

## Reading in a disadvantaged high school: issues of accomplishment, assessment and accountability

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Findings from a two-year project, which investigated the entry-level English reading skills of Grade 8 non-primary speakers of English, are presented. The article raises some theoretical and methodological issues related to reading development and assessment in schools. The generally poor reading skills of many learners entering high school raise questions about current classroom practices and disparities in literacy accomplishment in primary schools. By making our findings available to scholarly scrutiny, we wish to stimulate discussion on reading instruction and assessment in schools, and educational accountability, and so hope to encourage further research and discussion in this field.

### Introduction

National performance in reading is often seen as an indicator of the effectiveness of an education system. In the USA, for example, the National Assessment of Educational Progress (NAEP) was set up in 1969 and since then has monitored student achievement in literacy at ages 9, 13, and 17, and it reports trends in student achievement over time (Salinger & Campbell, 1998). In the UK, up to 1988, large-scale assessment of reading was undertaken to monitor national standards over time and to identify failing readers. This assessment was based on stratified sampling and never reached the intensity of the wide-spread standardised testing characteristic of education in the USA. In 1989 a national curriculum was introduced in England and Wales, which specified what should be taught and also introduced a mandatory system for national assessment of the curriculum at ages 7, 11, and 14 (Horner, 1998).

The domain of assessment is a controversial one. In many countries, including South Africa, the notion of assessment is being re-conceptualised. There is a trend away from 'external' standardised testing to continuous, classroom-based, holistic assessment. In South Africa, the new curriculum specifies the learning outcomes and assessment standards for literacy at the various levels (Department of Education, 2002). However, neither in the past nor in the present have there been national assessment procedures for monitoring reading and determining whether learners are reading at their appropriate maturational levels. Consequently it is difficult to determine, officially, to what extent learners have reading problems and whether the educational system is delivering on its mandate to produce literate learners. In 2002 the Western Cape Education Department implemented literacy and numeracy assessments of Grade 3 and 6 learners. Only 35% of the Grade 6 learners achieved above a 50% score on the literacy tests.

In 2002 a two-year research-cum-community project was undertaken at a disadvantaged high school in Gauteng. Whilst the overall aim of the project was to nurture a culture of reading at the school, one of the research aims of the project was to examine the high school entry-level reading skills of the Grade 8 learners and to track their reading development over time. This article focuses on the reading assessment of these Grade 8 learners. We first discuss some theoretical issues related to reading assessment. Thereafter we sketch the school context in which the research was undertaken, describe the way in which reading was assessed, and we present the results of the reading tests. In conclusion, we discuss some implications that derive from the findings.

It is not the intention in this article to address at depth issues around literacy assessment. Our concern at the findings from the research project has prompted us to raise questions about current classroom practice and literacy accomplishments. By making our assessment procedures and findings available to scholarly scrutiny, we wish to stimulate debate around reading instruction, assessment and accountability. We hope hereby to encourage further research in this field.

### A theoretical framework for reading assessment

Literacy, broadly construed, is generally taken to refer to language activities that include the written word. However, a simple definition of literacy as 'the ability to read and write' raises questions such as "Read and write what, how well, and to what purpose?" Expectations about what literacy entails depend largely on the socio-cultural context in which specific types of literacy occur, what functions they perform and how they are valued by their communities. Literacy is, above all, a socially constructed form of human behaviour. In the next section we will look briefly at what reading entails and then identify those aspects of reading that were assessed in this study.

### Reading: complex, constructive and interactive

This study focused on a specific type of literacy, namely, reading literacy in the learning context. Reading is viewed as manifesting an individual as well as a social dimension. The individual dimension comprises a complex array of cognitive-linguistic accomplishments that develop within the context of formal schooling.

The cognitive-linguistic accomplishment of reading comprises two main components, decoding and comprehension. Decoding involves the perceptual and parsing aspects of reading that 'translate' written symbols into language. Alphabetic skills and phonemic awareness lead to the increasing automaticity of word identification skills on which accurate and fluent decoding is based (e.g. Stanovich, 1986). Comprehension refers to the overall understanding process whereby meaning is assigned to the whole text. This involves prior knowledge, knowledge of text structure, and inferencing and integrative skills to construct meaning. Comprehension also involves interpretive skill, the ability to perceive author intention, awareness of theme, characterisation, and use of language to create specific effects (Graves, Juel & Graves, 1998).

Beginner readers initially learn to master decoding skills, since comprehension cannot effectively occur if decoding has not been mastered. However, skill in decoding does not necessarily imply skill in comprehension. Reading is a product of both decoding and comprehension (Oakhill & Cain, 1998). Skilled reading is an interactive, meaning construction process that is rapid, accurate, strategic and motivated (Grabe, 1991; Alderson, 2000). If problems occur in one area, this can affect overall reading performance (Stanovich, 1986). The assessment of reading ability should include a variety of tasks that will tap into these different components and assess the meaning construction processes at play.

In criterion-referenced reading tests, a distinction is commonly made between three levels of reading ability, appropriate to a specific maturational level (e.g. McCormick, 1995:100). These levels are not absolute, but serve as guidelines:

- At the **independent** level, the reader reads with 98% decoding accuracy and has at least a 95% level of comprehension. These are highly skilled readers who can effectively learn from texts appropriate for that specific maturational level.

