… Through materials. Through materials. So you'll be talking and then their approach is a listening, speaking, reading, writing thing, so you're always engaging with material even if it's talking. So, while you're listening, you're reading. Okay, that was a thing for second language thing, so that you're hearing the correct pronunciation. That textbook stuff is like the end of the lesson kind of thing to reinforce everything with the writing. Because they've been through all the talking and the games and whatever. And they've also got readers.*

What this teacher describes is what she understands to be a communicative approach (strongly linked to second language teaching), where the emphasis is on contextual learning and meaning-making, rather than on formal grammar-based learning. Heugh (2013, p.15) describes how many teachers "misunderstood [this approach] to mean an emphasis on spoken language rather than reading and writing". In the quotation above, the teacher acknowledges the need for materials, but relegates them to the periphery. Her description of second language teaching is interesting, because it resembles what teachers understand teaching in all subject areas should be in classrooms where English is the LoLT but not the HL of the learners. She captures clearly and eloquently how teachers have interpreted a communicative methodology for second language teaching where it becomes possible to avoid reading and writing. The methodology becomes the legitimation for a limited engagement with literacy. This is in contrast to the methodology, as conceptualised by socio-cultural and ESL theorists, who explain that reading and writing are pivotal skills that need to be practised extensively, but in a contextualised way that resembles the practices of everyday experience (Canale, 1983).

In relation to mathematics, teacher 4A emphasised working with concrete materials, by *"starting everything with concrete apparatus and working with concrete apparatus"*. Whereas in history, materials need to be approached very critically, as she stated: *"Let's start with children being more critical about what they're hearing. We're looking at sources. We're looking at skills like chronology. We're looking at sources like classifying, detecting bias in things."*

The nuanced and distinct ways of working with materials described above is significant. It is indicative of how important a part of pedagogical training the use of materials ought to be. The same teacher said how most teachers, who she had encountered as an HOD, gave little thought to how materials have different functions in different subject areas. There was an easy and lazy reversal to using chalk and talk, while working with selected texts. The way this teacher discussed how materials are used in most classrooms points strongly towards the importance of careful and considered training of student teachers in this area.

None of the discussion on pre-service training contradicted the idea that teachers are convinced that making their own materials is preferable to working with textbooks.

Sometimes the making of materials is taught so that such materials can act as a way of compensating for the lack of textbooks and funding for materials. It is also seen by lecturers as an embedded method to teach PCK.

The teachers interviewed were, by and large, neither trained to use materials, nor did they see the use of materials as a way of professionalising their practice. Materials, unless these are specifically highlighted for discussion purposes, are an almost invisible, but necessary part of the teaching and learning process. In the case where a teacher was carefully made aware by her training course of the affordances of specific materials for different subject areas, she was unequivocal about the benefits. She felt it had made her circumspect in the way she not only approached and chose her materials, but also in the way she taught.

While teachers have not have been trained to use textbooks, and avoid their use in the classroom, nevertheless they work extensively with LTSM of various descriptions.

Practices that are interwoven with LTSM-use that warrant discussion

The most striking finding to emerge from the teachers' interviews is the pervasiveness of their working with visual materials. Other areas that teachers talked about in distinct ways are the role of reading, what learners found useful and interesting, the role of language, and how they compiled their own materials.

The centrality of the image

There is no question that the traditional notes on the board and "chalk and talk" has undergone a metamorphosis. It has changed into the presentation of "entertaining" visual material in the front of the classroom as the basis for teaching and (sometimes) discussion. But it is important to note that only the materials have changed, and not the style of teaching. The teacher remains the provider of information, and the one who presents it, so teaching remains a front-of-class activity. This is a practice that I observed as uniform in most classrooms, and it is almost always the first thing that teachers talk about when they discuss the materials they use during interviews.

In schools where the GPLMS have been instituted, the charts across all levels in the grades observed in this study are extremely popular as the following quotations testify: *"My best thing is to work with charts – I absolutely love working with charts"* (Teacher 1B); *"I use mainly posters … the combination of visual and mother-tongue helps with understanding"* (Teacher 1F); *"I look for materials with pictures that are close to home"* (Teacher 1C); *"They [the learners] used to go out into the garden and plant. Now learners look at pictures … to gain information"* (Teacher 1E).

When teachers comment about the materials they use, they couple these remarks with pedagogical reasoning. Teacher 1B is an exception, because of the way she forefronts her preference for working with charts with personal inclination. In all the other instances, the teachers explain the use of visuals as an aid or teaching tool in relation to language issues, prior knowledge or knowledge acquisition. For the most part, these teachers feel they need to justify their use of an LTSM from a pedagogical basis.

Yet, there is another clearly articulated rationale for the strong focus on the visual. Learners are easily bored and it is in the teacher's interest to keep them captivated: *"The visual is very important – children watch television all the time, so you must have something visual for them. It is the only way to capture their interest or attention"* (Teacher 2B). Teacher 4B echoes this view when she says in relation to her preparation: "*… so that's how I would select my material, age appropriate, what's going to be interesting to the children, is it in colour, is it visually interesting, is it easy for them to listen to?"*

In the above quotations, the teachers' discourse shifts to deal with the learners' interests, but specifically as a concern to keep the learners attentive.

The phrase, "visual learners", occurs repeatedly in the interviews. In independent schools, the use of technology is strongly evident as a tool to assist with keeping of learners interested by using visual imagery. This emphasis on the visual, as the preferred teaching and learning mode, was also shown by the use of iPads, and film on smartboards (also found in public schools), and through the use of magazines, newspapers, posters, and various realia.

The powerful emphasis on the visual has a number of implications, if this is to be the preferred method of teaching and learning: Images are subject to as wide (if not wider)

range of interpretive and decoding mechanisms as text; and visual literacy becomes an important skill that needs to be foregrounded and understood. Although not directly questioned on how, or whether visual literacy is taught in any overt way, the teachers' discourse around the use of the visual consistently reflected a need to compete with television and other forms of screen entertainment in order to maintain the learners' interest. However, there was no emphasis on the importance of adopting a critical stance towards the use of the visual mode in the classroom, and in which learners are immersed from a very early age at home.

A second implication is that the use of the visual mode places the teacher in the role of provider of edutainment. A number of teachers spoke about gauging the level of engagement in their classroom and then hurriedly switching to something new and captivating if they feel that the learners are losing interest. The use of smartboards makes it possible for teachers to change the visuals: *"I won't stay long on one thing, because I can see the boredom,"* said Teacher 2A. Teacher 2B echoed the same strategy, although she was talking about using a variety of materials, rather than just a smartboard. Teachers were adamant that the key to good teaching was keeping the learners interested by using a variety of visuals. There was one teacher (4C) who spoke about the value of letting learners "struggle" to understand so that they developed persistence. She said that it is important for learners to find the stamina and courage to deal with ideas they find difficult, but she also worked hard to find ways to engage the learners:

> *That even if you're going to struggle, you're so excited you go, I'll read this. And that's great. That's really worth it. That's worth the struggle. I think with most lessons that I teach, I think of what would excite them, how do they become engaged with this.*

A third implication is how a focus on the visual imitates learners' exposure to screen modes (especially the Internet), where through hypertext, visuals, advertisements and other distractions, linearity is often removed. This means that logic and coherence are not necessarily clear. The way teachers suggest they move from visual material, topic explanation and activity to avoid the learners' being bored, is much like following hyperlinks on screen, where the user only pursues what is interesting. Such pursuit often moves rapidly from related idea to related idea, but there is no clear line which necessarily follows the pattern in which ideas are linked. Some theorists argue that this is a more

realistic representation of how thinking takes place and that linearity oversimplifies ideas and topics:

> Reading, in hypertext, is understood as a discontinuous or non-linear process, which, like thinking, is associative in nature, as opposed to the sequential process envisioned by conventional text. Associative thinking is more difficult to follow than linear thinking. …Conceptually, hypertext has a place, I think, in any environment where it's necessary or desirable to bring together large, complex, highly diversified bodies of information in such a way as to emphasize their interconnectedness. (Slatin, 1990, pp. 874-881)

However, it can also be potentially confusing and misleading for the learners if care is not taken to create a measure of logic and coherence. It also goes directly against the grain of what teachers claim they find appealing in textbooks: the cohesion and structure (Valverde, et al., 2002).

A fourth implication is that reading and writing is pushed to the periphery of teaching and learning. As will be seen in the next section, teachers are deeply concerned by what they feel is learners' resistance to reading. Most teachers also confess that writing is reserved for a short period at the end of a lesson or for homework. This means that reading and writing do not form the core of classroom experiences for most learners in primary school.

The written word

The major reason why teachers do not use textbooks in some classrooms is that they believe that the learners are unable to use the textbooks. Teachers' discourse ranges from concern for learners who have reading difficulties to a more fundamental problem, namely, that the learners are no longer interested in reading books. The discourse often interweaves these two notions: it moves from a pedagogical perspective to a sociological one, and sometimes includes an affective rationale too:

> *Learners don't enjoy their textbooks. The learners cannot read. They are not interested. They lose interest because they can't read. Mostly, they don't understand what they read. Learners will never ask to read, or read as an activity. There is a problem at lower grades. They are not taught to read and English is a problem. This does not mean they do not understand the information, but they cannot interpret questions or they don't have the language to answer the questions. When you see*

higher order questions in the ANA [Annual National Assessments] – where they have to explain or have to say 'why' – they totally do not understand. They run away from these questions. They cannot do this. The learners are [sounds like] inept [more likely 'unable'] – they don't even go to the right page. The textbook bores them. They don't even notice the same content from the textbook to that which is on the board. If it is on the board, they concentrate on what I want to talk about. If you say 'look at the book' everything is just congested there. (Teacher 1C)

In the quotation above, the teacher moves from enjoyment of reading (an affective rationale) to reading and language problems that originate in early learning (a pedagogical perspective). It may be argued that the teacher sees the reading problems as the reason for the learners' "boredom" and that the learners are overwhelmed and intimidated by text. When text is mediated, then the learners are more receptive. But there exist such substantial language barriers that, even with mediation, only limited results are achieved.

In the following quotation, the teacher includes a sociological perspective:

Learners don't like reading. Perhaps because of TV. Those who can read often don't read with comprehension. They just read for the sake of saying the words. Grade 7s read at grade 3/ 4 level. The learners like phones, TV, etc. A book is not entertainment – it's not interesting to them. They just want to watch TV. The books don't really interest them despite colour and illustrations. Many learners just read so slowly. (Teacher 1F)

It is noticeable in the discourse how often learners are placed in a deficit position. But this teacher appears to recognise that this is an ambiguous position, and hedges it by using ideas like the "interest" and the "entertainment" value of textbooks.

Aside from the concern over the learners' limited reading capacities, the teachers talk about the learners' reliance upon them:

They find the textbooks boring – they can't really understand some of the content. They don't read. Some children have a problem with reading, but mostly, they just don't like to read and …they don't know how to work with the textbooks independently. They have no idea what is going on there. They don't understand and rely on me. They want to see what I am going to do. Some (a few) get it. (Teacher 2B)

The significance of the above quotation, is the phrase: *'... they want to see what I am going to do'.* This shows that the teacher is tacitly acknowledging two factors: the centralised position of the teacher during the lesson, and the dependence of the learners on the visual and enactment strategies that the teacher employs to hold their attention.

In independent schools, reading resistance is described in highly charged or defeatist terms. The issue is not that learners have reading problems, but that reading has a limited hold on them: *"Children don't like reading. They hate reading"* (Teacher 3A) and *"Very few of them read"* (Teacher 4D).

It is evident from the above quotations that textbook avoidance is usually part of both learners and teachers' behaviour. At no point do the teachers question their own role in how the learners approach texts.

Teachers express a major difference between learners who do not read because they cannot, and those who do not read because they will not. Many teachers accept this as a reality about which little is to be done and a constraint within which they work: *"I make my own worksheets. I make the textbook easier. I summarise stuff. The textbook level is fine, but some children don't find it so easy to work out the textbook"* (Teacher 2D).

The ways in which this teacher describes her role indicates how the mediation of the textbook has shifted by transforming the textbook into something shorter and easier. The teacher defines her role as the judge of what learners ought to be exposed to in the classroom (note how the first three sentences all begin with "I"). In textbooks, the authors decide how to present the knowledge to learners, and this is based on what knowledge the curriculum developers decide is appropriate and desirable for learners to learn. In a parody of the "broken telephone" game, where the message becomes distorted or transformed through countless repetitions of what participants thought they heard, learners are at the receiving end of curriculum content. They receive a message that might be extremely curtailed from the curriculum's original intention. In the final analysis, the message hinges wholly on the skill, capacity and motivation of the teacher.

For example, the following teacher states: *"I make my own worksheets to try and make it more exciting. It gets boring for anyone – we all need diversity"* (Teacher 2B). The teacher's motivation is excitement, variety and change, and she also employs language related to political correctness when she refers to "diversity". This usage hints at a wider

disagreement than with textbooks that have a too narrow focus. In describing the necessity for exciting worksheets, and linking it to everybody's need for diversity (note how she includes herself in this situation), she is embracing an ideological position of both inclusivity, and a recognition of "otherness". In other words, she is suggesting that she is able to accommodate the needs and levels of her learners because she knows them and can consider their uniqueness as well as how they fit into a classroom community, and that this can be reflected in the way she devises materials for them.

According to another teacher, *"Every second year perhaps we change our worksheets…I tweak them, and I'll find another example of the same thing"* (Teacher 3B). The focus on the periodic revision of worksheets speaks more to appearances than substantive changes. However, she does consider their relevance and whether the examples are up-to-date, although it seems that the changes are there to provide evidence of her having updated the worksheets. It is interesting how she uses pronouns. At first, she includes herself as part of the teachers' community who adopt the same practices (*we* change *our* worksheets). But when it comes to the changes that are effected, then it becomes an individualised exercise (*I'll* tweak them and *I'll* find another example). In other words, how she mediates and enacts the material is part of her own domain, whereas the practices relating to the making and changing of worksheets belong to a wider domain.

Teachers across the spectrum agree that learners are resistant to working with educational texts. A few teachers insist that learners read in class under their guidance, so that at least some reading of academic texts takes place. But there are important distinctions that need to be made too. There is academic reading and reading for pleasure: while younger readers may embrace the reading of readers with great enthusiasm, older readers can find academic texts intimidating and boring.

If reading is a problem in primary schools, then it follows that writing is equally problematic. In government schools, most writing seems to be restricted to the filling in of short answers on worksheets. A sharp contrast is the far more extensive writing that is expected of learners in independent schools. This difference may be the result of class sizes and the amount of marking that writing demands. Many government school teachers described how worksheets are convenient because learners mark their own or each other's work:

'Marking is not too bad. They sometimes mark their own work. They often write work in frames, then they can mark each other's work' (Teacher 1B).

The use of worksheets is a practice that OBE helped to establish, when variety and the development of "own materials" were encouraged. Worksheets, typically, call for short answers that draw on simple recall or technical skills. Another facet of OBE, carried over into CAPS, is the idea that individual and peer evaluation should be integrated into learning. This was meant as a way to teach the learners how to evaluate their own performance and to measure themselves against and learn from the performances of their peers (RNCS, 2003, English First Additional Language, p 3). It has always been a common practice for learners to mark their own work and that of their peers, but this is clearly not what curriculum developers had in mind. They provide definitions of peer and self-assessment that suggests a critical/evaluative element. However, teachers often refer to the mechanical marking of worksheets as self or peer assessment.

Reading and writing are marginalised during class time, and also largely assigned to homework time, which has serious consequences:

Now it is possible to talk for a whole period. Now writing is a much smaller part of the lesson. The learners are supposed to do their writing at home – but they are so bad at doing their homework – there are exceptions, but most of them – they just ignore the homework. (Teacher 1D)

Underlying the sentiments expressed above, is a strong distinction between "now" (and the silent) "then". The teacher is reflecting on how the structure of lessons has changed and with it the obligations that fall on both teachers and learners: teachers must talk and explain, while learners must do their homework. Lessons are for listening; after school is for writing. Note how the teacher speaks confidently about fulfilling her obligation as a talker, but how learners are not doing their share of the teaching and learning process. The result is that learners do precious little writing.

Teachers describe the quality of their learners' own writing as generally poor:

The writing therefore has also deteriorated – it is difficult to stimulate their imaginations. When you ask them to write creatively, they always relate something they have watched on television – that is disappointing. The lack of reading really

affects their performance – there is a definite drop in performance and you can see it with every new year. A definite decline. (Teacher 2A)

The teacher in the quotation above juxtaposes creativity and performance. She would like her learners to deliver original, imaginative and individualistic work. But she is constantly monitoring their performance, and has some standard in mind against which she measures the decline. As with the textbook and reading resistance, the digital media (a factor outside the control of the teacher) is seen as the underlying reason.

I know we used to do quite a lot of creative writing at that time [when the teachers were at school], and the creative writing was very, very good. That's one thing that I must say that compared to what it is now, the creativity is actually going down. (Teachers 4D and 4E)

These teachers, too, lament the decrease in creativity. In this instance, they are measuring the learners against the kind of creative writing done when they were at school (approximately two decades ago). It is significant that they stress how much writing they did, and their praise for the quality of writing is effusive as they described it as *"very, very good"*. It may be that they are romanticising the past, but it also reflects the changed environment of today in which reading and writing has a different nature and status.

The remarkable extent to which teachers have internalised a discourse about their own and learner deficits that shifts responsibility to external and environmental factors is striking. Mainly media, the digital world and the powerful emphasis on the need to entertain (that teachers assume) and to be entertained (that learners expect) are reasons given for reduced creativity, reading and writing, although teachers also talk about curricular issues as factors, in other parts of their interviews.

Worksheets are used by HODs in government schools to monitor the learners' classroom work and whether the teachers are keeping abreast of the curriculum. In independent schools, it seems that parents fulfil these functions:

And parents always complain … they place a lot of emphasis also on worksheets and they judge the work by the worksheet that you give out. Because some of their kids can't write properly and you find a lot of the kids nowadays, I don't know what it is, they can't write and they can't transcribe from the board to their book any more like we used to. (Teacher 3B)

There is a sense of teachers under siege. The above quotation exposes how the measure of teachers' success is not in their own hands. As one of the teachers' predicaments that Cohen (2011) describes, it is only through the success of learners that teachers' efforts are validated. Parents, school management, departmental officials, colleagues, the media, and even learners stand in judgement of teachers' efforts, which is almost always under public scrutiny. The small note of desperation above is underlined by the comparison the teacher makes between her own school experience which included a great deal of writing, especially copying from the board, and the lack of writing now. Ironically, this is likely to be the same measure *("like we used to"*) that the parents who complain are using too.

The way teachers talk about reading and writing in their classes indicates that they feel it is beyond their capacity to remedy some of the problems and issues they raise. Fear of learners' boredom and an inability to compete with technology seems to dictate in large measure the way they view the learners' resistance to certain forms of reading and writing. But there are some forms of reading that are popular.

The learners love these… at least some of them love some of these

Teachers report that readers are very popular among grade 4 learners:

> *Learners enjoy reading [readers]. Learners evaluate the books – by drawing different faces [happy, indifferent and sad]. Learners don't like it if the books are difficult, but they enjoy the stories. I used to read to them – but now I don't any longer. They read by themselves. They explain to each other. They get upset if they have to interrupt a story.* (Teacher 1D)

In the above teacher's discourse about learners and readers at a public school, it is remarkable how the teacher suddenly becomes decentred. In the quotation above, every sentence, except for one, starts with "the learners" or "they". Reading is what learners do with books, not what teachers do with learners. The teacher expresses this explicitly when she says: "*I used to read to them – but now I don't any longer"*. Instead, the learners' independence and cooperation comes to the fore, as well as their assertiveness. The power of narrative appears to be a strong motivator and learners become engrossed in ways that are not dissimilar to watching television. But there is the added satisfaction that they have the ability to decode words and to make their own meaning of them. Their interest was

shown by Teacher 1B: *"They enjoy short, simple readers – these are very manageable. We have a book exchange system; and also from libraries. They bring books to school".*

The learners' independence extends beyond the reading of readers in class. They wanted to share their reading experiences with others through book exchanges. This speaks of active participation in reading in ways that is seldom witnessed in the classroom. The teacher, in the quotation above, uses the first person plural pronoun "*we*", and this expresses her solidarity and unity with the learners in this pursuit. Together they explore books and the finding of more books. The quality of recently published readers may be a factor to consider:

> *"…but the readers are a different story – they have improved a lot and these are so enjoyable and they have made my learners very keen to read. They really love these readers. They battle with some words but once you explain they make progress".* (Teacher 1F)

There is an obvious pride and pleasure in the way this teacher describes the learners' improvement and their enthusiasm for reading that runs throughout the quotation, with the use of words, such as, "*improve"*, "*so enjoyable"*, "*keen*", "*love*" and "*progress*". The teacher's own sense of accomplishment is tied to her learners' success, and she clearly experiences a sense professional success.