- At the **instructional** level the reader reads with 95% decoding accuracy and about 75% comprehension. These are readers who do not have major reading problems but who can benefit from reading instruction at their maturational level.
- At the **frustration** level, the reader reads with less than 90% decoding accuracy and 50% or less comprehension. These are readers who have major reading problems and who are reading well below their maturational level. They need intensive reading programmes to increase their reading level.

### A developmental perspective on reading

In order to place Grade 8 reading skills within a broader context, we briefly sketch a developmental perspective to show how reading as a skill in its own right develops. Chall's model of reading (1983; Chall, Jacobs & Baldwin, 1990) is used to briefly outline the differential development of reading competence and the qualitative changes that occur as learners move from 'learning to read' to 'reading to learn'.

The preschool years characterise the development of emergent literacy, where children acquire attitudes, expectations and skills related to written language and an increasing awareness of literacy behaviours (e.g. Sulzby & Teale, 1991; Graves, Juel & Graves, 1998). Children learn how to handle a book, and may pretend to read and tell a story while looking at the pictures. They learn how to construct meaning from visual clues on the page. During this early stage they usually have a vocabulary of several thousand words, but recognise very few of them in print.

The Foundation Phase characterises the 'learning to read' period. Learners learn the alphabetic principles, letter-sound relationships, recognise high frequency words, and read simple texts, usually narratives, containing language and thought processes within their experiential frame of reference. By the end of Grade 1, learners are estimated to be able to read over 600 words, and to understand around 4 000 – 6 000 or more words in spoken language. During Grades 2 and 3 decoding skills are strengthened and the reading of simple language becomes more automatised. By the end of this stage, about 3 000 words can be read and understood, and about 9 000 are understood in spoken language. Listening comprehension is more effective than reading.

During the Intermediate Phase from Grades 4–9, the learners' language, knowledge and vocabulary expand and they start using reading as a tool for learning. They start reading expository (information) texts that go beyond their immediate frame of reference. Listening comprehension is still more effective than reading comprehension.

By the Senior Phase from Grades 10–12 learners should be reading critically from a wide variety of texts with different viewpoints. By now they should achieve holistic integration of information across texts and should be aware of the hierarchic structuring of information. Reading comprehension is better than listening comprehension for complex topics; for poorer readers, listening comprehension may be better than reading comprehension.

The Post School Phase reading is done for professional, personal and tertiary level study purposes. At this level readers integrate, synthesise and critically evaluate information from a variety of sources and acquire new knowledge from reading. Reading is rapid and efficient. For highly skilled readers, reading is more efficient than listening.

This developmental perspective on reading shows a progressive pattern in reading competence over the years. There is a gradual move away from element-by-element processing of information to a more holistic integration of information and inferential processing. This developmental perspective provides a useful framework within which to view the reading abilities envisioned for the various grades in the new outcomes-based curriculum. For example, according to the Revised National Curriculum Statement (RNCS), the Grade 8 assessment standards for reading and viewing in English as language of teaching and learning (LoLT) include aspects such as the ability to infer meanings, distinguish main points from supporting details, read for in-

formation, use reading strategies (e.g. work out the meaning of words from contextual and other clues), read for pleasure, and demonstrate a vocabulary of 5 000–6 500 words in English (RNCS, 2002:96-101).

The developmental stages sketched above are not absolute; the developmental model itself is predicated on an educational context that assumes a high level of national literacy, a well qualified teaching corps and well-resourced schools and communities. These conditions do not obtain in all areas of South Africa, where much of education is framed by poverty, disadvantage and high levels of illiteracy, and characterised by lack of resources, poorly qualified teachers and high drop out rates (in 2000, the percentage of learners in South Africa starting Grade 1 and reaching Grade 5 was 64.8% — United Nations, 2003). In 2001 an Education Department audit showed that approximately 58 000 of the 350 000 teachers (17%) in South Africa were underqualified (Sukhraj, Mkhize & Govender, 2004:1). These conditions are not unique; in fact, for many children around the world, especially those from high poverty areas, developing reading competence is often not easy. Differences in reading ability are associated with socio-economic factors (Allington, 2002). Children from disadvantaged homes tend to have parents with lower levels of literacy, who may have lower expectations about the levels of literacy they expect their children to achieve. Factors that have been associated with the successful development of reading competence include a home environment in which parents regularly read storybooks to young children, engage in literacy activities in the home and act as literate role models.

### Reading assessment

Reading tests for learners from high school onwards do not usually include decoding components, since it is assumed that by that age such skills have been well established. The various components of the reading test used in the current study are described in more detail in the following section. At this point it suffices to point out that the tests were designed primarily for comprehension assessment administered to large groups. Because 'reading to learn' from expository texts characterises much of the learning that occurs during high school, the more interpretive aspects of reading comprehension that typify the reading of literary texts were not included in the assessment. To cross-check the maturational validity of the test, comparative tests were done with both primary speakers of English (i.e. mother-tongue speakers) and non-primary speakers (i.e. second or additional language learners) in Grade 7. To this end, a former Model C school was chosen where more than 75% of the school's population consists of African learners who are not mother-tongue speakers of English.

To counteract data that may be lost in large group assessment, some follow-up tests were also conducted on a one-to-one basis with the Grade 8 learners from the bottom, central, and top range of reading scores. The purpose of this second round of tests was to identify specific reading problems that the learners experienced in decoding and/or comprehension and to see if there was a 'goodness of fit' between the learners' performance on the large scale tests and the more individualised tests. All the learners also completed a 41-item reading questionnaire that probed their home literacy practices and their attitudes to reading.

### Methodology

In this section information is given about the schools (one Grade 8, one Grade 7), the components of the reading materials and the procedures.

#### The research context

##### *The Grade 8 school*

The high school, established in 1975 in one of the older parts of a township west of Pretoria, has a population of 1 060 learners and 32 teachers. It caters for speakers of Northern Sotho, Venda, and Tsonga, and offers home language instruction in these three languages, as well as English and Afrikaans as additional languages. Learners are drawn from the immediate township and informal settlements and comprise

many low income families. The school fees are R100 per annum and, according to the school records, about 40% of the parents are unable or unwilling to pay the fees.

The school has 25 classrooms, a home economics centre, a wood-work room, a non-functional science laboratory, a library and a small administrative block. The buildings are solid but in a state of disrepair. There are very few literacy artefacts in the classrooms (e.g. posters, wall charts, pictures, etc.). In fact, most classroom walls are bare. Vandalism is a problem and a secure fence has been installed around the school and the school gate is locked during school hours.

The library has a fair amount of books, both fiction and non-fiction, but many are outdated, the books are not catalogued, and the library is disorganised. For several years the library has actually been used as a storeroom. Learners at the school have not been able to access the reading books in the room, and the library does not function as an integral part of the school.

The matric pass rate in 2002 was 38% and it went up to 58% in 2003. This low level is symptomatic of a broad range of problems, both within the school and the community. Teacher morale at the school is not high, and visits to the school by the researchers often reveal that learners are not always in their classrooms.

#### *The Grade 7 school*

Although the majority of the Grade 7 learners come from more advantaged homes than the learners at the high school, the socio-economic status (SES) of the parents is mixed, and several learners come from single-parent families. The school is situated in the middle of an ever-increasing area of high-rise blocks of flats with high-density populations.

The school has 550 learners from Grade R to Grade 7 and a staff of 22 teachers, 8 of whom are paid by the governing body. The school, established in 1903, has buildings in a sound state and the school grounds are neatly tended. The school has an active reading programme and a library period is included in the timetable once a week for learners from Grade 1 to Grade 6. Due to the need for extra classrooms, the space under the stage in the school hall serves as the library. The library plays a central role in the school's daily activities. The principal and the teachers have strong views on the importance of reading in the primary school, and the Grade 7 teacher often discusses books with her class, encouraging them to read newly published books. She is familiar with the genre of pre-teen and teenage literature. The artefacts of literacy are clearly visible in the classroom, with charts, posters and pictures on the walls, and books and exercise books stacked on shelves and the teacher's table.

#### Participants

##### *Grade 8*

All four of the Grade 8 classes at the high school were tested in 2002 and 2003, comprising a total of approximately 400 learners over the two years. These learners were mainly speakers of Northern Sotho, Tsonga, and Venda. Most of them had attended local primary schools in the township, but many had attended primary schools in rural areas of Mpumalanga and Limpopo province. The participants were fairly evenly distributed in terms of gender. The average age was 14.3 years. The youngest learner was 12 and the oldest 19.

##### *Grade 7*

At the former Model C school only one of the Grade 7 classes was tested. There were 24 learners in the class on the day of the test, of whom only seven were mother-tongue speakers of English (these included white, coloured, and Indian learners, as well as learners from Kenya and Nigeria). The learners for whom English was not a primary language included speakers of local African languages (Zulu, Xhosa, Sesotho, and Northern Sotho), Portuguese and Afrikaans, as well as immigrant learners from Mozambique and Pakistan. The average age of the Grade 7 learners was 12.3 years.

#### Materials

The reading test consisted of 4 components:

##### *Section A: Comprehension of expository text (i.e. informational 'textbook' type of text)*

This section comprised a 368-word expository text. This was followed by six vocabulary questions on the meanings of key words used in the passage, and six inferential questions relating to the comprehension of the passage. All the questions were in multiple-choice format, with three options per question.

**Vocabulary questions:** Vocabulary questions were included in the assessment of reading comprehension because vocabulary knowledge and reading ability are closely related. Learners who read a good deal tend to have larger vocabularies than learners who do little reading (Daneman, 1991). Testing vocabulary is therefore an indirect way of assessing reading ability. However, vocabulary knowledge alone does not guarantee success in reading, since it is essentially the ability to construct meaning, while reading, that determines reading success (Ruddell, 1994).

**Inference questions:** The inclusion of inferential questions is central to the assessment of reading comprehension. The ability to make connections during reading, to relate new information in the text to given information, and to see how different elements in the texts are linked lies at the core of reading (Sanford, 1990; Oakhill & Cain, 1998). The ability to answer inferential questions rather than literal questions is a reliable indicator of how well a reader understands a text. The six comprehension questions were all inferential questions.

##### *Section B: A cloze passage*

Since the 1950s the cloze procedure has been used quite extensively to measure overall language ability in an integrative way. It is also used as a means of measuring reading ability. In a cloze passage, every *n*th word (usually every 5th or 7th word) is deleted and the reader is expected to fill in the missing words. The cloze procedure indicates the extent to which a reader is able to follow the sense of a text.

The text used for the cloze task was taken from a passage from the Grade 8 *network*<sup>1</sup> book. A modified cloze task was set, with approximately every 9th word deleted, if it was appropriate and could be inferred from the text. Because this cloze test was designed for AL learners and, in order not to measure grammatical proficiency but rather reading comprehension, a lenient semantic marking system was adopted whereby the general meaning of the answer was assessed rather than its grammatical accuracy. In other words, if a learner answered *it was rained* instead of *it was raining*, the former was accepted because the correct verb stem was used and the notion of pastness was conveyed, albeit by a past participle rather than by the past continuous *was* + the participle form *-ing*.