There may be strong incentives (moving up reading levels) and a sense of camaraderie (through shared reading) that propel the enjoyment learners have in early readers. But this is something that disappears in the later grades. From reading books as a daily occurrence in the early grades, it seems reading books becomes a rare occasion, where learners work with a published book in classrooms, and even rarer for them to read a story book in the later grades. The curriculum prescribes exposure to different kinds of texts, but does not prescribe 'setworks' at primary school level.

In suburban and independent schools, there seems to be a different pattern. The following teachers are discussing older classes (grades 5 to 7) and also children who have greater access to technology:

> *The numbers of children who enjoy reading and writing has dropped considerably – and I think it is technology and lifestyle. But some of them love reading. Some of*

them walk from one class to the next while reading. But that is very few. (Teacher 2A)

In the quotation above, the teacher pins the decline in reading and writing on technology and lifestyle. It is striking how she describes those who love reading as participating in an activity that happens outside the classroom. The implication is that if a love of reading has not been established by grade 5, then it appears that it will not be cultivated or nurtured in the classroom. Reading becomes an enjoyable activity for those who were hooked on reading early. However, another teacher provided a different perspective about a grade 7 class:

Some pupils like to read – my classes are loving the Shakespeare [a book of summaries and simplified re-telling of popular Shakespeare plays]. But some learners really struggle a lot. (Teacher 2C)

There is a certain poignancy about this comment, because this teacher's classes "*are loving"* what he reads and mediates with them, and this shows that both keen and struggling readers reap the benefit of shared reading. However, the struggling readers are dependent on him and the implication is that independent reading would be difficult for them, regardless of their enthusiasm for the book.

The issue of technology as the reason for a decrease in the enthusiasm for reading is expressed even more strongly in independent school circles: Teacher 3A talks about strategies she uses to encourage reading, the first of which involves the creation of books:

So, they have to find facts, they have to extract information, summarise, put in their own words, and they're very proud to say that I have made my own book. And then they put a picture of themselves to say that that's the author and they make their own ISBN number, and a little review about themselves. And then what we have done in the past is that they take these, the grade 7s will go to the grade 4s, and they will read to them.

This teacher adopts an academic and technical approach that highlights the processes of book production through to reading: Learners have to engage with higher order activities (extracting information, summarising and paraphrasing); they learn to understand the purpose of ISBN numbers; and, the promotional value of the author's photograph and biographical review. Finally, they have to experience the audience's reaction to their

product. The teacher clearly wants learners to understand the prestige of authorship and to understand reading in a holistic way. By recognising an author's perspective and effort, the book as independent product, and the interpretation and modification that takes place when there is a reading of the text, the teacher wants her learners to look at books in a different way. She proposes two further strategies to encourage reading:

> *I'm hoping next year as an extra mural, to run a reading club for those that maybe are a little bit physically limited, and would prefer to just on a social basis, sit with a cooldrink and chat about what they've read and maybe read to us. The other thing that we thought about doing is spotting. You've been spotted. And filming them, and we've got a communal video screen outside the library, so when someone walks past, just to encourage the reading, because our children are averse to the library.* (Teacher 3A)

She wants learners to be part of a book club, where they can develop camaraderie and a team spirit around reading and the sharing of reading experiences. In other words, she wants learners to have *"a social basis"* for reading enjoyment. There is the tacit recognition that reading is a solitary experience and that learners want interaction: by creating a "club" for discussion or performance, the learners can find greater motivation to read.

The second suggestion of "spotting" and filming readers plays into the notion of validating reading and giving this activity a profile that suggests status and prestige. It also uses the ideas of popular radio competitions and "selfies" to promote reading. The teacher wants to try to bring together a number of modes to make readers feel that they are "modern" and important.

The learners' aversion to the library speaks volumes. In the school where this teacher teaches, the library and the computer centre are in different locations. The separation of facilities makes it possible to see where most learners choose to spend their time, and there were many learners in the computer centre. In the second independent school, the computers and library were combined into a media centre, which is very popular and well-attended. It is possible that libraries will not regain their central part in learning institutions, because even avid readers of books may prefer to have access to e-books. Once schools choose to introduce tablets, then books are more likely to be downloaded

and library books may lose their appeal. For some teachers, it is "reading" rather than the handling of books that is important:

> *They're sort of a contrast between those that really like reading…there's a difference. And there are some children that have to be pushed to read. And I think the idea is to trick them into reading, and they don't realise that they're doing it. Like if they're reading on a screen then they don't realise that they're doing it.* (Teacher 4B)

In trying to encourage reading, it is clear that teachers feel trickery or some incentive is necessary, and the trick seems to be to link reading to a digital source.

The teachers' discourse suggests that there is a distinction between readers and non-readers. But when they were questioned about this difference, teachers did not have ready answers for why such a distinction should exist. The consensus seems to be that constant encouragement can create greater enthusiasm for reading. Teacher 4C says she works hard to make reading exciting for her learners:

> *… a little girl came just now, and she struggles a bit with English, she said, please can I borrow one of those books that you showed me earlier on? I said, with pleasure. But she actually finds English a little difficult but she was so excited. They love reading. But I do think there's a huge shift… because the images they're getting so easily off on iPads and phones and things like that…*

The resistance to reading is an international phenomenon, and one that goes back to studies conducted in the nineties. Teachers in US schools talk extensively about the search for teaching strategies that avoid the assignment of reading (Bintz, 1997). Parents and teachers discuss whether the kind of reading that happens on social media constitutes adequate reading practice and preparation for academic purposes, since this is the only kind of reading many young people are prepared to do (Rich, 2008). But the resistance to reading is not restricted to school education alone. In tertiary institutions, there are reports and studies that show a decrease in the amount of reading students are prepared to do, and even academic staff report that they would rather read short articles (sometimes no more than the abstracts) than academic books (Carr, 2008). If the resistance to reading is as pervasive as reported, which is also the case in the USA (Rich, 2008), then educationists need to think long and hard about how to deal with this issue:

> "We are not only what we read," says Maryanne Wolf, a developmental psychologist at Tufts University and the author of *Proust and the Squid*: *The Story and Science of the Reading Brain*. "We are how we read." Wolf worries that the style of reading promoted by the Net, a style that puts "efficiency" and "immediacy" above all else, may be weakening our capacity for the kind of deep reading that emerged when an earlier technology, the printing press, made long and complex works of prose commonplace. When we read online, she says, we tend to become "mere decoders of information." Our ability to interpret text, to make the rich mental connections that form when we read deeply and without distraction, remains largely disengaged. (Carr, 2008, from http://www.theatlantic.com/magazine/archive/2008/07/is-google-making-us-stupid/306868/)

It may be that a revision of how learning takes place (through audio-visual means) rather than reading needs to be considered and theorised for pedagogical purposes in different ways. This is how Selwyn, Crook, Noss and Laurrilllard (2008) characterise what they call Web2 learners, that is, learners who are used to interacting with digital technologies:

> Web 2.0 technologies are also associated with significant shifts in the nature of contemporary learners. A popular characterisation of upcoming generations of learners is that they are 'digital natives', who have grown up in a world of computers, mobile telephony and the Internet, and now lead lives that are reliant upon digital media. These digital natives are seen to stand in stark contrast to older generations of 'digital immigrants' who adopted digital media later on in their lives, having grown up without them. Commentators talk of young people as 'homo-zappiens', 'net savvy' and 'power users'. Some commentators talk of the 'internet generation', 'generation M' (media), 'generation V' (virtual) or 'generation C,' referring to characteristics such as connected, creative and click. Their digitally-mediated everyday lives are characterised by constant change, with technology lying at the heart of mobile, reflexive, 'liquid' lifestyles. These digital natives are thought to expect technology-assisted fluidity in all aspects of their lives, including the ways in which they learn and are educated. They are thought to have distinct expectations of education that involve learning which is personalised, accessible on-demand, and available at any time, any place, or any pace. As Marc Prensky warned at the turn of the century, "our

students have changed radically. Today's students are no longer the people our educational system was designed to teach".

If reading is to be encouraged, then teachers need to be given more sophisticated strategies and skills to bring learners on board. Bearne (2003) believes that reading should be taught as part of a conscious strategy to introduce multimodality. This leads learners to understand that texts and various other modes work together. By matching mode with purpose, this creates more effective texts and different possible readings. Learners, according to Rich (2008), can be drawn to novels and stories, but "deep reading" that involves academic text is very difficult to acquire. Several theorists (Bearne, 2003; Walsh, 2006; Wolf, 2008) make the point that reading for pleasure increases fluency, but like internet reading, it does not necessarily make the engagement with academic text easier. In other words, learning to inference, paraphrase, summarise, reflect and connect ideas comes from a different kind of reading which requires a different way of thinking about the teaching of reading.

DBE workbooks

Teachers were unanimous in describing the learners' enthusiasm for the government workbooks, which was a welcome and surprising finding. However, almost all the teachers do not use the workbooks during their lessons, and send the books home with the learners for their homework. While many learners ignore the homework, they do not ignore the books. It seems that they enjoy reading and looking at these workbooks. The format is interesting with its full colour double page spreads about a single topic, which consists of a variety of texts, pictures and activities. These workbooks appeal to learners, because the topics are concise and manageable. Teachers use the workbooks as a primary source for the preparation of the ANA. This is how teacher 2A describes her use of the workbook:

> *I use the DBE workbooks ...extensively. The children love the colours and the children find the little cartoon character who acts like a substitute teacher very exciting. We work from it every week. They work in that on an ongoing basis. It is wonderful that it covers all the aspects. It allows me to focus on one thing (say, essay writing) and to know they can go home and deal with reading, speaking,*

viewing, etc. in the workbook. The school also uses it for preparation for ANA. I use it more as an enrichment programme.

There is a contradiction between the first and the last sentence. The learners work in these books *"on an ongoing basis",* but the teacher dips into it from time to time for "enrichment" purposes. This means that she is relying on the learners' enthusiasm for the workbooks to cover a range of additional material. It is significant that *"the school"* uses the DBE workbook for preparation for ANA. The institution endorses the government-produced books for revision so that the learners are able to perform well in the government's tests. The discourse suggests compliance with departmental directives, rather than with an engagement with pedagogical concerns. If, as the teacher says, learners find the workbooks so appealing and "*it is wonderful that it covers all the aspects",* then it makes pedagogical sense for teachers to use the workbooks more.

It seems that there must be valuable opportunities to capitalise on the enthusiasms of younger learners for storybook reading and DBE workbooks. By doing so, learners might carry this enthusiasm for reading (of all kinds) into the later grades. If workbooks are popular with younger learners, then it might be possible to transform this enthusiasm into working with more sophisticated learning materials as these learners progress. Some teachers, such as Teacher 3A, stated that they felt learners were deprived because of the lack of textbook use in schools: *"Certainly, for the child who's absent, or even for the child who's present and needs consolidation and extension, for me the validity of having a textbook, far outweighs teacher devised worksheets"*.

Teachers do not often talk about LTSM. During an interview in which she was asked to reflect on her use of LTSM, this teacher used powerful language to recognise the value of a textbook. Words like "*validity"* and "*far outweighs"* are an unequivocal endorsement of the usefulness of textbooks as opposed to the use of teacher devised worksheets. This teacher works in a school where the principal has decreed that no textbooks may be used, because the principal (and, by extension, the staff) have embraced the idea that textbooks are limiting and undesirable. It would appear to be a position that or the teacher, on reflection, is perhaps too rigid.

Another teacher at a different school may use textbooks if she so wishes. Teacher 4B reaches the following conclusion about the value of textbooks:

We still want to be able to teach children the skills of using a book. And I think we might be moving away from those basic skills. And for those children who want to move ahead, who want to see what's coming next, and who also want to move backwards and see what they've done, it's a perfect revision tool as well. So, I think, relying on the teacher to hand out materials all the time, is a little bit of a setback, especially if you want to move at your own pace, you want to have a textbook.

Certain teachers realised during the interviews how they have defined their pedagogical practices in opposition to using textbooks. However, teacher 4B talks about the acquisition of skills and the book as revision tool, she also acknowledges the value of the textbook for the learners' independence.

The most marked finding that emerges from the data is how learners have extraordinarily limited access to the curriculum courses they are doing and are fed information in a piecemeal fashion by teachers as each new topic or skill emerges from the teachers' own programme or from the curriculum. When the learners do have access to whole books, then there seems to be a sense of ownership of the books and learning too. It is possible to direct one's thoughts about what went before and what lies ahead when a textbook is used, instead of concentrating only on the material at hand.

The language question

When questioned about the impact of language issues on the use of LTSM, teachers discussed issues surrounding language, but they steered away from LTSM. This was partly because they believed that their views on language made it clear that the use of LTSM required extraordinary and very substantial mediation. Predictably, grade 4 presents a significant problem as far as LoLT is concerned where English is taught as a First Additional Language (FAL). When English is introduced across all subjects as the LoLT, and all reading and writing has to be done in English, then the teachers find that the learners fall behind substantially. Teacher 1B gives the following reason: *"They speak in their mother-tongue all the time. It is a struggle to get them to speak English".*

The teacher's use of the word "struggle" as a noun is noteworthy. To struggle is to engage in an action, and it suggests immersion in a process. When "a struggle" becomes an object, usually more in the hands of the teacher than the learners, then it suggests an insurmountable obstacle. This idea is reinforced by the phrasing the teacher uses, when

she says "*to get them to speak English',* which suggests the use of force. The discourse is suffused in language which brings to mind resistance and struggle. But it also goes against what is natural for the learners, namely, speaking in their mother-tongue (MT). The concept of 'mother-tongue' is riddled with ambiguity and inconsistency. In many households, and classrooms the use of an African language is denoted as a 'mother-tongue' whether or not this is the language (or the main language) spoken by learners in their homes. In communities where many of the different African language groups of South Africa, as well as languages from other parts of Africa make up a communication matrix that members have to negotiate through the use of any number of strategies, 'mother-tongue' could be seen as a relatively loose term. There is a sense that teachers feel responsible for making an unnatural transition happen which is too difficult for them to accomplish:

> *Language is a problem and you have to explain in mother-tongue – you think they understand but then you find they don't. Code switching is not allowed in English [although the teacher could not explain where this rule comes from]. The combination of visual and MT helps understanding. But still, the Grade 7s read at grade 3/ 4 level.* (Teacher 1F)

This teacher grapples with a number of pedagogical issues: how to explain effectively; how to use MT (even if she thinks she should not); the role of MT in the learning of English; the role of MT in combination with other means, such as, the visual; and, the raising of reading standards. It is clear that for her (and other teachers) there are no ready answers. The only reference that could be construed as having a link with LTSM is the use of the visual. This combination of MT and visuals is a common strategy for the early teaching of second language.

For reasons that are unclear, some teachers are averse to the use of MT in the teaching and learning of English. Although the following quotation appears to be a direct response about learning materials, Teacher 2A side-steps the question and returns to the question of MT in a number of non-sequitors: *"Language barriers have an impact on the use of materials. I actively discourage any use of vernacular – even exclamations' like 'eish!' – I mark them down. But it is interesting – they do better in Afrikaans".*

If language barriers have an impact on the use of materials, then why does a teacher take such a punitive position on the learners' use of MT? The teacher in question does not speak an African language, which may be a factor. But when asked why she adopted this position, she replied that it was "bad" for the learners' development of English skills. Deducting marks for an exclamation that is commonly used by many South African speakers of all language groups, is indicative of an attitude that places little validation on MT skills. According to Cummins (2000), this is a key ingredient for ESL learning. It is interesting that learners do better in Afrikaans than English, but this may not be so surprising, since African languages and Afrikaans are all phonetic languages (as opposed to English). It appears that this teacher is aware of language's crucial role in learning and in LTSM-use. However, the specific issues around the learners' use of MT language for ESL learning are unclear to her, whereas she feels comfortable in following a specific pedagogic mode that promotes immersion in English, as the LoLT.

There could be a range of reasons for this aversion to the inclusion of MT in English teaching. For example, technical reasons, such as, the limited opportunity for transference of linguistic structural knowledge from African languages to English, or the teachers' limited knowledge of different languages. Another reason is pedagogical: where the belief that some form of immersion is a sounder method for learning a language; or, the belief that there needs to be a concerted effort at practising the language being learnt and the use of MT somehow tempts learners away from practising English. Finally, there are social reasons: the avoidance of linguistic exclusion because not all the learners are able to understand one another's MT languages; or, for bureaucratic reasons, such as, the belief that the education department decrees a certain way of teaching languages. Teachers were unable or unwilling to say why they discouraged the use of MT, and it may be that all the above reasons co-exist and intertwine.

In schools where English is taught as a HL even if English is not in fact the Home Language for the majority of learners, there remains some issues with language – from government through to independent schools – but these are less pronounced:

> *'With the English I found that the expectations [of CAPS] of what they wanted the children to know, was a bit too high. Especially when it came to the abstract concepts. We've got to take into account that, yes, we are teaching English as a first*

language, but there are children with various levels of English, they're speaking different languages, so for a child at this stage to learn what onomatopoeia is, it's not necessary. However, we teach them sound words. So we may not use the terminology that CAPS is telling us to use, but we're doing it in a way that reaches the children' (Teacher 4C)

The subtext of the quotation above is that teachers not only have more sound judgement of what is appropriate content for learners, but they are also more able to present these in ways that are learner-friendly and relevant. In discussion about the curricula, teachers often express mistrust of levels, and are dismissive of how curriculum developers understand learner constituencies. 'They' are out of touch with what is the right level for learners, whereas 'we' know how to circumvent the curriculum while still complying with it.

While teachers of English HL feel the curriculum is too difficult for some of their learners, teachers of English FAL have the opposite view of that curriculum. A teacher who teaches grade 3 expressed her criticism of the FAL curriculum as having too low a level and inadequately preparing learners for English as the LoLT in the following way:

'... Even the periods are less…and it frustrates me a lot because they are in grade 3, and when they move from grade 3 to grade 4, everything that they are going to be doing in grade 4 is in English. So why are we depriving these children of this English which they are going to be using in grade 4? It just doesn't balance… Like, there is a part where they say, you give a learner marks for pointing, whatever, you say, point at the orange, and then you sit there and the child is pointing at the orange, and then you're supposed to give marks for that. To me it's like, seriously?! Do I have to give marks for that?'

When the teacher says the curriculum 'frustrates' her a lot, the language and examples she uses are symptomatic of that frustration. She clearly feels disempowered by a curriculum where she sees evidence of inadequate preparation for her learners, and yet she is bound by it. Her tone (*To me it's like, seriously?!)* suggests that the curriculum makes a mockery of both teacher judgement and learner needs.

Teachers do not specify what the impact of language is on LTSM-use, and this silence and evasion of a discussion on language and LTSM is significant: by and large teachers

use LTSM which avoid major language problems. This inference is based on the teachers' position on how problematic many learners find the use of English in the classroom. In relation to the use of materials, there is a strong argument in favour of worksheets, where single words or short phrases are used to indicate learners' understanding and as a way to deal with the learners' limited knowledge of language. Learners complete worksheets quickly, and teachers ensure that they are completed correctly by spelling out words or dictating answers. This creates the façade that the work is completed and understood. While on the contrary, teachers are merely ensuring that HODs or officials are satisfied that there is coverage of the curriculum, and there is no guarantee that effective learning has taken place.

What it takes teachers to compile their own materials

It appears that the bulk of teachers' preparation is spent on the making or choosing of materials for worksheets. In GPLMS schools where teachers use the lesson plans and materials provided for the programme in English and mathematics, they make worksheets for other subjects by using photocopied materials from a variety of textbooks. The teachers' choice of materials is guided primarily by the curriculum, but also by what they believe is accessible and of interest to their learners. This is shown by Teacher 1B: *"I can choose materials and photostat what I like."*

If the curriculum makes teachers feel disempowered or frustrated, then the ability to choose materials and photostat whatever they like provides a counterbalance. The above statement speaks of authorisation, enablement and empowerment, where the teacher is decidedly in charge, and has the equipment at hand to implement those choices. This discourse runs through all the interviews with the teachers about the compilation of worksheets, for example, Teacher 1C states: "*I make notes and photostats for the learners. I have books for my own use. One book does not have enough information. I look for material that is close to home."*

Teacher 1C depicts the difference between teachers and learners in a direct way: the learners have "photocopies", while the teachers have "books". She provides a pedagogical reason for the making of photocopies, because "*one book does not have enough information"* and she explains her selection criteria of using "*material that is close to home"*. The phrase "*close to home"* suggests qualities, such as, comfort,

nurturance and knowledge of her learners. But it is also ambiguous, because these qualities could equally apply to her own needs. Teachers fall into the trap of selecting materials with which they feel comfortable, even if the materials do not necessarily meet the curriculum's objectives.

The teachers in suburban and independent schools also photocopy worksheets for learners, but these are usually materials they have devised by combining and reworking materials from various sources. As Teacher 2A said: *"I create my own worksheets most of the time. We stick very closely to the government document. Topics are flexible, but we stick to the programme. I work largely in themes."* This teacher outlines the precarious balance between her creativity and having to comply with the curriculum. Her preferred style of teaching (*in themes*) is one which encourages the integration of different ideas and fields of knowledge.

Another teacher describes in more detail how she sources materials for her worksheets:

> *I make my own worksheets to try and make it more exciting. I use textbooks and Internet for my worksheets. I also choose more than two sites – three or four. Like, for example, I'm aware that Wikipedia cannot always be trusted as an accurate site because it can be changed. I mainly google, but don't visit education sites with ready-made lessons… We have a choice when it comes to textbooks. I chose Vivlia because of the maps…they are better. The Platinum had good information. For me content is more important than appearance* (Teacher 2B).

Teacher 2B is deliberate and methodical about the content she prepares for her learners, and she states explicitly what her criteria are for choosing certain sites and books. However, she is unaware of the correspondence between her own endeavours and the criticism she levels at Wikipedia. She, too, is modifying materials into a mould that fits with her own preferences, biases and understanding. In many ways, this lies at the heart of the problem with teacher-created worksheets as the primary LTSM. The teachers' choice of materials is the chief domain where they can exert their professional prerogative and judgement. This is the domain where they are able to bring together their knowledge, experience and evaluation of their learners, of pedagogy and the subject area. Although teachers sometimes work together as colleagues, there is an almost infinite mix of what individual teachers produce for the purpose of facilitating learning. It stands to reason that

the quality, trustworthiness and comprehensiveness of worksheets will vary a great deal. The following quotation shows how teachers have numerous ways of approaching their research for the production of worksheets:

> *I go to sites –mostly education sites, unless a comprehension is based on a specific topic. I have basically always used multiple sources regardless of curriculum. Mostly they [the learners] just work off worksheets. Very rarely will you find a teacher just working from one textbook – usually we use 4 or 5; and from these you pick the best activity. For me the level of learners is a big determining factor.* (Teacher 2C)

This teacher specifically talks about the wider teacher community as having adopted this practice to make their respective worksheets. But he also describes his practice as the way any thoughtful teacher operates, and then specifies his own criteria for worksheet production ("*for me*…"). In other words, he affirms both community and individual practice among teachers. By doing so, he implies that teachers have different criteria, as is evident in the following quotation:

> *I am mainly focused on what I need to do for the classroom – but I also do my own personal research. Because I want to supplement the textbook. I make my own worksheets. I make the textbook easier. I summarise stuff.* (Teacher 2D)

Teacher 2D touches on three important and interesting issues: firstly, she refers to the educative possibilities for teachers who put together their own worksheet. When she does "*personal research",* it is almost inevitable that some knowledge expansion takes place. It is difficult to determine the usefulness and extent of such knowledge, although visiting general sites suggests the seeking of additional subject knowledge, whereas visiting educational sites suggests the search for pedagogical knowledge. When theorists (Davis & Krajcik, 2005; Hiebert & Morris, 2012; Morris & Hiebert, 2011) talk about Educative Curriculum Materials (ECM), they mean the systematic learning that may occur through the use of a coherent and complete set of materials. They are hopeful that new routines and understandings will build up during the course of working with such materials and that teachers will experience these as a way to develop pedagogical content knowledge. However, the kind of knowledge expansion described by Teacher 2D resembles the same kind of fragmented learning that learners often experience when they use a worksheet

which is meant to consolidate their knowledge. These materials are often based either in the domain of factual information or it is an activity-based application of the lesson's topic, but not necessarily both. These are also put together as and when the need arises. In other words, although some PCK development may take place as teachers put together worksheets, it is unlikely to be consistent and coherent.

Secondly, the teacher refers to the supplementation of the textbook. "Supplementation" is a misnomer, because the teachers in this study replace the textbook. If it was a supplementation of textbooks that learners share with teachers, then it would be different and, in the eyes of many theorists (see Torres & Hutchison, 1994), a desirable pedagogical practice. The way the teacher describes how she "*supplements"* the textbook, makes clear that she simplifies and reduces the textbook, rather than adds to it. There is a belief among teachers that their worksheets are an improved and expanded version of what learners would have available to them if they had access to textbooks, although this is patently not the case in the majority of instances.

Thirdly, the teacher embarks on a transformative process. She remakes the curriculum and resources into something more understandable to her learners: "*I make the textbook easier. I summarise stuff".* Part of the art of teaching is to explain the curriculum in an understandable format for learners. It means working with complex knowledge in ways that breaks it down for learners so that they understand the knowledge, but without losing any of its complexity (Cohen, 2011). Presenting learners with summaries and simplified versions of textbooks, leads to a loss of complexity. It also loses a sense of the wholeness of what needs to be learnt. A discourse that places learners' difficulties at the centre, rather than confronting these difficulties, comes dangerously close to reinforcing them.

In independent schools, teachers spend an inordinate amount of time on developing materials. According to Teacher 3A: *"I'm having to work to half past eleven every night, I kid you not."* They also talk about the enormous amount of research that is required. An interesting feature is the close cooperation between teachers, because they appear to work in line with collegial professionalism, which is described as follows:

> …many teachers are starting to turn more to each other for professional learning, for a sense of direction, and for mutual support. The role of the teacher has expanded to embrace consultation, collaborative planning and other kinds of joint work with

> colleagues. In a world of accelerating educational reform, this kind of working together can help teachers to pool resources, and to make shared sense of and develop collective responses towards intensified and often capricious demands on their practice. It also calls for new skills and dispositions, and for more commitments of time and effort, as teachers rework their roles and identities as professionals in a more consciously collegial workplace. (Hargreaves, 2000, p. 162)

This "consciously collegial workplace" has advantages beyond the combination and extension of collegial knowledge and individual strengths. It also serves to diffuse some of the tension around the teachers' "predicament" (Cohen, 2011) whereby the success of teachers is dependent on the learners' performance and cooperation. The predicament remains, but the teachers approach teaching problems together and they succeed or fail together. They design materials with one another:

> *We have our CAPS documents, and we've got to cover a certain amount of work and the type of work we have to cover is all there… And we follow that. We work in teams and so we're split into 3 terms and we say, this term we're going to concentrate on newspaper articles and story-telling, whatever. So, we work according to that.* (Teacher 3B)

The sense of cooperation in the above quotation is strong, and it shows that team work trumps the individual efforts, which is seen in many other environments.

Teachers 4D and 4E, who teach SS, also work together as a team. They teach the same lessons at the same time, set tests and activities together and mark together. Here they describe the process of compiling a booklet on the theme of Egypt, which is prescribed in the CAPS document for grade 5:

> *So, we actually went to the library, used the books that they had… And the Internet, and just put our own notes together. [We] did our own research and came up with a totally different booklet. I think it flows, the booklet will flow more, and then they've got a record of what they actually have to…especially if they've got to write tests and things, it's much easier if they've got that booklet.* (Teachers 4D and 4E)

These teachers produced an informational booklet, which is a vastly different project to producing a worksheet, or a series of worksheets. It demanded a measured and carefully considered search for materials that learners could read and also use for study purposes.

The booklet needed to form a coherent whole, and have information that covered the requirements for the curriculum. At first the search started in a tentative manner as shown in the first part of the quotation. But once they describe the result of their labours, the emphasis falls strongly on the coherence of the booklet they produced. This is shown by the repetition of the word "*flows"*, the description of the booklet as a "*record"*, and the phrase "*it's much easier if they've got that booklet"*.

The effects of using the booklet spread, because the grade 5 English teacher in the same school said the following:

> *For example, the grade 5s are doing Egypt. So then I looked at plays involving Egypt, and we looked at miming involving the building of the pyramids and so on. So then I would use the Internet quite a bit, so the Internet is a huge resource for me. I look at pictures and look at also diagrams and also maps of Egypt. I would bring in what the SS teacher would use, but in a more relaxed and creative way in the drama environment.* (Teacher 4B)

The quotation provides evidence of how cross-curricular work takes place. It is interesting to note how the teacher ventures into the territory of SS ("[I] *look at also diagrams and also maps of Egypt")* and finds connections with her own field of expertise – English and drama. She makes a clear distinction between how she sees SS as more technical (with the references to diagrams and maps) and her own field as "*more relaxed and creative"*. Teacher 4B points out how the cross-curricular aspect does not only bring different perspectives to the same subject, but it also creates a different ethos associated with the different disciplines. This teacher moves rapidly between the different groups (the learners, herself and the SS teachers) involved, which signifies the cooperative bond that exists between them.

The head of the intermediate phase at an independent school discusses the development of materials for the phase:

> *Well, we did, as a team. We looked around at stuff, we looked at what was on offer, and it was all of the books. I can name, I can sort of see the books, and in fact because I've worked with so many of them it's just like, I can often say, oh, I need that picture or whatever, and be able to identify exactly which book it came from. So it was working in teams, it was me sort of supervising the people in the*

intermediate phase, so that was grade 4 to grade 7. Getting all of those things happening. (Teacher 4A)

Teacher 4A foregrounds the issue of management that makes up teamwork, because when teachers engage in collaboration, then another level of management is required. A great deal of this management resides in making decisions about materials, as to what input is desirable and how to evaluate the suggested materials. It also means that shared materials lead to further discussion among the teachers, as they work with the materials. This is similar to the way that Morris & Hiebert (2012) envisage the building of an archive of lesson plans that develop through teachers' constant commentary on the lesson plans. When asked about teachers' responses to team work, Teacher 4 A was categorical: *'They are very enthusiastic'*. The enthusiasm mentioned by the teacher shines through in the language she uses: her recollection of materials she worked with in the past; how intimately she knows them; and, especially in the phrase, "*getting all of those things happening".* The emphasis in the quotation above is on the use of a variety of books, but the Internet is an important resource, as well.

A significant difference between teachers in independent schools and those in the government sector is their extensive interest in education sites. In the interviews, there was only one teacher in a government school who used education sites on the Internet whereas all the teachers in the independent schools talked about how valuable they found education sites:

The ones I particularly enjoy: 'education.world', I think, and 'education.com'. There's various ones. Sometimes they'll have…like one website will have something really great for one topic that you're researching, and then it might not be so good for the like 4s and 5s. So you might find something specific for that particular topic for that. So I tend to use a variety of websites and I use a lot of drama websites as well: aboutplays.com, which is wonderful. (Teacher 4B)

The kind of positive language used to describe websites ("*enjoy", "really great" and* "*wonderful"*) stand in contrast to the usually lukewarm responses to textbooks and other printed materials. In the discourse around materials, teachers show a strong preference for variety and an extensive choice of materials. This was also shown by an interest in reading the blogs of other teachers:

> *Teacher websites…blogs…technology sites where they're focusing on iPads and their use in technology, because that's a huge thing. One of the forums that I use is called Edmodo, so the kids…it's got an appearance like Facebook, but it doesn't have any of the kind of drawbacks of Facebook and it's a private, closed off thing, but the kids can interact. So they can interact through me. So there's no kind of chance of… Sort of distraction and… Well, abuse or bullying, or anything like that, because everything they say I have to approve. You can see. And in fact, they don't realise it. So that…there are teacher's forums on there. On Facebook there are a couple of things that I follow, like a thing like the Helpful Art Teacher. That really is your oyster, you go everywhere. Everywhere.* (Teacher 4A)

A large part of the attraction of the Internet is the infinite choice teachers feel they have. Another reason is the connections the Internet helps to forge with other teachers, because there is a sense of solidarity in the sharing of materials. The above quotation evokes the liberating effects of such a choice, which includes the list of options, such as, the "*teacher websites", "blogs", "technology sites", "forums" and "Facebook"*. Then the graphic idiom about the Internet being a teacher's oyster indicates how comfortable, helpful, rich and inviting the digital world is for many teachers. In addition, this teacher invites her learners into this world through the safe version of Facebook and lets them experience the interactive possibilities of the virtual classroom. She has found a way where she can control and monitor the learners' responses in a way that includes her.

The teachers recognised the challenge of developing materials, and this is never an easy process. Those teachers who are less confident will mix and match materials that are already in the format they want. Other teachers spend hours doing research and they work in teams to create worksheets that they feel are of good quality for teaching. The use of intensive research has the inevitable consequence of increasing subject knowledge. When teachers include education sites in the research process, then this possibly leads to increased pedagogical knowledge too. They also have a notion of what constitutes good materials to guide their thinking, when they devise LTSM.

LTSM that are important to teachers

Comprehensive English Practice (CEP) was an example of good materials that was frequently mentioned by the teachers - somehow this textbook is like the Holy Grail to

many of them. I came across unsolicited praise for this textbook from teacher after teacher, and especially from teachers in better resourced schools, but this was true across the spectrum. It was interesting that the focus was exclusively on the content, which was "*interesting"* (Teacher 2A), "*challenging"* (Teacher 2C), "*comprehensive – as it says in the title*" (Teacher 3B) and "*varied"* (Teacher 4A). The following quotations help to explain why the teachers are so attracted to the book. Teacher 3B said about its organisation: "*So the ones that I look at now for the grade 4s, it's still Comprehensive English Practice, and they've got the comprehensions nicely set out, there's the language area, everything is very well organised."* While Teacher 4B approves of the coverage: *"That's still a good book, I can still open that book and say it covers everything well."*

It is noticeable how muted and measured the descriptions of print materials in comparison with internet materials. The teachers seem to appreciate that that there is much so choose from in CEP and that it gives more than what is required so that they can select and "play around" with the texts and activities in the book. CEP is written for the HL market, and teachers, in all likelihood, would find that the book's standard is too difficult for most additional language speakers. But there is a strong nostalgia for the book, and its precise structure and detailed content. This appears to override the concern for additional language speakers, together with the fact that many of their learners are urbanites and immersed in the world of English media.

CEP has been on the market for a long time (since the early 1970s), as teachers remember the book from their own school days. The book has changed along with the political and curriculum changes and perhaps it is reassuring for the teachers that the book has survived all the turmoil of the last two decades. Many teachers remember the "older" books fondly because, they say, these books contained so much more information. They like that everything was in the book, so that it is like a one-stop shop.

Another book that one of the teachers was particularly enthralled by was Beryl Lutrin and Marcelle Pincus's *English Handbook*. This book provides all the rules concerning English grammar, and a host of other useful information in a colour-coded, reader-friendly and condensed way:

There is a very good English textbook – that does not define any grade – it is the science of the language – you can use from grade 1 to university – I have a copy that I refer to all the time. (Teacher 1D)

Cover of *English Handbook and Study Guide* by Beryl Lutrin and Marcelle Pincus

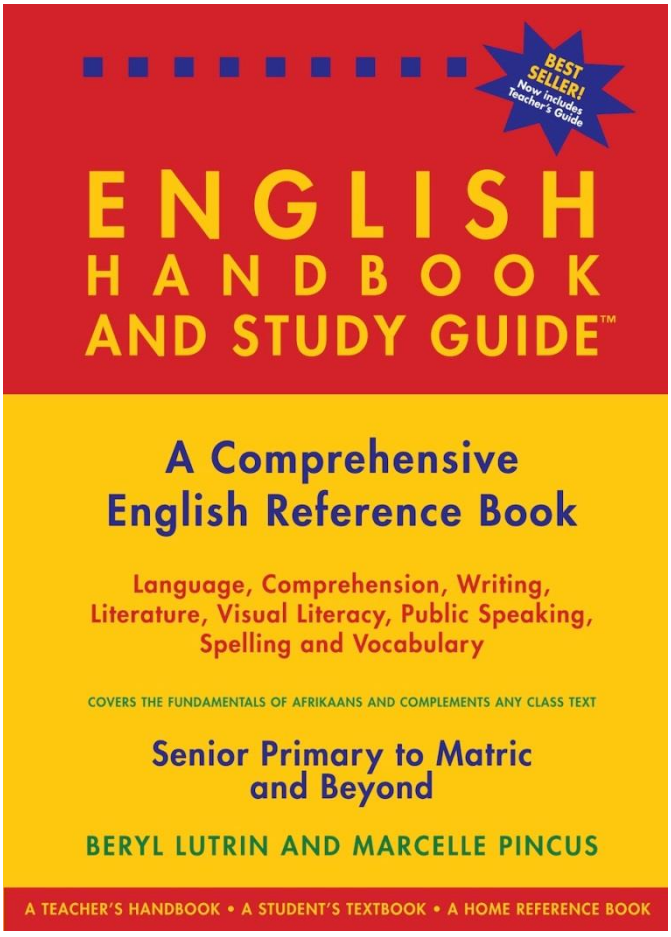


Figure 21 Cover of English Handbook and Study Guide by Beryl Lutrin and Marcelle Pincus

The cover of the *English Handbook and Study Guide* makes clear how the book attempts to cover all bases for the study of English in an academic context. It is reassuring for teachers and students alike, and it is also punted as a "home reference book". This suggests that it will appeal to parents too as a tool for helping their children with their homework. During this research, it emerged quite strongly that teachers want detailed coverage, which is given by a useful, "comprehensive" book.

This means that older books with a great deal of information reassure some teachers: *"I still adore old grammar books that are carefully structured"* (Teacher 1F). Textbook nostalgia is vividly expressed in the word "*adore",* and the reference to a "careful structure" speaks to the security this provides for the teacher.

Books that effectively function as reference books, as well as textbooks, also eliminate the necessity to consult a lot of different resources: *"The problem with modern textbooks is that it [they] give[s] poor coverage. It is simply good business for publishers. If you don't provide proper coverage, teachers need many textbooks"* (Teacher 1G). This opinion reveals a great deal about how some teachers view the idea of consulting several sources in order to construct learner-appropriate materials. Ascribing a profit motive to the publishing industry for the deliberate production of inadequate textbooks, is somewhat ironic. Publishers vie desperately for approval from submissions committees so that books will be bought for learners (Koornhof, 2011). Textbooks are written primarily for the learners. However, it is expected that teachers study and use textbooks with learners. The notion that textbooks are for teachers, indicates how the use of LTSM has been transformed in the South African context. If LTSM are approached with the understanding that a single textbook is "a problem"; then the openness and learner-friendliness that publishers strive for in "modern textbooks" is interpreted as "poor coverage" by the teachers. The density of older textbooks allowed teachers to select from within these textbooks, whereas the streamlined modern versions appeared too thin. Teachers feel the need to search for a greater variety and selection from more textbooks.

There are other books that the teachers approve of, such as, good readers. Teachers are concerned about finding reading material that will appeal to the learners. When asked what their criteria are in selecting materials, a host of contradictory ideas surfaced. Some teachers focus on finding entertaining, colourful and engaging materials, whereas others find good content and coverage important. In some instances, teachers look specifically for material that will have contextual relevance for learners: *"I like 'real-life' situations in books. They must be immediately relevant – not about foreign countries"* (Teacher 1F). It is important for this teacher that the learners feel represented in the book – through the kind of language and visuals that are used. Publishers are aware, particularly in the case of South Africa, that old-style textbooks excluded not only information but included

visuals that represented whites only, so this is an issue of redress in the new textbooks (Koornhof, 2011).

Another possibility is that the teachers themselves want to work with materials which are familiar. The phrasing of the quotations above centralises the teacher's choice and preference. Many teachers have felt inordinately stretched by the policy and curriculum changes of the last two decades. The teachers are aware of constant surveillance and judgements on how they, or more accurately their learners, perform. The sentiments in the quotations above express a revised form of assessing accessibility and difficulty levels in textbooks – and the criteria seem to apply equally to teachers and learners.

Yet Teacher 1D has an opposite point of view: *"The textbooks that I enjoy have relevant topics but they broaden the world of the learners".* This comment displays an interesting tension between wanting close representation of the familiar and yet an extension of the learners' often narrow worlds. Teachers still need to find a starting point in the familiar for the learners in teaching materials as they move to new information or ideas. A similar tension exists between teachers who want visually exciting material to capture the immediate attention of learners and those for whom *"content is more important than appearance"* (Teacher 2B). Finding a balance between 'previous or existing knowledge' and excitement and novelty as an introduction to the new is a challenge both materials developers and teachers have to find.

There seems limited agreement on what teachers look for in LTSM, and it is not always clear whether teachers are thinking about their own needs or their learners' needs when they describe appealing LTSM. It appears that in the case of the learners, the teachers want mainly variety and visually exciting material. But for themselves, teachers require content-rich materials. There is also the recognition that these criteria should not be mutually exclusive. This is an area that could benefit from further research.

The role of the curriculum in LTSM-use

Teachers were asked about whether the curriculum changes over the years had had any effect on the way they used LTSM. As indicated below, the current narrative framework of the CAPS curriculum makes teachers feel insecure, inadequate and harassed. According to teachers, this is because the curriculum's specified, tight time frames, sends a clear message to teachers that coverage (and its monitoring) is of primary importance.

In addition, the focus on testing means that the teachers are constantly under scrutiny. They are made to feel responsible for the learners' results, but they also know that quality of teaching is secondary to coverage. For some teachers, this is a demoralising situation. By working with visual material and oral presentation (the modern-day version of chalk and talk), they know that this is the quickest way to get through the curriculum. But reading and writing require time and these skills demands depth in teaching. Coverage is usually prioritised at the expense of in-depth teaching.