##### *Section C: Anaphoric resolution*

The ability to resolve anaphoric references in a text is an integral part of reading skill and occurs rapidly and unconsciously in skilled readers. Anaphoric resolution enables the reader to link new, incoming information in the text with already given information and to keep track of the topic focus and shifts in focus. Highly skilled readers are able to resolve anaphors with complete accuracy (Webber, 1980).

This section consisted of five separate paragraphs taken from the two Grade 8 *network* books. Example texts were first given. Specific anaphoric items were identified and the learners were required to underline the referents to which they referred and to draw an arrow linking the two items. For example:

Dadda does not like dogs and cats and David knows that. But he took Stumpy home anyway. He placed a cardboard box in his corner and put the dog in it. The poor thing sat in a corner of the box all day. He did not move or make a sound all day.

#### Section D: Vocabulary inferences

The ability to make inferences during reading helps to increase a reader's ability to add new words to existing vocabulary knowledge and so expand his/her conceptual development (Sternberg, 1987; Shu, Anderson & Zhang, 1995).

This section tested the student's ability to infer the meaning of words when contextual clues were provided in the text. There were only three items in this category and all the examples were derived from the Grade 8 setwork book,<sup>2</sup> for example:

He lay on his stomach and buried his face in his hands. A lump rose in my throat as I sat down next to him. I stroked his head but he sobbed on, heaving as the tears flowed freely from him. This was the first time I had seen my brother cry.

The word sobbed means \_\_\_\_\_

#### Reading rate

Reading rate is measured in words per minute (wpm). Reading rate is always measured together with comprehension, to prevent readers skimming through the text and setting up artificially high reading speeds without understanding. Research has shown reading speed to correlate strongly with reading ability (Anderson, 1999). Reading speed is closely related to the automaticity of word recognition skills (Stanovich, 1986). Reading too fast can obviously affect comprehension negatively, but reading at too slow a rate also affects comprehension negatively. Biemiller (in McLoughlin, 1997:230) demonstrated that, for more mature readers, reading below 150 wpm compromises comprehension because the reader cannot keep content in working memory long enough to comprehend it.

Reading rate may vary, depending on the type of text, the complexity of the contents, and the age and reading level of the learner. Skilled adult readers, when reading for leisure, read at about 350 words per minute. This may slow down to about 200–250 words a minute if the text is difficult (Manzo & Manzo, 1993). English home language Grade 8 readers should be reading (silently) at about 230 words per minute. It is estimated that learners who study through the medium of a language that is not their primary language should try to read at approximately 70% the rate of an L1 reader. This means that AL Grade 8 readers should be achieving reading speeds of at least 150 wpm.

For the expository passage, an informal measure of the learners' reading rate was taken to determine, more or less, at what pace they were reading.

#### Literacy questionnaire

The study also attempted to situate the learners' reading skills within a broader context. Although reading is, individually, a cognitive-linguistic activity, reading practices are deeply embedded within a socio-cultural context. Any discussion of the reading situation in South Africa should therefore also be situated within the broader South African context. To this end, the Grade 8 learners also completed a 41-item reading questionnaire which probed their attitudes to reading and the kinds of literacy practices to which they are exposed in the home and school environment.

#### Procedures

The learners were tested during school hours. The tests were administered by a member of the research team, assisted by a Grade 8 teacher. Each component of the test was explained beforehand, in both English and Northern Sotho, the learners were encouraged to request clarification at any stage of the testing, and no time limit was placed on the completion of the test.

To determine reading rate, after the test preliminaries, the learners were all told to start reading at the same time and, after a minute had passed, they were stopped and asked to circle the word they had been reading when they were stopped. Thereafter, they continued reading the passage and answered the questions that followed. The number of words read within the minute gives a rough indication of each reader's speed.

#### Further testing

In order to obtain a more individualised assessment of the learners' reading levels, further one-on-one reading tests were undertaken with 24 Grade 8 learners a month later. These included eight learners who scored top marks in the reading tests, eight learners from the middle ranks and eight learners from the weakest ranks. They were tested on an individual basis by two researchers in terms of the following criteria:

1. Word recognition skills out of context (60 high frequency words)
2. Oral fluency (i.e. reading a short story aloud)
3. Comprehension during oral reading (answering oral questions on the story afterwards, with full access to the text throughout)
4. The detection of anomalous sentences in a passage (identifying which sentence is out of place in a paragraph), for example:  
Mpho loves to play soccer. Every afternoon he practices the sport with his friends. He also watches soccer on TV and carefully looks at the moves that the famous soccer players make. One day he hopes to play for the South African cricket team. His parents will be very proud of him them!

These are all standard measures that correlate strongly with reading competence and help to identify problems in decoding in Tasks 1–2 above (*cf.* Gillet & Temple, 1990; Stanovich, 1991; McCormick, 1995) and/or comprehension in Tasks 3–4 above (*cf.* Daneman, 1991; Yuill & Oakhill, 1991).

#### Results

The Grade 8 and Grade 7 results of the reading test are presented first, followed by the general trends reflected in the individualised tests and some of the responses given in the reading questionnaire.

#### Results of the Grade 8 and Grade 7 English reading test

The totals for each component of the reading tests were computed and an overall or total mean reading score worked out for each learner. The mean reading scores for the Grade 8s in 2002 and 2003 were generally low at 23.3% and 29.4%, respectively. This indicates that the Grade 8s as a whole are reading below their maturational level and comprehend very little of what they read.

The reading test was also given to a group of Grade 7 learners at a former Model C school in 2002 to cross-check the maturational validity of the Grade 8 test. The reading test did not prove to be too difficult for these learners and they completed it within about 20 minutes (as opposed to the average time of 40 minutes it took the Grade 8s to complete it). Although the Grade 7s were on average two years younger, they fared very well in the test and they read at almost double the rate of the Grade 8 learners. It is important to bear in mind that 75% of these Grade 7 learners were AL readers and not mother-tongue readers of English. A comparison of the reading levels and reading rates between the Grade 7 and Grade 8 learners is given in Table 1.

The components of the reading tests that were the most challenging for the Grade 8s were the cloze items, the items assessing anaphoric resolution and identifying vocabulary clues. These are all aspects of reading that reflect meaning-construction processes at work during reading. From these results, it would appear that problems in reading centre around using textual clues to engage in meaning construction during reading; these problems occur at the sentence level (as reflected in cloze items), at intersentential levels (as reflected in cloze items and anaphoric resolution) and at more global levels (as reflected in the inference questions). Furthermore, the learners were reading very slowly for their grade level. As mentioned earlier, Grade 8 learners should be able to read texts quite easily at 150 words per minute. Given that, for these learners, English is the LoLT, slow reading rates are bound to have a negative impact on their 'reading to learn'. It is interesting to note that even the top readers in Grade 8 were reading considerably slower than the top Grade 7 reader: Grade 8 (2002) = 68.7% at 148 wpm, Grade 8 (2003) = 87.5% at 107 wpm; Grade 7 = 93.7% at 321 wpm.

**Table 1** Results of Grade 8 and Grade 7 English reading assessment,\* 2002-2003

	2002 Grade 8 (n = 197)	2003 Grade 8 (n = 184)	2002 Grade 7 (n = 24)
Mean age	14.4	14.2	12.3
<i>Sub-components:</i>			
A: Expository text	44.2	48.3	85.8
Vocabulary questions	42.6	44.0	87.9
Inference questions	45.0	53.6	83.3
B: Cloze test	22.8		70.5
C: Anaphor	16.3	23.4	80.7
D: Vocabulary inferences	20.0	16.7	60.0
<i>Mean total reading score</i>	23.3	29.4	76.2
Minimum reading score	6.2	0	61.4
Maximum reading score	68.7	87.5	93.7
<i>Reading rate (wpm)</i>	99 wpm	77 wpm	185 wpm
Minimum reading rate**	43 wpm (comp=16%)	27 wpm (comp=23%)	102 wpm (comp=92%)
Maximum reading rate**	169 wpm (comp=58%)	231 wpm (comp=60%)	374 wpm (comp=86%)

\* The scores are expressed as percentages

\*\* The comprehension scores are given with the minimum and maximum reading rates

### Results of individual Grade 8 assessment

In the individual assessments, it was assumed that the reading problems would lie primarily in the area of comprehension rather than decoding since it was assumed, that by ages 13–14, decoding skills are already well in place. In other words, it was predicted that the learners should cope with parts 1–2 of the individualised tests quite well, whilst comprehension problems would start emerging in parts 3–4 (*cf.* Further testing section).

On the whole, these predictions were met. Most of the 24 learners we assessed individually read aloud quite fluently but they did not properly understand what they were reading. Two of the learners tested showed distressingly low decoding skills. They had problems identifying simple, single-syllable, high-frequency words from the word recognition list (e.g. words like *look, jump*). They were then also given texts to read in their home languages (Northern Sotho and Venda, respectively) but they experienced similar problems reading easy texts in their home languages. It is not clear why their reading problems were never identified in primary school. The rest of the learners, on the whole, showed fair to good decoding skills (i.e. they performed fairly competently in parts 1–2) but demonstrated poor comprehension skills (they consistently performed poorly in parts 3–4). Only some of the top readers in each class had a good understanding of the story they read; very few of the learners were able to detect the anomalous sentences.

The findings from these individualised tests tended to confirm the results of the larger group tests, namely that the reading skills of the learners on the whole were not strong. The problems lie primarily in comprehension and not in decoding.

### Results of reading questionnaire

It was clear from the responses to the questionnaire that most of the Grade 8 learners came from home environments in which few literacy activities take place. Despite stating that they "enjoyed" reading, very few learners engaged in reading for pleasure and they were not at all familiar with children's literature or with the different genres of literature (e.g. adventure/horror/fantasy stories, comics, etc.). Many did not know the titles of any books, had not read a book within the past year, and came from environments in which literacy practices play a minor role. From their poor performance on the reading test and their apparent lack of exposure to literacy practices it would seem that nei-

ther their home nor their past school environments had provided them with the motivation or stimulus to read, or opportunities to do so.

Admittedly, responses to questions such as those probing the number of books in the home at best offer very rough indicators of the possible status of literacy in the home but this, together with library membership and newspapers and magazines read at home, provided a rough sketch of some of the literacy practices in the home environment. For example, 77% of the learners come from homes in which there are 20 or fewer books in the home, and 30% of them were never exposed to storybook reading as children.