Teachers have conflicting ideas about the CAPS curriculum. All the teachers interviewed agreed that the curriculum was too full and it was impossible to cover everything within the prescribed time frames. The result was that either they covered the work superficially or they added in extra lessons. This was summed up as follows:

> *The curriculum has thrown us out a lot – huge amounts of planning all the time and the constant ordering of new materials – the CAPS document is highly prescriptive and it is not always possible or practical to keep to the time frames. The layout – is not always possible – it is overload. The children cannot keep up and this was created as an ideal – it is idealistic. If you have 5 highly intelligent children in your class, maybe you could stick to it. But with close to 40 children, many of them not high achievers – it is a struggle.* (Teacher 2A)

The word "struggle" features constantly in the way teachers talk about their work and the structures that determine how they teach. This juxtaposition of struggle and idealism posits an interesting parallel to the military: the ways policy (informed by political and ideological issues) demands sacrifice, risks, and hardship from the foot-soldiers; they also feel far removed from the rationale of the policy; yet, they understand some of the logic implicit in the policy. An important element in the "struggle" is that teachers feel they have to sacrifice the many slower learners for the few faster ones.

Repeatedly teachers speak about learners who they have to 'leave behind' because of time pressures. Teacher 2C provides this insight:

> *'CAPS is overly ambitious, but it is not the standard that is challenging – the pace is a problem. There is a lot of pressure – it kills the teachers and the learners'.*

The first part of this comment links ambition, that is, desirable education outcomes with speed, rather than high standards. And it is this pressure that "kills" (a word associated

with struggle and war) teachers and learners – and by association – teaching and learning. Coverage is not the same as teaching or learning:

> *Then you lose focus – how do you know where to start? You feel so overwhelmed. How can you introduce new content if there is no foundation? That is the core of the problem. You get a wrong picture when you look at the ANA results. We are catching up and then it looks like we have not covered the curriculum. And then our learners fail that paper. If you analyse the levels of the learners you will find, perhaps there are 10 learners at the level of grade 6 in grade 6 or 10 learners at the level of grade 7 in grade 7. If you had to place these learners at their actual levels, you would see, they actually belong in grade 1, 2, 3 maybe grade 4. Our focus in teaching is to try to encourage understanding not volume. For example: If you give them a paper which says: Fill in the missing words, you will find they will produce as answers: in the first space – fill; in the second space – in; in the third space – the; in the fourth space – missing, etc. Such a learner has to lose interest. All they do is fail. You see the drop-out rate in grade 8 and 9. They understand they don't belong here.* (Teacher 1G)

The result of a curriculum, bent on breadth rather than depth, makes for distressing reading of teachers' dilemmas. This teacher's helplessness is captured vividly in the use of the 'how?' questions at the beginning of this quotation, because he does not know where to start if he introduces material that has no traction with the learners. For him, the exercise of 'teaching' becomes meaningless and mechanical. It becomes an exercise in satisfying the monitoring agents (HODs, the principal, department officials, the ANA system), rather than engaging meaningfully with the material itself. This is a broad generalisation which is only partially true, even in the underperforming schools. When this teacher says: '*Such a learner has to lose interest. All they do is fail',* he is talking about the learners, but inevitably it is also about how teachers experience this situation. Both teachers and learners are linked in terms of successful outcomes. There is a strong sense of the learners' disillusionment with the education system. If thirteen and fourteen-year-olds "*don't belong"* in classrooms, then by implication they do not belong in a society that values the skills and knowledge acquired through schooling. It seems that the learners "*understand"* that by dropping out of school they are also dropping out of a hopeful future.

There are no easy answers when it comes to curriculum in South Africa. When you have a bimodal school system (Venkatt & Spaull, 2015, p. 129) and a single curriculum, then problems will arise:

> "This finding [that teacher performance, across mathematical strands and grade band levels, is hard to distinguish between Quintiles 1–4, that is, across the poorest 80% of schools] adds to the growing body of literature in South Africa which finds that South Africa has two very different public schooling systems subsumed into one. This is epitomized by the bimodal distribution of student performance in South Africa which splits student achievement along a roughly 80:20 split with the smaller portion corresponding to the better performing subsystem of schooling".

OBE attempted to avoid this problem of different standards by allowing teachers unprecedented freedom to interpret the curriculum. It also did not have standardised tests to establish what learners had achieved at the end of a grade. Under CAPS, it appears that by providing volume, the teachers have a choice of how thoroughly they cover the curriculum. By just *"skimming the surface"* (teacher 1C), teachers satisfy those who monitor their coverage. But, as was so movingly explained by teacher 1G, the learners do not gain anything significant from such superficial teaching.

In independent schools, teachers refer to the curriculum, but seem to find ways to maintain previous teaching methods, styles and content:

> *So what I've done is that I've kind of drawn up like that old-fashioned tick sheet that we used to have. So I kind of went through, and it's like, okay, this is what they want, this is the minimum that they want, these are the sort of things they want. And I've kind of done it sort of as an analysis of, what is it in terms of what they want, in terms of the writing, what do they want in terms of the reading, what are the skills and so on.* (Teacher 4A)

This "tick sheet" means she can continue teaching how and what she likes, provided she has ticked all the boxes by the end of a term or a year. It is significant how this teacher describes the process she went through: she relied on her analytical abilities and her experience to produce a substitute curriculum that she has done "*for myself".* She adapts the curriculum to what suits her, and she has complete confidence in her own capacity to meet the curriculum standards, without having to follow the way it was designed. In a

real sense, she has internalised the principles of OBE, which gives teachers that exact kind of freedom – the meeting of standards without having to adhere to specific content or time lines. She gives "them" what "*they want"* but holds on to whatever suits her own needs.

Teachers 4D and E explained that the curriculum had little effect on their teaching:

> *... we had bits and pieces and then we put our own bits and pieces. So we used it but didn't use it, if you know what I mean. I think once you have got your own style, that it doesn't matter what anybody throws at you, you're going to keep that own style because it just works for you. And it works for the children as well. We haven't actually changed at all.*

In the above quotation, the teachers place strong emphasis on what they have, in terms of their own style and what works for them. These teachers do not allow the curriculum to dictate to them and they are not decentred by the curriculum. However, after further reflection, these teachers conceded that they checked the curriculum for assessment purposes. A similar idea was expressed:

> *If something was still working…so we haven't thrown out stuff that has worked just because it no longer fits into the curriculum. We've probably adapted, and I also have to try and fit in what I'm good at, and not try to stick to the curriculum and know that's definitely not going to gel with me and where I teach. I am trying to find that happy balance.* (Teacher 3B)

This shows how the discourse of teachers at independent schools is suffused with the confidence they have in their own judgement and skill. The curriculum is secondary to their own sense of what learners need. They recognise their strengths and refuse to dispense with what gives them professional satisfaction.

The place of LTSM in the education process

Teachers use words like *"very important"* (Teacher 1B), *"crucial"* (Teacher 2C) and *"absolutely central"* (Teachers 4D and E) in relation to the position of LTSM in the education process. But they have different definitions of what is important and why it is important. For the most part, teachers feel textbooks are important resources for the making of worksheets. The majority also stated that worksheets together with the GDE

workbook provided sufficient coverage for learners. A number of teachers felt that accompanying materials made the difference, for example, posters, flash cards, audio-visual materials and realia. However, textbooks for learners did not seem to be a priority as far as most teachers were concerned.

Some teachers, when asked directly, admitted that learners were disadvantaged by not having access to textbooks:

> *Look, I wouldn't say it deprives them, but they're probably like disadvantaged in some way because the textbooks, I mean, it's almost like having a teacher on hand. And yes, we rely heavily on the Internet and the iPads, and so on, but we still want to be able to teach children the skills of using a book. And I think we might be moving away from those basic skills. And for those children who want to move ahead, who want to see what's coming next, and who also want to move backwards and see what they've done, it's a perfect revision tool as well. So I think, relying on the teacher to hand out materials all the time, is a little bit of a setback, especially if you want to move at your own pace, you want to have a textbook...".* (Teacher 4B)

The tentative tone of the teacher is telling, because by saying "*I wouldn't say", "probably",* "*in some way",* this indicates a reluctant acknowledgement of the potential benefits of textbooks to learners. She also concedes that textbooks give learners freedom and independence.

Several teachers spoke about how textbooks helped them to interpret the curriculum and how this made teaching easier:

> *And ja, we did, I think the textbook helped sometimes when the [curriculum] document is too dense, where you just go, well what's in the textbook. And that seems to unpack it a bit at a better level. So that was helpful.* (Teacher 4C)

A key purpose of LTSM for teachers is to keep learners engaged in the topic under discussion. Posters or any visual materials are good, but audio-visuals in the form of smartboards or films are even better. Teachers are more ambiguous about tablets. Although learners seem to be pleased to use tablets, teachers prefer to have exclusive use of tablets for the purpose of demonstration to learners:

> *I love the pictures of the iPad. I think that's the main, to be able to get this ancient diary piece, how would I ever get that before? I would never be able to show them this ancient writing. And I had a few more pictures but then I thought I could just pace myself, but I thought that for me it has been incredible, that you could actually say, here is a picture of a virus. Or the other day I said to them, we're not just going to look at the sacraments of the Catholic church, we're going to look at weddings in all the different religions. And we looked at the Hindu wedding, there were weddings we looked at. I mean, it's beautiful. We were in the ceremony and the Buddhist wedding and the Jewish wedding. They were so excited. So I mean, in that way, it's a door that opens that blows my mind. But it's got to be well controlled, I think.* (Teacher 4C)

Tablets, like textbooks, place a learning tool in the learners' hands, and, according to the above quotation, independent learning needs to be "*well controlled"*. Learners working with tablets in the classroom engage with the tablet and not the teacher, which means that the teacher is marginalised.

Teachers talk repeatedly about the usefulness of LTSM to them as teachers, rather than for the learners. Learners share LTSM with teachers when these are used in front-of-class teaching, but otherwise learners are restricted to teacher-produced notes or worksheets. In independent schools, teachers encourage learners (and parents) to research topics for the purpose of extension and for presentation in class:

> *And so they [parents] will go out of their way to make sure that the kids have access to the right sort of materials that they need. And help them on computers … and it's very competitive as well. The kids are very competitive. Sometimes it's not so healthy but I'd rather have that than somebody who doesn't care.* (Teacher 3B)

Learners in situations where independent research is required, learn to access segments of information from the Internet, newspapers and magazines. This corresponds well with the way teachers make information available to learners through worksheets or visual materials. But research seldom means that books are consulted.

What does the teachers' discourse reveal?

There are two discourses that run parallel to each other in some areas, but come together in others. The two discourses reflect the existence of two unequal schooling systems

working under one umbrella. These discourses are manifest in the way teachers from quintile 1-4 schools talk about LTSM, as opposed to teachers from quintile 5 and independent schools. It is not surprising that these two streams have divergent ways of talking about LTSM, although the more interesting phenomenon is that there are certain overlapping areas in these two discourses. The following table provides a summary of the main elements of the discourse used by teachers about aspects of LTSM-use:

Summary of the main elements of the discourse used by teachers about aspects of LTSM-use

<table>
<tr><th>Area of discussion</th><th>Sub-topics</th><th>Discourse 1 Quintiles 1-4 public schools</th><th>Discourse 2 (quintile 5 public schools and independent schools)</th></tr>
<tr><td>Teachers' own school experiences of LTSM</td><td></td><td>Books were rare and highly desirable since these were seen to contain all the information necessary for success. In the absence of books, copied notes had to suffice. Academic success dependent on excellent listening and memorisation skills</td><td>A mixture of discourses, depending on race. Indian teachers enjoyed their textbooks and felt it gave them agency in their education. White teachers dismissed textbooks as boring and biased. Books were associated with homework and memorisation</td></tr>
<tr><td></td><td></td><td colspan="2">All teachers discussed how, regardless of whether they had textbooks, their classroom experience was based on "chalk and talk", that is, a teacher-centred, front-of-class pedagogy</td></tr>
<tr><td>Training on LTSM</td><td>"Good teachers produce their own materials"</td><td colspan="2">Training institutions, reinforced by OBE, promoted the idea that the creation of teachers' own materials was part of professional practice. This was premised on the idea that teachers develop better PCK if they make their own materials and that they can cater for the learners' specific needs. It also supports the idea that neither teachers nor learners should be dependent on single sources of published materials</td></tr>
<tr><td></td><td>"One week at school and one week on campus"</td><td></td><td>Only classroom experience prepares teachers for LTSM-use. When this is accompanied by input from experts, then teachers can become more confident and skilled</td></tr>
</table>

	"You have to think about the discipline"		LTSM-use differs from subject area to subject area and trainee teachers need to be made aware of the differences. Such awareness can change their understanding of LTSM and teaching practices
Specific practices interwoven with LTSM-use	The centrality of the image	"Talk and chalk" has mutated into "show and tell", because teachers feel that they have to compete with television and digital media for the learners' attention. Teachers define their role primarily as having to capture the learners' attention through variety and interesting images. Audio-visual is the most desirable form of presentation, but in the absence of audio, the teacher fulfils that role	
	Reading and writing activities in the classroom	Learners resist reading because either they have difficulties or because they find it uninteresting. Teachers blame a lack of language proficiency on television for the learners' resistance to reading. This resistance by learners has led to the teachers avoiding reading in the classroom. Teachers make worksheets to circumvent possible boredom or difficulty that arise from textbooks. Project work in independent school leads to more reading and writing done by learners with their parents' assistance	
	The learners love these… at least some of them love some of these	Early intermediate phase learners generally love reading graded readers if this is part of classroom routine. Even older learners enjoy reading when it is mediated by a teacher. Independent reading in older readers is the exception rather than the norm	
	DBE workbooks	Learners enjoy looking at and reading from the DBE workbooks, but avoid doing the homework set by teachers. Teachers seldom use the DBE book in the classroom. It is mainly used for ANA preparation	
	The language question	Teachers grapple with the role of MT in the teaching of English. Some teachers feel the FAL curriculum is	Many teachers have ESL learners who have to deal with the English HL curriculum, which

		inadequate preparation for English as the LoLT in grade 4 and find it frustrating. Language issues make intensive use of LTSM difficult	they find too demanding. Teachers have to find ways to make this curriculum more accessible
	What it takes to compile own materials	Teachers generally select activities from a library of textbooks available to them. Sometimes they do research on the Internet looking for information on specific topics. These are photocopied and presented to learners at the end of a lesson. They generally use accessibility as their main criteria and look for materials that will feel familiar to learners	Teachers usually work in teams and do research from a variety of internet sources, (especially education sites) and textbook libraries. Worksheets and informational booklets are designed based on this research and they combine and/or rework materials. Teachers describe the extensive effort involved in this work. They feel that they can use their professional knowledge and judgement when they are in control of what to provide for learners
LTSM that have been/are important to teachers: Criteria for choosing LTSM		Teachers enjoy well-structured materials with a lot of choice and information. *CEP* and grammar reference books feature in their choice of preferred books. When they select materials for learners, they are generally drawn to interesting, colourful, highly illustrated and accessible materials. There is a contrast between the materials teachers want and the materials they believe their learners need. A general perception is that most modern textbooks do not provide adequate curriculum coverage	
The role of the curriculum in LTSM-use		The curriculum is far too dense and provides no opportunity for in-depth teaching. Teachers feel intense pressure to comply with prescribed time frames	Teachers circumvent the curriculum by ensuring they cover the skills and main topics, but retain their own styles, materials and pacing of teaching. Their own professional

			satisfaction is paramount
The place of LTSM in the education process		Teachers describe LTSM as crucial, but they refer to materials they use for the production of worksheets. Teachers also generally regard additional LTSM, such as, posters, flashcards and realia as very useful and important	Teachers recognise that their chosen pedagogical style may deprive learners of textbook skills and access to the curriculum, but feel they provide adequate substitutes. They feel the use of tablet and smartboard technology is very important and useful

Table 26 Summary of the main elements of the discourse used by teachers about aspects of LTSM-use

Conclusion

There is a strong contradiction between the value that most teachers in this study place on textbook use, and the failure of textbooks to find their way into the learners' hands. For historical, ideological, professional and also curricular and classroom management reasons, it seems that teachers avoid the use of books. Instead, they provide worksheets for learners and these are the only materials that learners have ready access to in the classroom.

Historically, many teachers were unaccustomed to working with books or they were discouraged from doing so. Books represent for many teachers a rare and precious commodity, which is reserved for use when the learners are older. Alternatively, books require a particular way of teaching that they are unfamiliar with or they find intimidating. The last two decades has seen the promotion of teachers as independent professionals who use their expertise to produce tailor-made materials for their specific constituencies. It appears that teacher identity is closely bound up with the notion that teachers decide and provide materials for their learners. The production of materials is one of the very few areas where teachers experience a sense of freedom where they can exercise their professional judgement. Many teachers have given considerable thought to topics and to their learners' levels of knowledge and skills. As a result, it is possible that teachers' practice, in some instances, has improved. Consulting a wide range of research materials might have led to an increase in teachers' knowledge at a number of different levels: the content covered during their research; the various kinds of materials and formats that

work well for their own teaching styles; and, the exposure to many teaching ideas and activities. However, working with worksheets as the main LTSM for learners has led to teachers using a fixed way of presenting knowledge. This approach results in teaching that is mostly superficial, fast and often an incomplete treatment of the topic, because teachers feel pressurised to maintain the pace prescribed by the curriculum.

Traditional "chalk and talk" has been replaced by "show and tell" whereby teachers work extensively with visual materials and their own explanations. The teachers' use of reading and writing (with rare exceptions) is restricted to the minimum. One of the reasons for this lack of reading and writing is the control that it gives teachers over the classroom. It enables the smooth and efficient running of classes, where engaging the learners by visual or audio-visual means is a primary goal. This allows the teachers to place themselves (their materials and knowledge) at the centre of interaction in the classrooms. Teachers admit freely to the following: they have no control over homework that is not done; that writing in class is too time-consuming; and, that learners do not want to or cannot read. Making the lessons entirely teacher-centred means that these problem areas can be avoided. Thus LTSM, and its use, becomes a classroom management tool.

Both the CAPS curriculum, where topics are not necessarily presented in linear or sequential fashion, and the practice of using worksheets as the main LTSM, means that the learners' experience is usually fragmented and unsystematic. Teachers feel compelled to resort to edutainment – or, in their own words, *"to provide constant variety"*. Almost every lesson produces a new visual stimulus and new worksheets.

Another issue is the difference between what teachers look for in textbooks and what publishers produce. Publishers produce learner-friendly books that require systematic use and there is an emphasis on accessibility. In contrast, teachers require extensive coverage and the ability to choose exercises and activities from the textbook. These approaches are incompatible.

Teachers lament the decline in the learners' ability to read and write. This is despite the enthusiasm shown by early readers for graded readers, teacher-mediated reading of stories, and the learners' enjoyment of the DBE workbooks. Teachers consciously restrict the activities of reading and writing in classrooms for the following reasons: the learners read slowly; they do not always understand what they are reading, because of language

difficulties; and, they get bored. This is aside from the density of the curriculum, where the fast pace of coverage is also a factor. Learner independence (clearly evident when learners work with books and tablets on their own) is not widely fostered.

Chapter 10 Conclusion

Introduction: Context of this study

This research was done in 2014 against the background of the contradictory education policy directives over the last two decades in South Africa. In relation to LTSM, the DBE went from an initial directive in 1997 that required teachers to find, produce and tailor-make materials to suit the specific learners they teach, to a directive in 2011 for each learner to have a textbook in each subject. Through complex dynamics, which relate to the pressures and changes that took place in South African classrooms over the last decades, many teachers seem to have embraced the use of worksheets as a response to the first directive, and held on to this response, despite the second directive. There could be some good reasons for this situation. The use of textbooks, introduced by the DBE as part of a remedial strategy to address poor results in standardised testing, is riddled with contradictions in practice. In order to implement the use of textbooks fruitfully, it requires competent teachers with strong PCK, and learners with sufficient language proficiency to engage with the texts. There is the sense that textbooks are too restrictive in a modern, digital environment, even though some textbooks make an effort to mimic some of the features of digital media. Another contradiction is the lack of a textbook and reading culture in South Africa, while there is the imperative that such a culture should be cultivated so that learners would be empowered to acquire the literacy skills to equip them to perform well in assessments. Next, there are some teachers who believe that textbooks ought to be kept pristine and undamaged (so they are not distributed to learners), yet there is also an acknowledgement that learners need to be able to explore books freely. Finally, there is the belief in the importance of cultivating a love for reading as an activity of leisure and pleasure, but also the importance of grappling with challenging, academic texts.