Some of the results of the reading questionnaire for both grades are set out in Table 2. Those items that have been singled out pertain more specifically to literacy practices in the home. The Grade 8 responses were indicative of the learners' lack of familiarity with extensive literacy practices. As can be seen from this table, 73% of the Grade 8 learners did not belong to a library outside the school context, and 55% had fewer than 10 or no books in the home. In contrast, only 21% of the Grade 7s had 10 or fewer books in the home. Although the Grade 7s come from homes in which there are more literacy practices, they also watch far more TV than their Grade 8 peers (about 60% of the Grade 8 learners watch between 2–4 hours of TV a day, compared to about 84% of the Grade 7 learners). However, the one variable which differed substantially between the two Grade groups was that of storybook reading in the home: only 5% of the Grade 8s reported that their parents had read them storybooks when they were young, as opposed to 54% of the Grade 7s. As mentioned earlier, storybook reading to young children is a variable that consistently emerges as a strong determinant of later success at school (Heath, 1983; Wells, 1986; Neuman, 1999).

**Table 2** Home literacy activities\*

		Grade 8	Grade 7
Community library member	<i>Yes</i>	27	37
	<i>No</i>	73	63
Parents read story to you as a child	<i>Never</i>	30	4
	<i>Seldom</i>	–	17
	<i>Sometimes</i>	65	25
	<i>Often</i>	5	54
Books in home	<i>More than 100</i>	10	33
	<i>About 50</i>	13	12
	<i>About 20</i>	22	33
	<i>About 10</i>	42	21
	<i>None</i>	13	–
Newspaper bought in home	<i>Everyday</i>	42	33
	<i>Once a week</i>	42	42
	<i>Sometimes</i>	–	25
	<i>Never</i>	16	–
Watch TV	<i>Don't have TV</i>	7	–
	<i>About 1 hour</i>	34	17
	<i>About 2–3 hours</i>	22	29
	<i>About 3–4 hours</i>	37	54

\* The scores express percentages of respondents

It was clear from the Grade 7 responses to the reading questionnaire that practically all the learners engaged in reading for pleasure, to a greater or lesser extent (70% of the respondents had read a book recently, and they were familiar with children's literature (several respondents wrote down several titles of teenage books). For instance, they were familiar with the different genres of literature (e.g. adventure/horror/fantasy stories, comics, etc.), and they were clearly familiar with current popular children's books (e.g. the Harry Potter books, the Goosebumps series, the Sweet Valley series for teenage girls, etc.) and, with the exception of two boys, they had all read a book within the past month.

## Discussion

Two important factors emerged from the study. These relate to overall reading levels and accessibility to print material.

On the whole, the Grade 8 learners who were tested had poor reading ability on entering high school, especially in terms of comprehension. The majority of them were reading at frustration level, i.e. well below their maturation level. Their reading speeds were slow, their vocabulary levels were low, and their performance on the cloze task and the anaphoric items suggested that the learners did not attend to textual clues to help them construct meaning. Although many of the learners in the smaller sample decoded adequately, they seemed to understand very little of what they read. This finding has been corroborated by other studies (Macdonald, 1990; Strauss, 1995). Given that English is the LoLT for these learners, the reading results have serious implications for their academic performance — with such poor reading levels the learners cannot effectively 'read to learn'.

The Grade 7 results were in stark contrast to the Grade 8 results. They scored well on the vocabulary items, they read much faster than their older peers, and their performance on the cloze task and the anaphoric resolution items indicated that textual clues were used to help them construct meaning. In sum, they understood most of what they read.

Two questions naturally arise: (i) Why, after seven years of primary schooling, are there such disparities in the kind of proficiencies that learners develop in their schools? Why are some learners entering high school so poorly equipped to engage meaningfully with the texts that they will be expected to read and learn from? And (ii) how should this problem be addressed? If we can understand what factors give rise to disparities, then we are in a better position to address the second question.

### Why the disparities? Identifying possible causal factors in reading accomplishment

In this study the individual cognitive-linguistic accomplishments of reading were not viewed as autonomous psycholinguistic abilities but as abilities mediated by sociocultural contexts. In searching for answers to why disparities arise, we tried to identify possible causal factors that impact on literacy development. The English as LoLT issue should not overshadow these results; the majority of the Grade 7 learners were also African learners, so most of the Grade 7 and all the Grade 8 learners were dealing with English as a first additional language. The most obvious difference between these two groups is SES — the Grade 8s came largely from low-income homes and attended disadvantaged schools, whereas the majority of the Grade 7s came from more advantaged homes and attended a more advantaged school. However, SES is a marker variable, not a causal variable of school accomplishment — it co-occurs and is associated with factors that are related to a particular outcome (Lonigan, 1994:317). Knowing that SES is a predictor of school outcomes does not necessarily provide insight into the factors that do impact on school outcomes. In any case, schools cannot change the SES of their learners. Although the majority of the Grade 7s came from more advantaged homes, many, according to their teacher, came from single-parent families and lived in high-rise apartments in the surrounding area. These are socio-economic indicators that are not typically associated with school success, and yet these Grade 7 learners were proficient readers. We therefore need to examine more closely those variables that SES is a marker of, so as to "uncover informative and potentially causal relations with literacy development" (Lonigan, 1994:317).

An important factor to emerge from this study relates to differential access to print-based materials and opportunities for reading that different learners experience. From the questionnaire it was apparent that the majority of Grade 8 learners came from homes which do not readily provide adequate literacy resources or opportunities for engaging in literacy activities. Literacy stimulation by way of books and magazines is beyond the financial means of many parents. Of the Grade 8s, 77% came from homes in which there are 20 or fewer books.