Textbook nostalgia is found among the following: older teachers who were deprived of textbooks for a large part of their schooling; an older generation of intellectuals who have faith in the power of book learning; and, policy makers who are aware of the possibilities of textbooks as these have changed over time to reflect a more modern reality[6]. This nostalgia underlies a public discourse that endorses the use of textbooks as integral to teaching and learning as well as classroom dynamics. Textbooks have become a "rights" issue and both non-governmental education bodies and the education departments have embarked on textbook provision as crucially important for improved learner performance. Yet some studies (Hoadley, 2016) show that teachers seldom use textbooks.

Important questions that arise are how South African teachers understand and use LTSM, which includes textbooks. The specific sub-questions that were investigated in this thesis were:

- What are the various ways in which teachers talk about LTSM?
- What distinct patterns of LTSM enactment can be observed across different kinds of schools, representative of different social strata?
- What are the underlying assumptions embedded in the LTSM that teachers use?
- What are the implications of the discourse and enactment patterns for policy development and teacher training?

A conceptual framework, which was an extension and development of previous frameworks, assisted in examining three sets of data, which were applicable to different parts of the study. This framework looked at the intersection where teachers, learners and LTSM came together, and focused on the following: levels of lesson coherence; levels of participation among elements of the teacher-learner-LTSM triad; and, the affordances provided by the LTSM and how they are used. By using interviews, the teachers' thinking about LTSM was probed, and it became possible to discern certain enactment patterns through classroom observations. Both actual and suggested LTSM could be examined

[6] Textbook nostalgia can perhaps be seen alongside the priority given by international agencies and a recent global resurgence in interest in textbooks as part of an Education For All agenda. UNESCO's GMR Report on Textbooks (2016) is evidence of that.

through textual analysis so that the demands and practices became clearer. The framework also made it possible to integrate and analyse the findings from the different sets of data.

How the literature intersects with this study

The international literature on LTSM suggests that textbooks have a wide-ranging usefulness for teachers. Curricula are translated into textbook format, by including activities or exercises, narrative or instructional texts, and performance expectations or assessment tasks – sequenced in a way that corresponds carefully to curricular guidelines (Valverde, et al., 2002). Studies showed repeatedly that textbooks were valuable to teachers, because of the systematic way the curriculum was set out (Sosniak & Stodolsky, 1993, Valverde et al., 2002). Some researchers posit that textbooks could also be useful as professional development tools (Ball & Cohen, 1996; Ball & Feiman-Nemser, 1988; Collopy, 2003; Davis & Krajcik, 2005; Hutchinson & Torres, 1994; Valencia, et al, 2006), as teachers gain both subject and pedagogical knowledge from the way in which information and activities are set out. Such development could be further enhanced through the use of TGs, usually available with the sale of learners' textbooks.

Materials, however good or poor, remained an artefact until they were enacted in one way or another. When enacted by a teacher a learner, or any interested person, the materials began to shape thinking (and perhaps learning). Remillard (2005) pointed out that there are many factors in the process of enactment of remodelled materials: class sizes; teacher and learners' profiles; cultural elements; school ethos; and, levels of understanding influenced by elements, such as, language or the way a curriculum was structured. Socio-economic status, political, geographical and ideological factors, parental involvement, teachers' training and teachers' knowledge were among the additional factors that shaped material enactment – either in the way they were presented or in the way they were received, but it was mostly about how they interacted with one another. There is a debate about the possibility that textbooks could deskill teachers (Apple, 1986) through an unthinking and technical adherence to the textbook. Yet it is mostly accepted that teachers enact textbooks in such varied ways, and are guided by a such variety of environmental and classroom factors, that this means that textbooks cannot be seen as a deskilling tool,

if teachers already have the necessary skills and teaching strategies (Crawford, 2004; Davis & Krajcik, 2005; Forbes & Davis, 2010; Remillard, 1999; Valencia, et al., 2006).

Much of the international research on textbook use emphasises the importance of the ways teachers embrace textbooks and how contextual factors may influence their mediation. An underlying assumption is that learners have access to the same textbooks as the teacher, or if they do not, then they ought to have this access. The availability of textbooks for learners to take home so that they can use these books independently, as well as in the classroom, is seen as a way of democratising education, which is an assumption that underlies much of SER research (Fuller & Clarke, 1994; Fuller & Heyneman, 1989; Hanushek & Woessmann, 2010; Lockheed & Verspoor, 1991; Spaull, 2012; Westbrook et al., 2013). The use of the third voice, which is delivered by the textbook in the teacher-learner-LTSM triad, has a number of problems associated with it. These include the unacknowledged authorship, predominant in many textbooks, which creates the impression of neutrality and omniscience. The textbook then acts both as authority and provides authorisation in the form of exercises and activities that determine competency (Olson, 1989). An interplay between teacher (who also has both authority and authorisation) and textbook splits the centre of power and can privilege the textbook, the teacher or the learners in turns (Herbel-Eisenmann, 2011). A three-way engagement becomes possible, although the teacher usually remains the central determinant of how that engagement should take place.

It was relevant to this thesis how teachers consulted textbooks as a secondary source to the CAPS curriculum. The latter acted as their primary guide for content, sequence and pacing. The teachers used extracts from textbooks (and material from the Internet) to find the form and activities that they wanted to use to present the topics set out by the CAPS document. It follows, therefore, that textbooks did not fulfil the function of a development instrument, and Teacher's Guides were entirely disregarded. The sourcing of materials required that the teachers investigated topics in different books and on web sites. This suggests that an alternative form of development could take place. However, the kinds of LTSM that were sourced by the majority of teachers in this study led to a mechanistic engagement with the LTSM by the learners. While the LTSM might not have deskilled

teachers, there is the distinct possibility that the use of these LTSM might lead to deskilling (or not developing relevant skills) of the learners. This finding is in alignment with other studies done in South African classrooms (Adler, 2000; Edwards & Ngwaru, 2011; Fleisch, 2008; Hart, 2002; Kariem, Langhan & Mpofu, 2010; Koornhof, 2011; Lemmer, Edwards & Rapule, 2008; O' Connor & Geiger, 2009; Stoffels, 2005a and 2005b).

The literature consulted for the creation of the framework that informed this thesis was more directly relevant, because it had a bearing on the pedagogical impact of different kinds of LTSM. Meek's (1996) studies on how learners move from learning to read to reading to learn looked at the use of different kinds of informational and narrative texts. She concluded that the verbal interrogation of these texts with both peers and teachers were pivotal in learning how to use the texts so that they were internalised and the learners gained information. Cohen (2011) also claimed that active engagement with texts, which included discussion and debate, constituted "ambitious teaching". This approach allowed teachers to understand the ways learners interpreted texts. The use of certain types of materials, notably worksheets, was symptomatic of a closed and mechanistic form of teaching that focused on congruence – a form of teaching encouraged by standardised testing. Freebody's (1992) description of the different roles that a reader adopts when working with text, and Cummins's (1979) distinction between BICS and CALP for ESL teachers and learners were also particularly helpful in separating out important strands that operated when learners engaged with texts for this thesis.

Brown (2009), Forbes & Davis (2010) and Remillard (1999 and 2005) devised interesting frameworks which located the role of the teacher in the LTSM selection and enactment terrain. By establishing the different fields in the terrain (the mapping, design and construction fields), it became possible to study how teachers worked with texts in the various fields (Remillard, 1999). This led to notions of offloading, adaptation and improvisation in relation to materials (Brown, 2009) and how these strategies might impact on the kind of teaching that is adopted by teachers (Forbes & Davis, 2010).

The design of texts has undergone considerable change over the past decades. Bezemer and Kress's (2010) analysis traced this transformation, and it revealed the influence of modernity and digital media. It showed how this change is realised through design, the selection of many genres and the inclusion of a variety of visual styles. The notion of LTSM is a complex one, whether it is seen as a number of different kinds of LTSM or as a single LTSM in the form of a textbook.

Main findings

This study set out to understand what happened in practice when classroom materials, necessary to develop literacy and subject content, were used by teachers and learners in four Gauteng primary school classrooms. The original assumption was that there were two comparisons at work in the data: between SS and English; and, between public and independent schools. However, it soon became clear that there was not a major distinction between the way materials were used in the SS and English classrooms. Sometimes, there were a broader range of genres used in the English classroom, but the materials were mostly similar, and they were used the same way by the SS and English teachers. The distinction that made itself most keenly felt was the difference between the approaches used by the public and independent schools to learning materials.

The following section presents some broad generalisations based on the small sample size used in this thesis. Nevertheless, these generalisations are important, because they suggest some thought-provoking trends. There are certainly exceptions to these generalisations and the contextual factors that underpin these findings cannot necessarily be generalised to other environments.

Observation data:

In relation to public schools, teachers use the front-of-class to teach in almost all the lessons, and they use visual prompts. The teacher-learner interactions during lessons consist almost exclusively of teacher's questions and learners' answers, and the purpose of this interaction is for recall. There is almost no evidence of reading, writing, discussion, using textbooks or of group work. The DBE workbooks are mostly not used, except for the teacher assigning homework. Worksheets predominate, which are sometimes

unmarked or incorrectly marked by learners or peers, and not always completed by the learners. Finally, there is a lack of consistent linearity in the structure of many lessons. In many instances, there was a deviation from the topic, and the lesson's coherence was lost. Seldom was there considered use of the affordances of materials, such as posters and printed texts.

In relation to the independent schools, there is a lot of front-of-class presentation that uses visual prompts too, but the presentation is shared between the teachers and the learners. LTSM in the form of videos becomes a front-of-class presentation, without the interaction of teacher and learners, unless specifically orchestrated. Learners often ask questions for clarification and expansion on the topic and in response to the teacher's questions. Teachers ask questions for the purpose of both recall and to develop the learners' understanding, which often leads to an extensive discussion. There is also some guided reading with the teachers and some independent reading by the learners. However, writing is still fairly limited, although I observed some creative writing.

There were also some similarities between independent schools and the public schools, because the teachers in both contexts hardly used textbooks. (In independent schools, the DBE workbooks are not available for use). I observed limited use of group work in independent schools, and as with the public schools, worksheets predominated. However, in independent schools there was usually a clear, logical structure to knowledge development in the lessons. While there may have been a substantial amount of variation on a topic, lesson coherence was generally maintained. Teachers often made an effort to work with the affordances of materials, especially the printed text, although there was little evidence of the deliberate teaching of visual literacy.

Interview data:

When teachers reflected on their experience and use of LTSM, they had some explanations for some of their practices, as well as some important insights into how LTSM and LTSM-use affected both the teaching experience of teachers and the learning experience of learners.

In relation to public schools, the teachers talked about the primary importance of images as a way to introduce and explain teaching topics, and they emphasised the usefulness of posters and charts. Worksheet materials were usually compiled by mixing and matching parts of existing textbooks, or taken as a whole from textbooks and the teachers admitted that learners were very teacher-reliant for all LTSM-input. There were easily accessible resources available for the teachers' use, and teachers' criteria for good materials ranged from colour and variety on the one hand, to comprehensive coverage of curriculum content on the other hand. The curriculum was the basis for absolutely all learning and teaching. Teachers spoke extensively about the learners' resistance to reading, except for simple story books in the younger grades. The learners' limited knowledge of English was a big barrier to the use of materials, according to the teachers in this study. CEP was mentioned as a textbook that many teachers remembered as having made an impression on them either as a book they encountered when they were at school or as a book that formed the basis of their research for worksheet materials.

As with public schools, teachers at independent schools emphasised the importance of visual images as teaching tools. These teachers spoke emphatically about the extensive research and teamwork required to compile the materials they use. Many resources were available and used, and these included internet sites which were designed for teachers' use. Their criteria for good materials were mainly variety and good coverage of teaching topics. But the curriculum was treated as a guide and teachers at independent schools frequently deviated from it or expanded on it. As with the public schools, teachers at independent schools were concerned about learners' resistance to reading: the learners have to be encouraged or "tricked" into reading; however, these learners have a lot of adult input from both their teachers and parents to encourage reading. Although English can be a barrier to learning for many learners, it is generally well-established by grade 4 at independent schools. In relation to textbooks, CEP is much praised and there is some concern about the lack of textbook use in classrooms. The use of technology is praised as the LTSM of the future, but the teachers want to control it and they see it mainly as a teacher's tool.

Materials data:

In relation to public schools, worksheets contained limited, and sometimes inaccurate and fragmented, information and activities. These worksheets were drawn mainly from a range of current textbooks, although there was some use of internet information. There was not a great deal of depth or extension in content because there is such a strong focus on curriculum coverage. Teacher-driven use of all materials was observed, except for the use of DBE workbooks and graded readers. The use of dictionaries was observed in a number of lessons.

In relation to independent schools, there were worksheets that required fairly limited input from learners, but there were also worksheets that served as a reference for further written work. Some teachers compiled information booklets on themes, which used a range of sources for learners' further study purposes. Sources include both modern and older materials, and they used print as well as materials taken from computer sites. Some of the materials did not have a great deal of depth, but there was an extension in content through learners' projects. Learners were encouraged to do their own research (usually with parental help) and these projects formed the basis of many lessons. Dictionaries and reference books were an integral part of classroom work.

Discussion of main findings

The teachers in this study discarded or distorted two of the three elements that constitute formal teaching and learning in a classroom. Based on the teacher-textbook-learner triad, it was only the teacher who featured clearly and significantly in most classrooms, while the textbook-learner part of the triad was sidelined. For a variety of reasons, many teachers have discarded systematic programmes like textbooks that would allow both teachers and learners access to the curriculum. A piecemeal approach emerged whereby the teachers made choices of LTSM, which were based on their own interpretation of the curriculum. The reason for this choice was that the teachers struggled to cover what they regarded as an unrealistically full curriculum for the learners. This approach meant that teachers made themselves the key creators of coherence in lessons. But the participation of the learners (in many instances) and a textbook accessibe to all participants were not used by the teachers to assess and monitor how successfully content was received or

interpreted by the learners. The teachers did not develop an understanding of how effective their pedagogy was in the classroom via the assessment methods of the learners, because mostly only surface knowledge was tested in a mechanical way.

In their choice of LTSM, teachers opted for two forms that outnumbered all others: visual materials and worksheets. Visual materials (which took a large variety of genres, as well as modes) meant it became incumbent upon both teachers and learners to undestand the affordances of materials in order to gain the maximum value from them. Four areas that elucidate these findings are:

- The primacy of visual input
- Almost no evidence of textbook use
- A worksheet environment with the resultant lack of reading and writing
- The way the learners' participation functions to minimise or maximise lesson coherence

Show and tell

With the expansion of the digital sphere, the education environment has become increasingly multi-modal. Even where teachers did not use digital technology in their classrooms, they adopted the techniques and strategies dominant in the digital sphere, such as, the use of multiple images and the rapid movement from topic to topic. Textbooks developers also use these techniques, as well as "talking heads", a variety of explanatory text boxes, and double page spreads to imitate digital media. A variety of font types and sizes are used to create interest and definition. This means that whether commercially or self-produced, many materials mimic a digital environment.

The learners' understanding was enhanced by the use of visual materials, and it was an invaluable tool when used in a considered way by the teachers. Learners, who have access to visual input, find that it creates greater clarity and faster learning. Educational practice has become steeped in a culture where the image is dominant, and this situation is likely to remain for the foreseeable future. Teachers, who have access to an easy distribution of visual input, have a variety of reasons to be grateful for this resource. Perhaps the most significant reason is that visual input is a very effective classroom management tool. It is fortuitous in South African classrooms that a strong human rights culture (which

emphasised non-punitive ways to maintain discipline) and the digital revolution took place at the same time. An engaged (or entertained) learner is usually a non-disruptive one.

Outcomes-based education was based (at least in part) on the principle that information should no longer form the bedrock of the curriculum. Instead, skills should be cultivated so that individuals understand how to access, evaluate and synthesise information, which are higher order skills. Where teachers and learners have limited access to digital information, this curriculum suggested that learners should work together in groups so that resources and knowledge could be pooled. Group work was unwieldy and difficult to conduct in the classroom, especially when teachers were expected to monitor carefully the quality of learner input and engagement. It was easier for teachers to produce materials that made diverse bits of information available to learners. By using posters and worksheets, many teachers felt they were fulfilling the remit of an OBE curriculum.

Since the teachers presented these materials in new and unexpected ways, this had the dual result of turning the teacher into an expert who had authority, and it captured the learners' attention. Making their own decisions about what to present, provided teachers with a strong voice – both literally and figuratively. During the pre-democratic era, the mediation of materials was almost the only thing teachers did: either the learners copied notes from the board or teachers referred them to specific sections of a textbook. This changed in the democratic era, because teachers were encouraged to produce the materials they wished to use, and to ensure that the bulk of the lesson was used in discussion of these materials. For some of the teachers in this study, this meant they discussed the lesson topic and learners answered questions that focused on their ability to recall information. Teachers spoke with amazement about how their teaching styles had changed from the giver of instructions to "real teaching", where they spoke for most of the lesson. Because of the prescriptive nature of CAPS, it was even easier for teachers to hold fast to their central position as knowledge givers.

The production of materials was an excellent way for well-trained and experienced teachers, who found themselves in flexible working environments, to expand both their

content and perhaps also their pedagogical knowledge. Those teachers who relied on a "cut and paste" method from a variety of sources had additional exposure to content and needed to make decisions about what to use. From a teacher's perspective, the production of her own materials was, and is, for the most part, a positive one. But, ironically for many learners, the opposite holds true. Their experiences rest often on poorly prepared materials, which were inappropriately used, were often decontextualised and fragmented. As was argued previously in this thesis, the creation of materials is a far more difficult exercise than seemed on the surface for the following reasons: finding suitable images and texts; phrasing unambiguous instructions and questions; setting doable tasks at the appropriate standard; calculating the time and effort required; understanding how the tasks and activities build on previous knowledge which extends to the creation of new knowledge; presenting the work in an inviting way, with an awareness of the underlying semiotic content; creating a balance between the different kinds of activities that encourage a variety of angles to the content; and, ensuring sufficient practice and revision. All these complexities required a nuanced understanding of both subject content and pedagogic process, which was both time-consuming and a challenging process.

Where material consisted mainly of images (or a central image) or film, the learners in the lessons I observed were presented with these materials in an unmediated way. While the teachers discussed the images or films with the learners, they did not acknowledge that the images required the same levels of decoding and critical interpretation which was applied to print text. Images have an immediate and often powerful impact, for example, in photographic form they appear to represent "reality" or "truth". The distance (and relative "slowness") that printed text allows is removed. Even the earliest readers understand and respond to print text with the knowledge and understanding that "somebody else", that is, an author, is telling the reader something. During the classroom observations, images seemed to be authorless, and they appeared to be "evidence" rather than staged presentations. The learners experienced images as containing a volume of information, but in a very condensed form.

In his painting, "This is not a pipe", Magritte tried to demonstrate that no matter how close to "realism" an object is depicted, it remained an image – one that an "author"

constructed, positioned, chose and contextualised. When the learners watched a film about, for example, a scientific phenomenon or a historical event, they experienced the film (or picture) as definitive of the topic. The immediacy and speed of processing meant that reflection and critical questioning of the content was further removed. When the content is presented in print form, then it has to be imagined and verified through discussion or further research. The teachers who used images were relieved from the onus of having to find words to express ideas, processes and concepts. But when the learners were tested about the content presented via images, then they had to return to the use of the written word. From the perspective of teachers and learners who had trouble with the language of instruction, these images became a powerful teaching and learning tool. Teachers claimed legitimately to have covered the work set by the curriculum, and to have done so accurately and thoroughly. The learners also claimed to have understood the work during the time spent looking at the image(s), without necessarily having the wherewithal to express their understanding. By filling in short answers on worksheets, the learners showed only a small and superficial comprehension of what they had learnt via the images.

There were two important implications that followed from this finding about the centrality of images in teaching: teachers and learners need to be taught how to decode, interpret and question images. In other words, visual literacy should become a requisite part of teacher training and practice. Hand in hand with such literacy, there needs to be an extensive development of linguistic tools which would help teachers to describe what images represent and why they do so.

Text books: hexed books?

Textbooks have a justified reputation for being the carriers of ideological and cultural values. The contemptible ideological content of apartheid education textbooks, as well as the repressive ways in which certain departments enforced their use, made the use of textbooks undesirable in a post-apartheid education system. The reconceptualization of post-apartheid education coincided with international trends that equated progressive education with curricula that did not prescribe content, and focused instead on skills-based learning and bespoke materials.

Ironically, the re-thinking of what should be included in education, and how this could be presented and taught, resulted in innovative and progressive textbooks, both internationally and nationally. Although of varying quality, there was a veritable surge in textbook publishing immediately after 1994. Many publishers took considerable financial risks in order to transform the industry, which was based largely on textbooks (Koornhof, 2011). In general, teachers liked these textbooks and submission committees approved these books. Many textbooks were used by teachers to extract excerpts, so that they conformed to the "own materials" directive from the national Department of Education. However, these textbooks were not generally introduced to learners in the way that they were conceived of by the authors or the publishers. In addition, these textbooks were not used as guides to the curriculum where they could have helped learners (and parents) understand the requirements of the new curriculum.

The findings of this study, which showed the lack of textbooks in many classrooms, raises two fundamental questions: should only teachers have access to the curriculum programme, while learners (and parents) rely on teachers' judgements for what learners need to know and do in order to fulfil the criteria for the curriculum? Can effective teaching and learning take place when print modes are used so sparingly? There is a profound irony that the present government was lambasted for the non-delivery of textbooks, and that court cases brought by organisations, such as, Equal Education strove to remedy the situation. The argument in the court cases rested on the basis that the right to education, in large measure, was equated with the right to learning materials – seen as textbooks by the public, government and education organisations. This study was restricted to primary school level, and it is likely that textbooks are used more widely at high school level. However, in the primary schools used for this research, many learners did not use textbooks, irrespective of whether these were available or not. An additional irony is that learners would likely have had access to learning materials, which were chosen and provided by their teachers, even when the delivery of textbooks did not take place.

Many educationists might argue that there are benefits to a minimal use of textbooks in the classroom: Learners do not become reliant on a single source of information; the social and digital world of the 21st century is too multi-faceted; and, new information is too readily available to make textbooks desirable. There is another argument that teachers' reliance on a single textbook could lead to laziness and a lack of professional development. By giving teachers the power to decide which materials they select to use in the classroom, how to use the element of surprise when presenting different materials, and an opportunity to use their professional judgement is important. It is important in the sense of personal satisfaction as well as for maintaining effective classroom management.

Although it is debatable whether there is essential or intrinsic value to the distribution of textbooks to young learners, who might not all be able to read fluently, I argue that access to the curriculum programme through a textbook is a valuable resource. Teachers concurred with this view in the interviews when they said that textbooks helped the learner to locate themselves when they needed to work, because they were able to look backwards and forwards in it. For learners who missed work in the classroom, the textbook became an important (although not necessarily exclusive) tool for catching up. For ambitious learners, the ability to study ahead held certain advantages. A primary guide would place learners inside the circle of their own learning, rather than outside it. This does not mean that a primary textbook eliminates the need for supplementary and complementary additional materials sourced by the teacher, and even by the learners themselves. Instead, it creates a democratic situation where there is equal access to materials, although, of course, not an equal ability to understand or make sense of them. In addition, it gives caregivers or parents access to the curriculum too. This adds the dimension of a bird's eye view to the curriculum, and in the instance of older learners, the opportunity to debate how a textbook has been pieced together. A textbook helps to provide the learners with some traction on the progression of their learning in a curriculum.

More importantly, textbooks are exactly what they are called, that is, books consisting of texts. Whether or not teachers decide to use the texts in textbooks (this includes visual and reading texts), learners have access to these texts and can make their own choices

about what to read for themselves. Certain learners might well decide to read or study visual texts that were not discussed in the classroom situation. Parents could encourage the learners to take advantage of this access to textbooks, especially for the purpose of assessment. When the learners have to confront an assessment, then they would have (presumably) accurate, coherent and logically progressive texts to work with in their textbooks, rather than their own efforts derived from teacher-produced worksheets.

Textbooks, although designed to be a helpful tool for learners and teachers, require skill and wisdom to be used effectively. Selection and skilful mediation is part of the way textbooks are meant to be used. Textbooks, contrary to the way some policy makers see them, are not meant to be a substitute for the teacher. Although there are many textbooks of dubious quality, those that are well designed will move learners from lower order to higher order activities. This makes challenging demands on both teachers and learners. Many modern textbooks build in a component that requires learners to make judgements and to do tasks that rely on critical thinking. Teachers can choose to avoid these tasks (Kariem, Langhan & Mpofu, 2010; Stodolsky, 1988; Stoffels, 2005b), but learners have the choice to look at these tasks and to think about them on their own or to question other adults about them.

Worksheets that require minimal work

Worksheets, or workbooks that consist of worksheets, create a deceptive façade of work done and completed. Learners, who have incomplete worksheets in their exercise books, create the impression that they have not done their homework. The simplicity of these worksheets adds to the impression of the lax and uncooperative learner. Learners who do not complete these worksheets appear to be bedevilling their own records of completed work which supplies them with the means to study and perform well in assessments.

Worksheets were marked by learners themselves (either by their peers or learners could mark their own work), so there was a second chance to fill in worksheets according to a teacher's instruction. This meant that even completed worksheets were not necessarily indicative of learner effort. Teachers, who were worried about HOD or departmental inspection on their work through checks on learner workbooks, could provide learners

with the answers to create an impression that work has been done. This meant that both teachers and learners were off the hook when evidence for learning and teaching took the form of worksheets.

As with textbooks, not all worksheets are created equal, and as has been pointed out repeatedly in this study, many worksheets were based on extracts from textbooks. The most significant distinction between textbooks and workbooks is the contextualisation that textbooks gave, as well textual description of processes and content. Some worksheets might be designed to include such texts, and/or contextualisation, but because worksheets are usually presented as a class's lesson commenced or as a part of a lesson, these worksheets always stood as fragments of a whole. In other words, they provided a piecemeal approach to the curriculum.

It would be difficult to break the hold that worksheets have in the classroom, because both teachers and learners have found them to be a significant shortcut. Teachers, especially, benefit from the worksheet culture. Aside from the aforementioned "evidence" of work done, the use of worksheets cut down on marking. When classes are big, this is a major benefit. It also cut down on the time spent reading and writing in class. Most learners are not well disposed to reading, as teacher after teacher testified in the interviews. This finding is not unexpected. A survey of middle and secondary school teachers in the United States of America found an almost disabling resistance by learners to reading, so that teachers actively searched for strategies to circumvent reading in the classroom (Bintz, 1997). The underlying assumption of the value of worksheets is that teachers have presented curriculum content and that worksheets can serve as evidence of such teaching. This places the onus on teachers to find ways (visual or oral) to present the content. Visual and oral presentation places teachers in control of what is said, seen and heard in the classroom. In short, worksheets provide a very effective classroom management tool for teachers.

In interviews, many teachers complained bitterly of the "slowness" of learners' writing. Writing exercises takes up far too much of teaching time, and the teachers avoid doing writing exercises during class time. Instead, they set writing exercises for homework,

which the majority of teachers do not expect the learners to complete. It stands to reason that if writing is not done frequently, then learners will not have sufficient practise to do it more quickly. In addition, teachers placed an inordinate emphasis on the neatness of books, since HODs and departmental officials looked at this aspect as evidence of a teacher's performance and coverage of the curriculum. The less learners write, the neater their books appear.

Resistance to reading and writing is not only a South African problem. Reports from many countries reveal that learners are seduced by technology (see Fetaji, 2008, for a review on m-learning), and have a myriad of interests that do not include reading and writing. There is an ongoing concern expressed by educationists about the falling levels of literacy. The testing of learners requires that they are able to read and write. Without these two skills, it is impossible for them to reflect what they know in any assessment. Teachers and others have lamented increasingly that tests were not an accurate reflection of learners' skills. In South Africa, much emphasis is given (legitimately) to language barriers in school assessments; however, the other major factor is that learners genuinely lack practice in literacy skills. This means that learners might have the knowledge or skills that are being tested, but they could not reveal what they know (as with the language question), because the learners have had limited practise in reading and writing.

In a digital culture, or in a world where employment opportunities are few, or where employment requires a low level of literacy (even in some professional fields), this might mean that reading and writing will slowly become of lesser and lesser importance. Even high-level academics have talked about how they no longer read very long tracts and prefer pithy articles and poster presentations (Carr, 2008). Social factors point to the possibility that reduced literacy will not be a hindrance to a fulfilled and successful future for many people. It is a question (and perhaps a reality) that might need to be confronted by educationalists in the future.

However, at present, there are at least two compelling arguments for a strong focus on improved literacy levels. The first is that current education culture still dictates success in terms of high levels of literacy. In order to compete in a global market and context,

learners and schools are severely disadvantaged by low levels of literacy. This disadvantage spells inequality, which makes improved literacy levels a human rights issue. It is imperative that literacy levels are improved for learners to have even the smallest chance to improve their economic and social positions in life.

The second argument is that literacy changes the way in which language development and intellectual prowess is shaped. Neurological studies have found that pathways in the brain change with the consistent practising of reading and writing (Berns, Blaine, Prietula & Pye, 2013). Such pathways become more adept at linguistic and syntactic possibilities. It needs to be stressed that this does not suggest that literacy, per se, increases intellect or even logical ability. However, it shapes the way in which learners are able to recognise the power and possibilities of language to express thought clearly and coherently.

What is notable about the alphabetic-system of literacy, especially as used in academic contexts, was how it freed memory through the recording of information: "You cannot stop and review what you are listening to, especially if you are 'caught up' in its rhythm, but writing allows one to take a second look and thereby to notice contradictions and inconsistencies" (Gee, 1986, p. 723). Goody and Watt (1963, as cited in Gee, 1986, p.724) suggested that "logic, in the restricted sense of an instrument of analytic procedures, seemed to be a function of writing, since the setting down of speech enabled humans clearly to separate words, to manipulate their order, to develop syllogistic forms of reasoning, and to perceive contradictions".

Writing as a process, encouraged a different form of thinking – one that could hone skills of clarity and logic (this excludes the kind of writing often used on social media, which often deliberately sets out to mimic informal conversation). Reading, too has certain neurological advantages: In an extensive study conducted by Berns, Blaine, Prietula & Pye (2013) they found that participants, up to five days after a reading event, "retained heightened connectivity relating to language receptivity, called a '*shadow activity'*, almost like a muscle memory" (Emory Health Sciences, 2014, quoting Berns, no pagination). By implication, reading is a significant technique for language development as well.

Seen, but not heard

The placing of visual texts and worksheets at the centre of teaching is not intrinsically problematic. However, in this study, it led to the result that many teachers controlled all aspects of the lesson, including what learners could and could not say in the classroom. The most striking difference between public and independent schools was that learners were markedly present and heard in independent schools, whereas, they were silent in public schools during the teaching and learning process.

The visual and teacher talk took precedence over learners' contributions in almost all the public-school lessons. Although teachers in public schools were caring and concerned about their learners, they avoided any form of discussion by the learners in the classroom. Teachers conceded that part of the reason was in order to maintain discipline and focus. Teachers expressed the concern that learners digress when they are allowed to speak freely in class. Visual texts, which were a dominant feature during the lessons, and worksheets that required minimal input from teachers and learners, made it easy for teachers to teach for congruence. The teachers used "show and tell" for almost the entire lesson, then they asked recall questions, which were interspersed with the occasional "Do you understand?" This was a rhetorical question thrown in without the teachers pausing or probing to find out whether the learners had understood anything in the lesson. The worksheets required almost no thinking beyond recall, which meant that the learners operated at a very low cognitive level. Thus, in the public-school classrooms, the learners were straitjacketed by a "piecemeal pedagogy" that teachers adopted through the use of particular learning materials and teaching style. It was only the topic under the teacher's discussion that was considered relevant, while links and connections to other related areas of knowledge were not explored.

In independent schools, learners' projects formed a substantial part of their learning materials. What learners wrote or produced as a visual text was very often the central part of the lesson – leading to intensive discussion of how and why the learners had produced what they presented. In other words, teachers used learners' work to "get inside learners' heads" to try and understand how the learners have made meaning of the teachers'

teaching. This approach fell within the ambit of what Cohen (2011) called "ambitious teaching", because it allowed for the learners' participation in the education process. It also relied heavily on the teachers' ability to engage readily with learners' problems, and it assumed that the teachers had a high level of content and pedagogical knowledge.

This research revealed that surface teaching took place in a large proportion of South African classrooms, and this was a cause for serious concern. The CAPS curriculum, which is structured mainly as a (long) list of topics, also encouraged surface teaching. In order to attain curriculum coverage, teachers claimed they had to race through the work. Given the volume, this meant that teachers hardly paused for reflection on any topic. Another problem that contributed towards surface teaching was the slowness of learners' writing. This situation was caused by insufficient practice and because teachers demanded neatness. Furthermore, the DBE's way of testing in schools relied on knowledge based directly on the DBE's workbooks, which used worksheets in their format. Another important factor was the experience of many teachers during the period of OBE, where they were instructed by departmental officials to abandon "rote learning", "copying notes from the board" and "reciting". They were told progressive teaching meant they had to talk to learners, produce their own materials and minimise unnecessary and mindless writing. The availability of posters, and other visual texts, made it possible for teachers to take centre stage and talk extensively to and about such materials. The use of worksheets satisfied two departmental directives: for teachers to develop their own materials, and to eliminate the time wasted on copying notes.

Many teachers were threatened by the notion of the participative learner. There appeared to be a great unwillingness to confront the problem of learners' reading resistance and also the learners' inability to write. It would require substantial persuasion to persuade public school teachers to move to more reading and writing with the learners participating actively in the classroom – something that would necessarily involve a change in the type of LTSM which was generally used and possibly also a curriculum that made opportunity for in-depth teaching possible. A good place to start might be the use of teacher-supportive textbooks. A great deal of research would be required to determine what such textbooks would look like, but this study found that such textbooks would have to target

teachers' need for greater depth and structure, to allow them to select from a fuller textbook. Furthermore, teacher training that facilitated the effective use of materials would be necessary. It is crucial that teachers understand that the use of teacher-supportive textbooks should not preclude the use of additional, complementary and supplementary materials. It is equally important that visual materials be understood and used better, so that teachers should introduce a rigorous and systematic teaching of visual literacy. For this to be accomplished, visual literacy needs to become a priority in both pre-service and in-service teacher training courses.

How this thesis contributes to research in the LTSM field

This thesis contributes to research in the field of LTSM in at least two ways. The first is the conceptual framework which was constructed to probe all three elements of the classroom triad: teachers, learners and LTSM. This framework built on previous research and it introduced in a systematic way the intersection between the elements of the triad: the levels of lesson coherence, the use of LTSM affordances and how the participants (teachers, learners and LTSM) needed to form an entity where the participation of all three were required. The intersections between these elements suggested that lesson coherence, the exploitation of the affordances of the LTSM and guided learner participation are areas that could reveal how teachers were mediating LTSM. However, none of these three areas are easily measurable, although the framework includes criteria for each area, so that it is possible to make some judgements based on these criteria. First, in the case of coherence, there are indicators such as the logic and linearity of the lesson, the creation of connections with related ideas, as well as the way in which learners engage with the topic. Secondly, the affordances of LTSM require an understanding of media and how different genres use different modes to communicate with audiences in order to describe this piecemeal pedagogy. Thirdly, learner participation can be gauged through an examination of the kinds of questions teachers and learners ask, and the nature of the discussion on the ideas and topics in a lesson.

The second contribution this thesis makes is the description of a teaching practice, namely piecemeal pedagogy, which is an approach not described in the literature. It is best described as the way teachers actively avoid the use of textbooks in the classroom. The

replacement of textbooks by mainly teacher talk, front-of-class visual materials and worksheets makes for a pedagogy that differs markedly from those described in international studies. Because only teachers had access to an overview of the curriculum's content, the learners experienced the curriculum in a piecemeal fashion, as the teachers presented topic after topic to them. There were instances where a teacher's input, extended notes, the learners' participation during project work remedied the generally fragmented nature of such piecemeal presentation. However, in the majority of cases I observed, the learners experienced a disjointed learning programme. This was reinforced by the provision of daily teacher-produced worksheets, where many of them gave scant information. Although other research (Hoadley, 2016; Taylor, 2007) describes the phenomenon of many worksheets used in classroom, this thesis analyses the implications of their use for the different forms that such a pedagogy takes.

Limitations and future research

This was a very small-scale, context-specific study and no conclusions can be drawn other than that the field is ripe for further research and expansion of the ideas contained in this thesis. A number of contentious and thought-provoking notions emerged from this research which would require testing and also verification in more contexts and in different schools.

The use of LTSM is an integral part of the teaching and learning process. It stands as an additional actor, together with the teacher, in the zone of proximal development (Vygotsky, 1978). This research focused on teacher enactment of LTSM and also learner reception/enactment, which is a novel approach in the field of teaching and learning. Given that learners are an essential part of the teaching and learning triad, their omission in much research is a serious gap in the field. Teachers and learners (with the assistance/mediation of teachers) need to work with materials in a far more conscious way if learners are going to achieve a fully rounded literacy. An expanded definition of literacy (and what it means to work with texts of all kinds) needs to be embraced and understood. These are all areas which would benefit from further careful and systematic examination.

And finally

Doing research on LTSM and observing how teachers work with these materials, has helped me to crystallise many ideas about how teaching happens, how learning might happen and how LTSM are instrumental in this process. The complexity of the dynamics in the teaching and learning process serve to remind one of the importance of always keeping the goal of the learners' development at the forefront. Educationists working in South Africa are acutely aware of the social and economic inequalities that undermine almost every intervention aimed at improving the learners' performance. The provision of LTSM was an area where access could be and largely was enabled, and many teachers benefitted enormously from this process. In turn, there were some positive spin-offs for learners, because of the greater variety and more interesting materials that teachers provided for them in the classroom.

But in a strange twist of policy events and teacher needs, many South African learners did not gain the access that was intended for them. LTSM could have been an instrument that democratised the classroom, where learners were given a stake in their education and their caregivers became participants in the education process too. However, poverty, in the form of light-weight worksheets, which were mainly used to accommodate teachers' requirements, has taken root in some classrooms. If teachers circumvent textbooks or substantial LTSM, or are unable to use this important element of the triad so that their learners do not participate actively in their learning, then serious disadvantages develop for learners who are already at the bottom of the global educational spectrum. When the learners' curiosity and their freedom to question are consciously replaced by a classroom-induced passivity and a dependency on a teacher, then this is a grave injustice. Whatever form materials take, these are central to the teacher for teaching. However, it would seem they are peripheral to many learners. This imbalance needs to be redressed, and requires materials that inspire and support teachers in line with the many issues that arise in the classroom. It also requires teachers who are well trained in how to use materials and who are willing to engage differently with both materials and learners. There needs to be three wholly involved participants in the teacher-LTSM-learner triad, and not just one or two. The lessons where this triad happens in practice is testimony to the profound difference that this approach makes to the learning process. If LTSM is accepted as a rights issue,

as the courts, education organisations and public discourse proclaim, then the provision of textbooks to schools are only the most basic part of such a right. Textbooks (or LTSM more broadly) that have depth and extended usefulness need to be in the learners' hands who have been shown how to mine, question and supplement these books with additional materials. A culture of engaging with ideas and knowledge needs to be actively and systematically cultivated.

Appendix A

Chapter 6: narrative description of lessons

Using books

Lesson 1 (observed 19 May 2014)

I made a request to observe a third lesson with teacher 1A, which was a 'reading lesson'. She taught a grade 6 class in a public school.

Teacher 1A had written a list of words relevant to the reader on the board. She announces that the learners will be reading a reader and these are handed out. The reader is "What is an endangered animal" (Sunshine Books, level 6, Set A, published 2001 by Wendy Pye Publishing.) It has beautiful photographs, reminiscent of National Geographic (see photograph), and the font is clear and fairly large. There is no discernible excitement from the learners at the idea of reading. The reading lesson starts unceremoniously with an instruction that learners read together starting on the first page. This they do, reading text and captions without distinction. Some learners are simply silent, while others are clearly reading silently. Some learners page through the book to look at photos. Some learners read ahead. There is a pause at the word 'orang-utan' when it is clear there is a pronunciation difficulty. The word is pronounced by the teacher and she points to a relevant picture. At some point, the teacher pauses to explain to learners why the correct diet for animals is so important: "people of Alex eat khota; if we had to flee to Sandton, their diet would not suit us, and we might get sick and die".

The teacher stops the choral reading after page 7. She reads a page and then asks an individual learner to read. There is always a keen response to the teacher's invitation to read individually to the class. Teacher and individual learners read to the end of the book. At the end, the learners are told to do the sum of the difference between the number of whales thirty years ago (25 000) and now (7 000). Teacher 1A then talks about the Kruger National Park as a place where animals can freely roam. The learners appear to be fluent readers, with fairly sophisticated vocabulary. Certain words are probably unclear, for example, 'blubber'. The teacher checks and discovers learners do not know the meaning of 'breed'. She instructs them to use dictionaries and a learner reads the definition: 'to produce offspring'. The teacher explains the meaning of 'offspring'. At the end of the lesson, the readers are collected.

Lesson 2 (observed 8 October 2014)

It is the second observed reading lesson taught by teacher 3A and the grade 7 class has twenty-two learners and the focus is on reading. However, the smart board has been set up to show a video of Jennifer Bricker, a gymnast without legs, and the teacher starts the lesson by showing the video to the class. They are very inspired by it and are all engaged by the idea of overcoming disability. The novel the learners are about to start reading deals with hardship and difficult physical limitations. Another theme in the novel is how to find inspiration.

The teacher switches the smart board to writing mode. Somewhere in the video there had been a reference to 'spitting' image. A question arises from the learners about 'spitting' and 'splitting' image. The teacher writes these two phrases on the board for discussion, using colour coding for distinction. She claims the reason 'spitting' image is used, has to do with DNA and saliva, which makes it possible to say something is 'identical' if the DNA matches.