Although the parental level of education was not factored into the questionnaire, low adult literacy levels are widespread throughout South Africa, especially in disadvantaged areas, which means that many learners must acquire literacy skills and behaviours without the aid of a supportive home environment. These learners then attend schools in which extensive reading is not a priority, and which do not have functional libraries to provide learners with easy access to storybooks and other print materials. Therefore, for many of these learners, the transition from home to school does not necessarily bring about greater access to literacy practices or materials.

In contrast, the Grade 7 learners came from homes in which access to books and storybook reading was more common (55% of the Grade 7s had had storybooks read to them when they were children, as opposed to 5% of the Grade 8s). Coming from homes in which many of them were already exposed to print materials and literacy practices before school, the Grade 7s then attended a primary school in which reading was strongly emphasised, library and reading periods were part of the weekly timetable, the school library played a central role in daily school activities and learners had easy access to storybooks and were constantly encouraged and motivated to read. In this case, the school provides a strong literacy stimulus for these learners to develop their reading skills. By making reading and books an important component of the daily school routine, the school establishes a culture of reading at the school. The development of reading proficiency within this context of reading is not surprising, and in fact is corroborated by other studies. For example, in the International Studies in Educational Achievement (IEA) study of reading literacy amongst 8- and 14-year old children in 32 countries, it was found that across and within countries, differences in reading performance were consistently and robustly associated with availability of books, in the community and in the schools: "... the general message is that books are essential no matter how rich or poor a nation is" (Elley, 1994:147). This is a crucial factor that educational policy makers and educators should heed.

The fact that most of the learners from the smaller sample of Grade 8s could decode with a fair degree of competence but did not actually understand what they read provides a pointer to classroom reading practices. As reported in earlier studies (Macdonald, 1990; Strauss, 1995), there is a tendency in many primary schools to focus on the more technical aspects of reading, the assumption being that once learners can decode, they can read. The ability of many readers to read aloud relatively fluently may also mislead many teachers into thinking that their learners can 'read'. This may explain why learners are entering high school without the requisite reading competence. Unless learners are exposed to extensive reading, they do not easily develop those meaning construction processes so central to comprehension.

Another pointer that some primary schools do not provide learners with the opportunity or motivation to read came from the questionnaire responses, where it was clear that the Grade 8 learners were not familiar with children's/teenage books. Although they claimed to like reading, very few of them actually engaged in reading for pleasure, very few had read a book within the past year, and they were unfamiliar with current popular teenage books. They were also unfamiliar with different genres of literature (e.g. adventure stories, horror stories, science fiction, romance, etc). These kinds of responses, together with the low reading levels of these learners, suggest that the primary schools that they attended did little to establish a culture of reading for the learners.

In seeking to explain disparities in reading accomplishment between learners entering high school, as reflected in this study, we have proposed that accessibility to books, opportunities to read and good practice in the classroom are important variables in reading development. We come now to the second question posed above, namely, what can be done to address this problem?

### How can disparities in reading accomplishment be reduced?

If Grade 8 learners are entering high school with low literacy levels, then clearly there is something amiss, not only with the development of reading within our schools, but also with a system of schooling that enables learners to spend seven years in primary school without equipping them with the requisite literacy skills, and without having a system in place that identifies learners with reading problems and assists them in overcoming these barriers to learning.

In a country with high illiteracy levels and disadvantaged communities, it is important for schools to become active sites of literacy development, especially if learners do not have easy access to this outside the parameters of formal schooling. Furthermore, schools should also take their reading responsibilities more seriously. Below we briefly consider some ways in which schools could assume greater responsibility for reading development and build accountability into their reading mandate. Changes in literacy attitudes and instructional practices occur more readily if educationists are made aware of their underlying assumptions about reading and are shown alternative ways of thinking about reading.

#### *Reading as a learning tool*

Because so many learners in South Africa who perform poorly at school have English as their LoLT, the language debate in South Africa tends to overshadow reading issues. There is a tendency among many educators to assume that reading in English is dependent on proficiency in the language. Language proficiency and reading are clearly related, and a linguistic threshold is needed for reading in an additional language (*cf.* Alderson, 2000:23-24). However, the assumption that learners will become better readers if their language improves needs to be challenged. Schools need to recognise that reading improves reading. Improving language proficiency does not readily improve reading skills if learners do not already have reading skills in place (Hacquebord, 1994). Furthermore, reading is a powerful means of improving language proficiency; through reading learners also develop language and cognitive skills, as shown in several studies (Hafiz & Tudor, 1989; Elley, 1991; Krashen, 1993; Mason & Krashen, 1997).

To improve the reading skills of their learners, schools need to provide their learners with opportunities to read. In addition, if schools wish to improve the overall language proficiency of their learners, then they should provide opportunities for their learners to read extensively in the LoLT.

#### *Reading and academic performance*

The fact that most schools do not cultivate a culture of reading or have a dedicated reading or literacy period in their timetable suggests that reading is not perceived as being central to learning. Instead, time and effort is invested in the more 'serious' activities of teaching content subjects. And yet reading is a very powerful learning tool — probably the most important and empowering skill that learners need in the learning context. Reading ability in the middle school years is crucial to later academic success. Chall *et al.* (1990:14) argue that if adequate reading abilities are not acquired during the middle school years, then there are severe consequences: "Reading science and social studies texts becomes an almost impossible task for students who cannot read (at this) level". If schools wish to improve the overall academic performance of their learners, they should change their assumptions about what is important, and provide opportunities for their learners to develop their reading skills.

#### *Reading and instructional practices*

If learners enter high school with such low reading levels, then there is something seriously wrong with the teaching and practice of reading in primary schools. While not wishing to criticise the many dedicated teachers who teach in extremely disadvantaged situations, it is important to recognise that reading problems do not go away if ignored. In fact, the gap between good and weak readers widens as learners move

up the educational ladder (Stanovich, 1986:380-381; McCormick, 1995:73).

The new outcomes-based approach to education has assigned a central role to assessment, which now becomes pivotal in monitoring, supporting and enhancing learning. The RNCS specifies quite clearly the outcomes and assessment standards for reading for the different grades, in all the languages (for home languages, first additional and second additional languages). This system therefore has the potential to identify learners who are at-risk with their reading. However, the successful use of these assessment standards requires considerable teacher knowledge and expertise of what reading entails and how it develops.

Since our involvement in the reading project in 2002, it has become apparent, from our interactions and interviews with language teachers at both primary and high schools in the township, that teachers recognise that their learners have reading problems, but they feel helpless and do not know how to deal with these problems. Given the lack of training and experience in reading of many teachers, and the fact that many teachers are themselves non-readers and come from a largely non-reading culture, it cannot be assumed that the specified reading outcomes will be reliably and validly assessed by teachers. Educators need support in interpreting and applying OBE policy on literacy development in meaningful and effective ways. This is an area that merits urgent attention and further research.

Teacher training should develop a much stronger focus on reading. In order for teachers to become active participants in fostering a culture of reading at their schools, they need to have a greater understanding of the reading process, the different stages of reading development, and reading assessment.

#### *Reading and educational accountability*

Performance in reading reflects the effectiveness of an education system. The low reading levels of the Grade 8 learners point to a grave lack of accountability within the education system. Many of our schools are seriously failing their mandate if they fail to develop reading skills in their learners and if they allow reading problems to go undetected and unattended.

Assessment procedures are not only useful classroom tools for teachers, for internal, within-school monitoring, they can also serve as an accountability and monitoring index across schools, at provincial or national levels. As Tumer (1997:49) points out, well-designed standardised reading tests can serve a variety of functions. For example, they can provide demonstration of reading progress, they help to monitor reading standards, they help to evaluate outcomes, they help in the early detection of failing readers, and they provide feedback for the planning of instruction. The results of the literacy assessments undertaken in the Western Cape have galvanised the province into making literacy a priority and considering ways of dealing with the problem of low literacy levels.

In an effort to stem the current tide of underprepared learners into high schools, the introduction of some form of national literacy assessment in primary schools needs to be considered. This could be done as an interim measure for the next decade, until the educational playing field is levelled more evenly, teachers have become better informed about reading, and the gap between the new curriculum and classroom realities is narrowed. What form this national assessment takes is open to debate. It could possibly be implemented at the end of the Foundation phase (to ensure that basic decoding and comprehension abilities have been established) and again in Grade 6 (to ascertain whether the learners will be able to cope with the 'reading to learn' demands of high school). 'External' assessment at national or provincial level should not replace the on-going, classroom assessment required by OBE. Given the very real costs involved in large-scale assessment, stratified random sampling can be used so that while reading levels continue to be regularly monitored, fewer schools are involved and costs are reduced.

Although there has been much criticism of national standardised

tests, especially in the USA where large-scale testing of students is wide-spread, decades of research have resulted in the design of reading assessments that are more consistent with current theory (see, for example, the arguments and case studies presented in Turner, 1997; Brooks, 1998; Pearson *et al.*, 1998).

The implementation of a national literacy monitoring system has the advantage of putting literacy in the public domain and making teachers, schools and the education system publically more accountable than at present. Although standardised reading tests are not an ideal form of assessment, not having any standardised reading tests means throwing the baby out with the bath water. The argument that standardised tests are costly can be countered with the question: what have we gained by not having regular reading assessment at national levels? Money may have been saved but the intellectual potential of whole generations of learners has been lost.

### Conclusion

The findings of this study revealed that, on entry into high school, Grade 8 learners were reading very slowly and with very little comprehension. Through no fault of their own, the majority of these learners had poor reading competence, largely through lack of exposure to print material and few opportunities to read, both in the home and in the school context. This was in stark contrast to the Grade 7 learners who were in a school where reading was an integral activity in the daily school routine, and where learners had access to books and were constantly encouraged to read.

It is time for educationists to take the reading crisis in our schools seriously. The socio-economic status of learners is a variable that schools cannot change. Consequently, the responsibility for providing a stimulating and rich literacy environment for learners falls on the school. Schools need to recognise the fact that the establishment of sound instructional reading practices and the availability of books are the cornerstones on which learners' later academic success depends. This is particularly important in schools that serve disadvantaged communities, where learners are unlikely to be exposed to literacy practices and books within the home environment. Developing a culture of reading at school can only be established if the principal, school governing body, the teachers and the learners have the collective will to take reading seriously.

An investment also needs to be made in teachers' professional development with regard to literacy training. Until teachers are more fully trained in the development of reading and its assessment, consideration should be given to implementing an effective public assessment system to assess whether readers are reading at appropriate maturational levels.

### Notes

1. Ruben H 1991. *The calf of the November Cloud*. Cape Town: Macmillan Boleswa.
2. Case D 1986. *Love, David*. Johannesburg: Maskew Miller Longman.

### Acknowledgements

We thank all the learners who participated so willingly in the reading assessments. We also thank the anonymous reviewers who provided helpful comments on the article.

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