All the learners have a copy of the new novel they are to read. "Skellig" is a children's novel by the British author David Almond, published by Hodder in 1998. It was the Whitbread Children's Book of the Year and it won the Carnegie Medal from the Library Association (http://en.wikipedia.org/wiki/Skellig).

The teacher asks the learners to read the blurb, study the cover to draw conclusions about the content and genre of the book. She discusses the concept of 'genre'. Despite a distracting disruption outside the classroom, the learners remain attentive and quiet. The teacher asks many probing questions about their beliefs, regarding 'angels', which is another theme in the book. She uses a dramatic voice to make conceptual distinctions and to emphasise aspects of the book that are described in the blurb. There are brief discussions about "Snow White", the Bible and dictionaries interwoven with learners' interaction during the reading. The teacher refers to the reviews on the inside cover, and points out facts and opinions, as well as instances of hyperbole. She makes an effort into building up the class's enthusiasm. The teacher spends some time on the pronunciation of the author's name (Almond) and compares it to the pronunciation of the word "poignant". Then the learners study the dedication and discuss its purpose. When the teacher starts to read, the very first sentence, it becomes an opportunity for her to talk about parts of speech. The class are almost all following carefully. Some of the learners prefer to listen to the teacher reading, so they do not follow the words in the book. A striking feature of the discussion that takes place about the content is the link to vocabulary, where words like "coerce" are used. The teacher clearly enjoys performing and takes every opportunity to play the parts of the characters. This enthusiasm spills over the class and most of the learners appear to be pleasantly engrossed in the reading of the chapter. There is a constant process of questioning, where she integrates interpretation with vocabulary building (breaking down words and talking about their origins) and grammar. The first chapter is short and at the end of it, the teacher moves rapidly onto a completely different focus.

Lesson 3 (observed 9 October 2014)

The following lesson was conducted by teacher 3B in school 3. It is part of what happens during an English lesson in a grade 5 class which has twenty-two learners. While some learners are writing a test, the class moves on with 'unprepared reading'. One learner at a time comes up to the desk to read to the teacher, and also the class, who uses a rubric to assess the learner. They all read from a novel called "love, Aubrey".

While the various learners read to the class, the class is mostly engaged in other activities. Learners have clearly been trained to raise their eyes to the class. It is hard for the first learner, but he makes a valiant effort, and tries to include expression. The teacher calculates a mark and returns the marked rubric to the learner who studies the assessment.

The second learner also finds it an effort to look up during reading, but is fluent and reads confidently with expression. He is clearly very pleased with the marked rubric. The following

reader becomes very involved with text and is very expressive. She is excited to receive the marked rubric and very pleased with the mark.

Next a less fluent reader, who appears a little insecure, is called. She reads in chunks, then pauses, and has a habit of raising her voice at the end of sentences. The next reader is also a little hesitant, but nevertheless quite competent. He stops of his own accord, instead of waiting for the teacher to halt the reading and is clearly nervous. Next a learner who uses text as drama script is called. She uses lots of facial expression and body language. A very confident and expressive reader follows. When returning to her desk, there are lots of whisperings of 'what did you get?' The class has clearly started to compare the marks of different readers. The next learner reads softly but is very focused on the text. He seems to be concentrating on meaning and doesn't seem to value the idea of reading aloud. Next is a confident reader, who is expressive, and strongly focused on the text. The class is quite bored and has to be reprimanded several times for disrupting the readers. The lesson literally follows a pattern of "next…next…next…next". Next a hesitant reader who grapples with the text is called. When the bell goes, the class leaves in a rather unceremonious way.

Lessons 4A and 4B (observed 23 May 2014)

The following two lessons are conducted by teacher 2B and are Social Science grade 5 lessons, which the teacher repeated with different classes. The school is a suburban government school and the classes have about forty learners.

In both instances, the teacher lines up the class outside the classroom and then she allows the learners in, one at a time. The teacher points each learner to a specific seat, and in this way she creates her own groups. She says that she does this in order to maintain discipline during the lesson. Although this process takes more than five minutes, she feels it is time well spent. Once seated, textbooks (Viva Social Sciences Grade 5) and class books are handed out.

Lesson A: The learners open their class books but are told: "Close your class books; all stationery down; open the textbook on page 71". She explains that the learners will be designing pamphlets on a holiday destination and will be highlighting five physical features of the advertised location. She points them to a picture in the textbook of Table Mountain, when she holds up the textbook. Then she explains that they are looking at an aerial view of Table Mountain. She reads the caption to the class and says: "You can go up Table Mountain in a cable car. What do you think you can see from the top of Table Mountain?" She then moves to the questions, but the answers are provided in a textbox on the textbook page: "What is a beacon?" "What is a landmark?" There is much laughter as she says in response to a learner's answer: "No, Beacon is not a chocolate". A whole lot of hands go up. "I didn't ask a question; put down your hands". Then she returns to a question on the definition of a lighthouse. A learner provides the answer given in the textbook. The teacher starts to talk about the role of "flares" and refers to the film, "The Life of Pi", which the whole class seems to have seen. She fetches the globe and points to a spot in an ocean. "Look how far it is to the closest land. It would be like walking to Tanzania – and remember this is the Pacific Ocean, it is very cold." Then she talks about radio communication between the captains of ships and the coast guards. Learners are engaged and constantly add comments and ask questions.

The teacher moves to the next photograph in the textbook, which is of the Drakensberg. She reads the caption but does not pause to discuss anything further. They turn the page and she tells them to study the picture of St Lucia. The teacher reads the caption and asks what a "wetland" is. Some

answers are given (it is very wet; there is a lot of water) and she then says: “Do you remember what the school fields looked a while ago after the heavy rains? It was waterlogged. When you walked on the fields, your feet sank into the water and you would be wet nearly up to your knees” A number of questions arise, one of which the teacher cannot answer, and she says to the learner, “You go and find out.” She mentions the Amazon River: “But we’ll talk about that next time I see you”. She instructs learners to close their textbooks and leave them on the desks. All other books and stationery are packed away.

Lesson B:

The lesson is a repeat lesson of the previous one and proceeds in the same way at first. In the discussion of what a beacon is, the teacher tells the class: “Pretend I’m a lighthouse. You are ships. It is pitch-dark, but I have a light. You would now know where the shore was. The lighthouse helps you to work out direction” Again she moves quickly over the Drakensberg picture and focuses on Saint Lucia. The teacher talks about how the abundance of water attracts animals and stimulates aquatic vegetation. None of this information appears in the textbook. A learner points to the picture in the textbook which includes a hippopotamus. An animated discussion about the dangers of hippos ensues. This leads to a discussion of a wetland and the effects of the seasons on it. The discussion returns to the hippopotamus and there is much excitement about how protective these animals of their young. Then the discussion moves to the notion of “endangered” and from there to “extinction”. Again, none of this content is in the textbook. The teacher then asks for a definition of a peninsula, which appears in the textbook, but she says: “I don’t want you to read the definition to me, tell me in your own words”. The lesson ends with the same instructions as for the previous lesson.

Chapter 7: narrative description of lessons

Front-of-class lessons observed

Lesson 1 (observed 9 May 2014)

I observed this grade 6 English lesson, which was done by teacher 1A, who is the HOD of English in the intermediate phase. She is a great enthusiast of the GPLMS, where she felt that the presence of a coach in lessons had inured teachers to being observed. This meant that she wholeheartedly embraced the idea that an interested party wanted to know about LTSM in her classroom. She repeatedly praised the lesson plans provided by the GPLMS. This was evident in the way she used the lesson plan, which never left her hand while she taught her classes.

The grade 6 English lesson starts with a reminder that the theme is “soccer”. A poster is pinned to the board, but it is not visible to many of the learners in the class. However, the poster has been up for some time and the learners are familiar with the visual and the vocabulary. An A4-sized copy of the poster is available to the learners in the form of a photocopy in their books, and they have coloured it in. The discussion is on the meaning of the vocabulary that the teacher writes on the board. The words are a mixture of nouns and adjectives, and some of the adjectives are discussed in their comparative form (loud, louder and loudest). She constantly refers to her lesson plan, but when she deviates by giving her own examples, she is very engaged with the learners and the examples are apt. The learners know instinctively to copy from the board as the teacher writes a heading.

Finally, there is an instruction that learners are to make sentences with a list of words provided: tall, loud, taller, louder, angry, stadium, biggest, province.

Lesson 2 (observed 19 May 2014)

This is the second lesson I observed, which was taught by teacher 1A in an English FAL grade 6 class. The lesson is still on the soccer theme and the poster remains on the board. Again, the teacher works with her lesson plan in her hand. She starts the lesson by referring to a mind map, which was not visible, but it emerges that the learners had done the mind map in a previous lesson. Teacher 1A writes a text frame on the board that requires the learners to provide their own input and she pauses after each sentence to discuss it:

I went to the stadium with _____ [teacher's phone rings and she takes the call] to watch _____. It was _____. [Learners are copying form the board while the teacher is talking and explaining. She tells them her focus is to teach them how to be descriptive. They need to give details like who (e.g. family or friends) and when (date and time)]. We had so much _____. ["Make it interesting, elaborate, create the mood"]. The day went by _____ because _____ [The lesson is interrupted by a colleague entering to talk to the teacher]. I was very happy because my team _____. They played _____. I felt _____ when the game was _____ and we had to _____.

The moment the teacher has completed writing on the board, she instructs the class to stop writing and close their books. She reads the frame from the board again and supplies her own examples of what might be appropriate words to fill in the spaces. Then she asks one of the learners to do the same. It is clear she selects one of the best performing learners in the class. The learner struggles to find alternatives to the teacher's examples, but makes a valiant effort. It becomes clear how difficult it is to use the frame to be "original", because the frame demands the same answers in a number of instances (we had so much fun; I was happy because my team won). The teacher skirts over this difficulty, but praises the learner for finding ways around this problem (we had so much of a good time; I was so happy because my team beat the other team).

Then the teacher asks the class to identify verbs in the frame, and she writes the verbs on the board and asks them to explain why they are in past tense. Next, she asks why verbs are important and then explains: "It's something that happened. Most essays are in the past tense". The learners are given an opportunity to complete the copying of the text frame.

Lesson 3 (observed 14 May 2014)

Teacher 1B is the English teacher for three grade 4 classes. The class under observation is doing Week 6, lesson 12, according to the heading on the chalkboard. The focus of this lesson is the simple, present tense, and how to use verbs with singular and plural subjects.

Most of the lesson is spent with the teacher working on the board. She writes a couple of sentences on the board that relates to a picture chart that is also on the board and treats each sentence as a discrete example of the grammatical structure. The underlying rule of concord (that singular nouns mean the verb will have an 's' added to it and plural nous will mean the verb will have no 's' added to it) is not made explicit. In the midst of her discussion on the present tense, she interrupts herself: "On Monday we read a story…. about wild animals. I will give you an activity;

I will give you homework." Then she instructs the learners to open their textbooks. She tells them to revise the story and explains what homework has to be done. Learners have a photocopy of the relevant page pasted into their class books. The teacher then returns to the topic of present tense sentences and tells learners to copy the following sentences off the board, which is also for homework:

My friend eats cake I watch television My teacher _____ to me My brother _____ with the ball I [walk, walks] alone on the road You [bake, bakes] delicious scones Do four of your own sentences in the simple present tense.

The disjointed instructions and haphazard presentation of the teaching appear to be unproblematic to the learners. No one murmurs or asks questions. The teacher walks around the class checking the copying of sentences off the board that the learners are doing in their books. In this case, the teacher is particularly concerned that the learners have work in the class books to reflect that the topics were covered. She then checks whether learners are working correctly off the board.

Lesson 4 (observed 13 May 2014)

The following Grade 5 English (HL) lesson was conducted by teacher 2A in a suburban public school, but where the learners are mainly from township areas. The class has many charts on the walls all relating to aspects of English teaching. The charts are uniform in style, which creates a very orderly "look"

The focus of the lesson is "editing" and on the smart board is a short story that was read to the class in a previous lesson. It is now presented as a kind of cloze exercise (see photo 10). During this lesson, the teacher hardly speaks at all to the learners except to give the initial instructions. This includes having to copy the text from the smart board and to correct mistakes and to fill in the missing words. Almost the entire time is used by the learners to write the exercise into their class books. The teacher sits at her desk and surveys the class from there. She makes an occasional comment to ensure that everybody continues to be busy. The visibility of the story on the smart board is poor and the learners walk constantly to the front of the class to read the text.

I notice that the class books of the learners consist of worksheet upon worksheet. At this time of the year (May), the learners are nearing the end of their class books and will have to start new ones soon. I observe how every learner has highlighted the work in the same way and how every book resembles the next almost exactly.

The lesson ends when the bell rings. Then the teacher tells the learners they will have an opportunity to complete the exercise the next time they come to class.

Lesson 5 (observed 15 May 2014)

Teacher 1C teaches SS to grade 7s and his topic is "Floods". A screen was set up to play a video. The learners have the *Spot On grade 7 Social Sciences* textbook on their desks, and the learners open the books to the relevant page. These books remain open, but the textbooks are not referred to at all during the lesson. The chalkboard is blank, but there are many charts on the walls. Before the lesson starts, some learners are reading, others are listening, some fidgeting and non-attentive.

The teacher introduces the topic by asking the class for the definition of a 'flood'. Then he produces a poorly home-drawn graphic, which is similar to the one in the textbook that the learners have on their desks. The teacher talks to the class while consulting notes that he carries with him. His explanation jumps from one concept/idea/point to another: Alexandra, mountains, ploughing, erosion.

He writes "run-off" on the board, and then the teacher adds an explanation that he copies from the notes in his hand. The written explanation disappears behind the screen and is invisible: "the water that does not sink in the …". Then the teacher puts up a sheet of written notes over the notes on the board. The handwriting of these notes is too small to read. He asks: "What is alien vegetation?" Next, the teacher refers to the graphic, that he put up earlier, to show an "alien tree". During the next part of the lesson the teacher talks about fires. He is very unsystematic and confusing in his presentation, although he appears confident.

Then the teacher switches on the video. While waiting for the video to load, he picks up a new set of written notes, and gives the following instruction: "Don't read in your book; think about it [floods]". The video is about the tsunami in Japan, and the panic of the people in the video elicits laughter from the class, which the teacher does not address with the class. After watching a short part of the video, the teacher asks the class: "What are the effects of floods? What did you see?" Learners in the class responds by shouting out answers: "Collapsed buildings", Drowning" and "Displacement". He then asks about South Africa and diseases.

Finally, the teacher produces a worksheet. It is a photostatted copy from the Viva textbook and includes a picture of the Jukskei River in Alexandra, which he explains "is only one kilometre from our school." The learners start to work on the worksheet's questions and copy answers into their class books. There are five questions, and at least three of them are higher order questions. The teacher allows no time for discussion or thinking: "You only have 5 minutes to finish this work." Next, he removes the notes from the board while the learners are busy. The teacher invites the learners to come after school on Friday if they want to watch the rest of the video on the tsunami. Most of the textbooks are now closed on the desks, and covered by the worksheet. Learners are working very slowly and he tells them to complete the worksheet for homework.

The five kinds of material used in this lesson (excluding the lesson plan from which the teacher reads) moves from a drawn graphic, which was available in the textbooks, but he does not refer to this, to the notes on the board. Then the teacher moves to a sheet with more notes pinned to the board, back to the initial graphic, next to the video, and finally to a worksheet. If there had been a clear line of thought or argument, then the variety of materials need not have served as a distraction and caused confusion. Instead, the teacher covers all of the following topics in short bursts without making the links between them or to the main topic: Alexandra, mountains, ploughing, erosion, run-off, alien vegetation, fire, the tsunami in Japan, the effects of floods, South Africa and diseases, and the Jukskei River in Alexandra.

This lesson offers the learners nothing of substance, but it serves to alienate and obscure the key issues. The worksheet's exercise, which might have served as a cohering principle, is treated cursorily and dismissively when the teacher instructs the learners to do the exercise on their own at home.

Worksheets and notes

Lesson 6 (observed 21 May 2014)

Teacher 1D teaches both SS and English. The following description is of a grade 4 SS lesson. It is a large class and the teacher controls them with her powerful voice, which she uses at high volume, and her bluff humour. The learners are seated in groups with the *Oxford Successful Social Sciences Grade 4* textbook on the desks. These are closed and remain so for the duration of the lesson, which is an hour.

Teacher 1D starts the lesson by handing out a worksheet, which is a numbered grid. She then instructs the learners to fill in their names and scratch out the bottom row. Next, the teacher tries to explain by holding up the worksheet and pointing to part of it. However, what she points to is not visible to most of the learners. The teacher asks them to perform inexplicable activities with instructions that are hard to understand. Then she spends considerable time focused on an individual learner while the rest of the class also do not know what to do. Finally, she draws the grid on the board and starts to explain systematically what she wants the learners to do.

The teacher gets learners to find different blocks and this generates some excitement from most of the learners who now become attentive. When a learner gets the answer H6 right, then the class gives a cheer. The teacher asks the learner to explain how she arrived at the answer. Then the learner adopts the teacher's manner and gets the class to count in chorus, as she leads them block by block to H6. The teacher then puts up a hand-made chart with instructions, and the learners have to copy the instructions onto their worksheet:

1. Ice cream F4
2. Sun G9
3. Apple I8
4. Hat D3
5. Bird B2
6. Butterfly D10
7. Car A6
8. Sunglasses E3
9. Heart J10
10. Boot A3

The teacher then goes through the list and demonstrates number 1. Learners get started on the exercise and are occupied to varying degrees. After about five minutes, the teacher abruptly stops the activity and instructs the learners to paste the sheet into their class books. There ensues much cutting and pasting of the worksheet. She says: "You are grade fours; if I don't tell you to do it now, I know I'll find my papers on the floor!" The learners need to share glue and scissors, which leads to the class becoming restive. There is a struggle to collect bits of paper and to dispose of them. Finally, the class settles again. The teacher tells them to colour in their drawings, but the

colours need to be realistic: “No blue apples! If you colour it blue, you will have to bring a blue apple to school”. Then there is more effort expended on the picking up of papers from the cutting out of the worksheet.

The teacher walks around inspecting the work of learners and praises one, which leads to the class clapping. There is much to-ing and fro-ing to get koki pens and crayons from each other. Learners begin to take books to the teacher to be checked and signed. The teacher tells the class to leave their books on the desks for her to collect, and then she asks for the textbooks to be collected. This leads the learners to send the textbooks to the front so that they can be put away into the teacher’s cupboard. Some learners are scrambling to complete the exercise before the bell goes.

Lesson 7 (observed 21 May 2014)

This is the third grade 7 lesson I observed that was taught by teacher 2C. The topic for the lesson is adverbs, and it takes place over a double period, which is interrupted by break. As the learners enter the classroom, the teacher places worksheets on their desks. Without a word or any hesitation, the learners take out their class books and cut and paste the worksheet into them.

The teacher sets up the computer in preparation for using the smartboard: “I want to go back to the worksheet on adverbs”, and a worksheet that was handed out in a previous lesson is displayed on the smartboard. Then the teacher reads and discusses the explanation of adverbs in terms of time, manner and place. He mentions that there are other kinds of adverbs, but that today’s focus is on these ones. The teacher instructs learners to highlight/underline answers as he systematically goes through first adverbs of manner, then place, then time. He also provides a number of additional examples. Then he gives the learners an exercise from their English textbook, where they specify whether the adverbs are of manner, time or place in the sentences. While the learners are busy, the teacher does administrative work that requires interrupting individual learners to collect forms. The work of the learner seated next to me shows her partial understanding of adverbs, but she does not ask any questions.

After break, learners settle quickly and are asked to convert adverbs to adjectives. A learner asks: “May we use a dictionary?” The teacher encourages this and dictionaries are handed out to those who want them. Many learners are sitting idle while others are working. Then the teacher says: “Let’s mark the first set.” He goes through the answers on the smartboard and the learners are either entering or marking their answers. Despite quite a high scaffolding level, it is clear that many of the learners do not understand adverbs.

The teacher then moves onto marking the second set of answers with the learners. Again, many of the learners simply copy the answers down as he gives them to the class. The teacher creates a humorous moment as he mimics Jim Carrey to emphasise the spelling of “bea-U-tiful”. Then the teacher moves to revision of compound nouns, which is shown on the next worksheet. It is noticeable how poorly the worksheet (from a textbook) has been put together, as it reveals a number of errors. But no one remarks upon this problem. (This worksheet is discussed in more detail in chapter 10 on materials analysis). The learners shift their attention from the smartboard to the worksheet, which the teacher reads and explains to them. Inexplicably, he asks the learners to copy the task from the worksheet into their class books. A few minutes before the end of the lesson, the teacher tells the learners to complete the activity for homework.

In this lesson, the teacher deals with adverbs, adjectives and compound adjectives. Although there is a strong connection between these different kinds of words, and the teacher stresses this

connection ("we are dealing with describing words"), the lesson has a disjointed feel. This is largely due to adjectives and adverbs being identified as individual words, and the examples jump from one unexpected word to another. The disjointed nature of the lesson is also due to the nature of the different exercises that the learners are given. They are presented with decontextualised sentences that require the identification of certain types of words, rather than to look meaningfully at the meaning of the sentences. A further reason is due to the use of five sets of LTSMs, which interrupt one another: two different worksheets, an exercise in a textbook, the use of the smart board and dictionaries.

Lesson 8 (observed 22 May 2014)

Teacher 2E teaches SS at grade 4 level. Although she is friendly towards the learners, her teaching style is mechanical. The class is arranged in rows (most classes in this school have the learners sitting in groups). There are notes on the chalk board and a graphic of a compass and directions on the smart board.

The teacher announces what the lesson will deal with and starts by getting the class to say a rhyme which serves as a mnemonic for geographical terms. Then she announces that she "was very happy – everyone in this class passed the geography exam". Next, the teacher asks questions about map work, and the class answers in chorus about how to reference a grid. She instructs the class to open their class books at the graphic of the compass. The class is deathly quiet. The teacher says: "What does a compass represent? NEWS", and she makes the class represent the directions seven times. Her next question follows: "What is a compass?" The class choruses the answer: "An instrument that shows direction". They do this five times. The teacher insists on absolute accuracy with no variation and explains why alternative answers are not acceptable.

Next, she tells the class they will be going to the school field the following week "to look at which direction we are facing". The teacher also tells them that she plans for the class to make a windmill in their creative art lesson so that they will be able to determine the direction of the wind. Then she makes the learners look at a map in their class books and she asks them to explain the symbols and key. Again, the class choruses the definition of key several times. "Tomorrow we'll design our own map and put in symbols and say where the symbols are, i.e. NEWS".

The teacher tells the learners to put away their geography books and to take out their history books. Learners are still fairly attentive, but they are now looking and playing with things on their desks. She starts with questions about Nelson Mandela: "What was his date of birth?"; "What was his place of birth?"; "What was his profession?" Every question results in a choral answer. The teacher then talks about "apartheid" and makes the class repeat the word "segregation" five times.

Her follow up question is: "Everyone: what is democracy?" The choral answer is repeated twice. A learner unexpectedly puts up a hand and says: "We weren't born. We can't know about this." The teacher explains that this is why they are learning about it now and that this is precisely what history is – it is learning about things that happened before you were born. She then tells them: "Nelson Mandela came up with something: the Freedom Charter". She asks the class: "What is the Freedom Charter?" A learner answers: "South Africa belongs to all who lives in it, black and white". The answer is chorused several times. The teacher's next question is: "What is 'protest'?" When no one replies, she tells them that it is when you disagree about a decision so you march against it. She asks another question: "What is equality?" Then the class choruses: "Equal rights".

The teacher then tells the class: "The government could not fight the whole world. So they came to a mutual agreement with Mandela".

When she asks the question: "What is a political prisoner?", the teacher allows for a number of different answers and then she says: "People are sent to prison because they stand up for what they believe in". Then: "Who was Mandela married to?" "What is a lawyer?" ("Someone who helps people with the laws of the country"). She now asks the class to list the qualities they want to find in a leader. As answers are given, the teacher writes on the board: friendly, kind, helpful, someone that shares, clever, dedicated, someone we can respect and who respects us. Then she asks: "What would you NOT want in a leader?" Learners give the opposite of what is on the board, and they add "jealous" to the list.

The class is now restive and learners are playing with various objects on their desks and have stopped paying attention. The teacher becomes annoyed and talks to them sternly about their "bad attitude". Then she moves on to Mahatma Gandhi. She tells the class: "Everyone, fold your hands for me", and then she explains that the word "Mahatma" means "great soul" and it comes from Hinduism. The choral definition is repeated. "What was his first job?" "What was the big word that had to do with the British taking over India?" Answer: "Colonialism". "Gandhi wanted independence for India".
The teacher talks about "ahimsa" and says (as if reciting): "The truth that comes with love and non-violence". She then tells them that another word for "humiliating" is "embarrassing" and proceeds to narrate the incident of Gandhi's experience in the whites-only train compartment. The teacher talks about passive resistance and explains that "it is not like today. People did not throw stones and burn tyres and swear".
The lesson ends when the bell goes and the learners leave noisily.

Lessons 9a and b (observed 5 November 2014)

The following two lessons are the same lessons, which were taught by different teachers. As the lessons followed closely upon each other, it was possible to make a comparison between the two teachers and the different ways they used the same materials. The materials were drawn up by the two teachers as a joint endeavour. This consisted of an information booklet which was given to the learners. The teachers made a decision to keep the activity sheets separate from the information booklets so that they could include exercises for the purpose of assessment.

Lesson 9a

Teacher 4D settles the class and refers the learners to the relevant page in the booklet, then asks: "What can you tell me about medicine?" Lots of hands go up and the learners relate the "facts" they could remember from a previous discussion: the use of human milk, bleeding, laxatives, mouldy bread for infections (an early form of penicillin). Then the teacher presents what she calls Egyptian culture, in contrast to the modern and scientific 21st century. The teacher constantly uses words such as "bizarre" and "crazy". When she described how the Egyptians knew that the windpipe led to the lungs, she said: "How amazing were these people!"

Then the teacher commends a certain learner for bringing 'beautiful' books for the forthcoming project. She reads to the class about mummies from one of these books. Next, the teacher tells them about the idea of archaeology, the after-life and how bodies were embalmed. She explains

that the embalmers used up to twenty layers of bandages, and that the brain was removed with a hooked knife. The learners exclaim with horror, and then the teacher shows pictures from the book. She tells them the removal of the brain was in order to preserve it. Throughout the discussion, the teacher alerts the learners to the ways in which human anatomy works. She connects these ideas to their own experiences of ailments such as, sinusitis. As the teacher takes the book around, there is lots of discussion.

The teacher settles the class and asks: "What is an organ?" A learner answers: "Intestines." Then the teacher returns to their notes and reads with the learners, and she explains every phrase. In relation to the idea of 5km of bandages, she explains the distance as being from the school to some landmark about 5km away, and the class is amazed.

The lesson is very cross-curricular, and the texts are peripheral and supplementary. It is clear that the knowledge resides in the teacher. She reminds the class of their research project, which will require them to use knowledge from English, Mathematics, Social Sciences and Natural Sciences.

Lesson 9b

Teacher 4E teaches in a similar context as the previous teacher. The class is much quieter and more studious than the previous class, and the teacher reads from the booklet and explains it phrase by phrase. She talks about the post-mortem examination and the processes of dissection and how this led to an understanding of anatomy. The teacher describes the Egyptians as advanced and explains how one cannot just learn everything from books, and how one needs to see real bodies and real objects. She tells learners how learning materials take many forms. The teacher moves on to the topic of mummies. A learner tells the class how he watched a video on YouTube about Tutankhamen and saw images of black and shrivelled mummies.

The teacher holds the class in tight but comfortable control. Her aim seems to be to prevent the learners from jumping ahead and keeping them focused on the discussion at hand. She tells the class: "We don't know how true this is… history is like that … we make deductions from what we can see."

The teacher reminds the learners of the project and explains to the learners how intact bodies were found after thousands of years. She tells them "embalmed" means "preserved". In this class, there is far less of a shocked response to the description of the removal of the brain and intestines. The teacher shows them pictures of organs in jars from a book, and asks the following questions: "Why do you think they removed all the organs?"; "Why is it called a 'mummy'? – You go and find out." This is how the lesson ended.

Lesson 10 (observed 28 October 2014)

Teacher 4A is the head of the intermediate phase, and an English teacher with many years' experience. I observed a grade 6 class during the first session of the day. Unlike in other classrooms, the learners sit at tables (not desks), which gives them a lot of surface space. Bags are left outside and only pencil cases are brought into the classroom.

The teacher hands out a piece of paper with a picture of a thatched house (see figure 15, p 197) and tells them she will be reading a "story" to them and they will have an opportunity to hear it three times. They will listen with closed eyes the first time, and then with the second and third

readings, they will take notes. The third reading will be an opportunity to refine the rougher notes taken on the second reading.

The teacher starts the discussion by asking if anyone knew what a dovecote was. A number of answers are given, all beginning with: "Isn't it …?" The teacher shows a drawn picture to the class. Then she instructs the learners to close their eyes while she reads a poem to them. The teacher asks them to "try and get a picture in your head". She urges the learners to listen to the sounds of the words, and to try and pick up the poetic devices. The teacher works off a tablet and reads the following Walter de la Mare poem:

Silver
Slowly, silently, now the moon
Walks the night in her silver shoon;
This way, and that, she peers, and sees
Silver fruit upon silver trees;
One by one the casements catch
Her beams beneath the silvery thatch;
Couched in his kennel, like a log,
With paws of silver sleeps the dog;
From their shadowy cote the white breasts peep
Of doves in silver feathered sleep
A harvest mouse goes scampering by,
With silver claws, and silver eye;
And moveless fish in the water gleam,
By silver reeds in a silver stream.

The teacher exaggerates the "s" sound to emphasise the alliteration in the poem, and to focus the learners' attention. She also highlights the personification of the moon through her use of voice and emphasis. After the first reading, a conversation in the class ensues, some of it with the teacher, and some of it with each other. The teacher then tells the learners that she will be reading the poem for a second time, and that they are to take notes while listening to her. She also tells them that they will be using their notes to create a drawing depicting the images from the poem. The picture of the thatched cottage is the basis of their creative art work.

She pauses to ask the class about the spelling of the word "kennel". It seems that she aims to get the learners to write a description of what they have heard. The teacher hands out crayons. Next, she tells the learners that she will be reading the poem for a third time and they need to refine the notes that they have already taken. Using the picture of the thatched house as their central image, the learners need to draw the images of the creatures described in the poem. The class is very attentive and they follow the teacher's instructions carefully.

There are many poetry anthologies scattered around the class: *Poem Stew*; *Where the sidewalk ends*; *African Sky Blue*; *Appreciating Poetry*; and, *Poetry 2*. The teacher tells the learners to use the white crayon under the colours they want to depict to create a silvery affect. It is not clear what the learners think the purpose of the lesson is, because it combines listening, art, poetry appreciation, vocabulary extension, note-taking, and it is a very integrated lesson.

She tells the class to stop when the period nears its end. Learners need to hand in both their drawing and their notes, and they also have to return the crayons.

Lesson 11 (observed 28 October 2014)

Teacher 4B starts with a grade 4 English lesson, and the teacher settles the class. The learners use tables (not desks) and in this case, there are learners' bags all over the tables. There are dictionaries on the tables as well as pencil bags. The learners are writing in exercise books. There are lots of notes on the chalk board relating to adverbs, and they are listed together with examples.

The lists are colour-coded. Then the teacher goes from learner to learner to point out –ly words. The exercise books are clearly the repository of knowledge and learning in this classroom.

This lesson starts when the teacher writes the following on the board:

Characters Setting Problem Conclusion

Then she tells the class that she will be reading a story to them, and they must listen to it. The teacher settles on a stool and tells the class to "pick up in your mind" the different parts of speech like nouns, verbs and adjectives, while they listen. She wants them to be aware, but not to put up their hands to tell her. The teacher briefly reminds them of the meaning of proper nouns, verbs and adverbs. She explains why parts of speech are useful to know, because they are "the building blocks of language, used to tell stories". Next, she comments on some of the Americanisms that they will encounter in the story, namely, mail versus post, and fall versus autumn.

The interaction between the teacher and the class is easy, conversational, and interspersed with lots of praise. She asks both challenging and easily achievable questions. Throughout the lesson, she uses sophisticated language. When she starts reading, she interrupts the story to talk about the use of language, for example, "Isn't that a lovely way to say this?" She provides the class with a very expressive reading of the story. Then she asks: "Do you think it really happened?", and confirms for the class: "In his mind, it felt like it really happened".

The teacher starts the conversation by talking about imaginary actions and games. There is much hilarity. Things become a little cryptic when she adds: "… the journey is short, but the end is just the beginning … for a leaf. When they fall off the trees in autumn, they drift in the wind and they travel".

Next, she continues the story which concerns maple leaves that blow in the wind towards the city dump. The boy in the story, Tommy, "blows" with them, and imagines that he is a leaf. He imagines (and describes) the amazing sights from up high. During the reading, the teacher pauses again to make the class spell the word: "happily". Then she asks: "Is the city dump a safe place for children to play?" The teacher places emphasis on the structure of the story. As she questions the class, she writes the learners' ideas on the board under the different headings. She makes the class stand up and pretend that the wind is blowing them and then tells them the wind is settling them back onto their chairs.

When she asks about the setting, a learner says it is also about "time". The teacher acknowledges that this is an excellent insight. When examining "plot", the learners look at all the various problems that arise in the story – both major and minor. The teacher explains how in the conclusion the problems are solved or resolved.

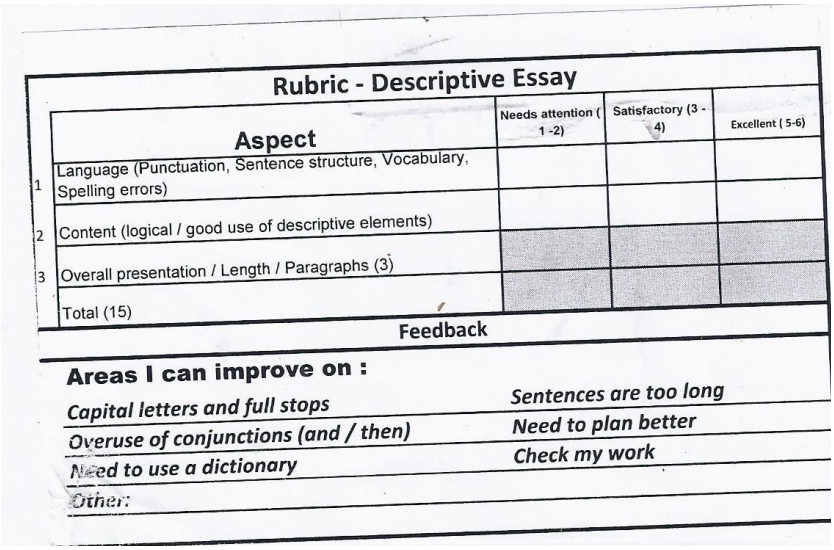
After extensive discussion, the learners are told to cut and paste their worksheets (figures 7.7 and 7.8) into their books. The teacher cleans the board and rewrites the four elements of the story (characters, setting, problem, conclusion) on the board. She tells the learners to fill in the worksheet circle and the learners become busy with their own ideas.

The second worksheet serves as a reference sheet, and to remind learners how the writing process works. It is intended to instil the habits of drafting and editing in learners. The teacher refers to the sheet but does not go through it with the class. She tells them to use it as a reference.

Lesson 12 (observed 13 May 2014)

Teacher 2C is the HOD for English and teaches the grade sevens. The following lesson consists of one-on-one discussions between the teacher and learners while the class is engaged with summaries of "Stories from Shakespeare" in preparation for a test the following week.

The teacher seats himself next to me in a learner's desk at the back of the classroom. He then calls individual learners to this desk and talks to them about a one-page descriptive essay that they wrote and he has marked. While talking to them, he first shows the learners how he has assessed them according to the top part of a rubric (see figure 28, below) Then he fills in the second part of the rubric with them. In this way learners are forced to re-examine their own work and participates to a limited extent in the assessment of their own work. Most of the marks are in the 10 – 12 out of 15 range. He continues to work with individual learners in this way until the bell goes.



Rubric - Descriptive Essay

	Aspect	Needs attention (1 -2)	Satisfactory (3 - 4)	Excellent (5-6)
1	Language (Punctuation, Sentence structure, Vocabulary, Spelling errors)			
2	Content (logical / good use of descriptive elements)			
3	Overall presentation / Length / Paragraphs (3)			
	Total (15)			

Feedback

Areas I can improve on :

Capital letters and full stops	*Sentences are too long*
Overuse of conjunctions (and / then)	*Need to plan better*
Need to use a dictionary	*Check my work*
Other:	

Figure 22 Rubric for assessment of creative writing work of grade 7 learners

Lesson 13 (observed 3 November 2014)

Teacher 4F teaches a grade 6 class SS. It is a small group of learners and the class is arranged so the tables form a circle. The tables have pencil cases, books and the printed booklet on them. The atmosphere is relaxed, comfortable and both the teacher and the learners engage in humorous interchanges. This lesson is on travelling for the purposes of trade, and it is about the crusades.

The lesson consists of notes that are read in turn by different learners, and the teacher stops learners to discuss issues that arise from the notes. There is a class discussion about the meaning of AD, and they talk about the Christian – Muslim conflicts that were the reason for the crusades. The teacher explains that the Christians wanted to restore Christianity in and around Jerusalem:

"Someone, look up in a dictionary the meaning of the word 'crusade'". A learner asks if there were any other crusades. There is a discussion about inter-religious conflicts. There is a question about the African National Congress (ANC) and apartheid and whether the struggle was a crusade. The teacher answers: "Not really – it was not a religious struggle". The learners read in turn for quite some time, but the class becomes distracted. It seems that the learners' attentiveness depends on who is reading.

Another discussion on global warming starts in relation to a reference to flooding, and that the cities had floodgates. The learners' questions are very dispersed and wide-ranging. But the teacher brings the discussion back to "trading". There is more learner-reading, which is followed by a discussion on "spices". A learner asks the following question: "Are spices plant based?" The teacher asks an Indian girl to explain, because he is not sure where spices come from. A discussion starts on the cost of spices, and the teacher tells the class that the Arabs had ready access to spices. This meant that the Arabs could drive up the prices of the spices. The teacher is clearly unsure of the content, and this is partly due to the booklet's content being too simple and the learners' questions are too demanding and extensive. His discomfort is clear and the teacher tries to rein in the discussion by adhering to the booklet's content. However, the learners continue to insist on a lot of background information.

There is a tangible sense of relief on the part of the teacher when the lesson comes to an end. The learners have to handback the booklets at the end of the lesson. This booklet contains worksheets as part of the information package and the learners have to fill in some of these for marking.

Combining coherence, LTSM affordances and learner input: an exercise in group work

Lesson 14 (observed 9 October 2014)

Teacher 3B teaches a small grade 6 class and it is a SS lesson. The lesson starts with the handing out of notes, and the learners cluster in groups. Gradually the class settles down, while the teacher talks to the learners in different groups.

The notes are under the heading: "Influence of mineral resources and industries on world settlement". It is page 7 in a pack of notes and the class is given an additional six pages to read. The learners use highlighters while quietly reading through the notes. After some time, the teacher gives each group a focus to summarise for the class, using their own words. The learners are encouraged to write notes in pencil at the end of their books.

Some learners look for the exercise books to hand out, and other learners are fairly engaged once the teacher has given the instructions. But some of the learners are not reading. There is a lot of paging through the notes and chatting takes place. The teacher allows this to happen for a short while and then brings the class to order: "You can read together. One person can read and the others can take notes; you can also read on your own and then compare with the others in your group to see that you understood". A hum develops and although quite loud, the class is constructively occupied. The teacher moves through the class going from group to group. She helps guide groups so that reading and writing is happening.

Some groups are far more engaged than others. Many learners are not keen to write, and there is quite a lot of reading out aloud. Some learners assume the teacher's role, and they point and explain to their group members. There is quite a lot of play and chatting in a relaxed atmosphere.

The class settles into a rhythm of work, for the most part, and the learners consult with the teacher to clarify concepts. She also helps them to articulate their thoughts. Some of the learners go outside to practise and there is a sense that they take pride in their presentations. The learners are given nearly an hour to prepare for their presentations in groups.

Most learners adopt a dramatic presentation style, which does not feel appropriate for the kind of presentations they are doing. First, the groups talk about climate and population patterns. The teacher stops them from time to time to ask questions. Later groups talk about population density and distribution. The teacher asks very pertinent and difficult questions that force the learners to think hard, go back to their notes, or undertake to do further research. Mainly she asks questions to extend their thinking about the issues they raise.

The last group is interrupted by the bell and the learners start to pack up. The teacher promises to continue in a follow-up lesson.

The tablet as LTSM

Lesson 15 (observed 28 October 2014)

Tablets are handed out to a grade 6 class. Teacher 4A refers the class to the vocabulary building games that they have played before, which she invites them to revisit. The only input the teacher gives the class is to explain which application to use.

Then the class becomes very quiet. All the learners are focused, individually, on their tablets. Once they have logged in, they play the vocabulary games with great concentration. The learners are engaged in a variety of activities that require typing and moving objects on the screen. A screen is in front of the class, but there is nothing displayed on it. After about 20 minutes of complete quiet, the teacher instructs the learners to log off, but the tablets are not handed in to her.

A more normal hum of conversation and activity resumes, but this is not related to what the learners have been doing on their tablets. In fact, the teacher moves directly onto a new lesson.

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