

MOVING FROM A DISCOURSE OF ACCESS TO READING INSTRUCTIONAL MATERIALS TO THE MANAGEMENT AND UTILISATION THEREOF: PROGRESS IN INTERNATIONAL READING LITERACY STUDY AT GRADE 4 IN SOUTH AFRICA

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ABSTRACT

Two cycles of the Progress in International Reading Literacy Study (PIRLS) were completed in South Africa in 2006 and 2011. In this article, we investigate the qualities of high-performing reading literacy schools for optimal resource

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management and utilisation strategies for possible application to low-performing schools. We do this against the background of reports on reading resource shortages and inadequacies in the context of reading literacy learning from both of the PIRLS main studies. This is done by comparing six case study schools with varying contexts and performance levels. The findings from a secondary analysis using the PIRLS 2006 data together with six case studies using international reading benchmarks from PIRLS 2006 to depict performance levels, confirmed that learners in low-performing schools from the study had inadequate access to reading instruction resources. This appeared partly attributable to inadequate funding and government provisioning; ineffective resource management at school level and non-resourcefulness of teachers at classroom level exacerbating reading resource inadequacies; as well as ineffective utilisation of materials at these low-performing schools. The resource management and utilisation strategies of high-performing case study schools were found to be potential models for schools with inadequate strategies.

Keywords: qualitative case studies, Progress in International Reading Literacy Study reading materials, resource management and use, instructional resource access

1. INTRODUCTION

The United Nations Educational, Scientific and Cultural Organisation's (UNESCO) Education for All (EFA) global monitoring report (2014) indicates that worldwide, a learning crisis prevails as a result of a lack of attention to education quality and failure to reach those who are marginalised in society. Millions of children around the globe are not learning the most basic of literacy or numeracy skills and the further skills needed to progress in their societies. Whilst there have been significant gains in access to education over the past 10 years, the improvement of educational quality has not always followed suit, and disadvantaged learners are likely to be the most detrimentally impacted due to a lack of trained teachers, overstretched infrastructure and inadequate teaching and learning materials (UNESCO 2014).

This worldwide learning crisis is illustrated in the continued problem with the development of South African learners' reading literacy and its negative impact on the quality of educational outcomes in the country more widely (Howie 2015; NEEDU 2013). The results of the Progress in International Reading Literacy Study (PIRLS) 2006 and 2011 (Howie et al. 2008, 2012; Mullis et al. 2007, 2012) have foregrounded this situation by revealing the extent to which South African Grade 4 learners lag behind in their achievement of the outcomes associated with this international comparative assessment of reading literacy in which many countries and education systems worldwide participate. For PIRLS 2006, the average performance

score of South African Grade 4 learners was 253 points,¹ well below the international average and also the lowest score of all 45 participating education systems (Howie et al. 2008). In 2011, the sampled South African Grade 4 learners completed a shorter, easier test of reading literacy called prePIRLS (Mullis et al. 2012). The results still revealed a low level of reading literacy achievement of 461 points on the easier assessment in comparison to other participating countries (Howie et al. 2012; Mullis et al. 2012).

UNESCO's EFA report suggests that in order to address the crisis in many education systems, learners need trained, motivated teachers who enjoy their work; who are able to identify and support learners who struggle; and importantly, who are supported by well-managed education systems (UNESCO 2014). These suggestions by UNESCO (2014) hint at some of the numerous factors that may play a role in South African learners' continued poor performance. Developing countries specifically face a number of problems in providing quality education to learners. These problems can be generally identified as challenges of educational participation, effectiveness and resources (Lockheed and Levin 1993). School characteristics, such as academic and disciplinary climates, teacher quality, teaching practices, the curriculum, leadership by the principal and indeed resources, influence learners' educational outcomes to varying degrees. In developing countries where large numbers of learners are deprived of basic resources, material resources may play a bigger role in socioeconomic inequality in their education systems. This has policy implications in that governments should provide financial support to address such socioeconomic inequalities in education either in the form of allowances for educational materials or increased funding to schools in low income areas (Marks, Cresswell and Ainley 2006).

Shortage of resources for education and inefficient use of available resources have been linked to problems of quality in basic education in Africa specifically (Sedel 2005). Given the magnitude of the problem there is a risk in focusing attention and interventions on short-term solutions, such as input indicators linked to resource allocations, and output indicators, such as achievement to monitor educational quality without attention, to process indicators, such as the quality of teaching and learning (O'Sullivan 2006; Zimmerman 2014) which would require medium to longer term solutions. The focus needs to be on classroom teaching factors as well as the context of teaching and elements, such as resource availability and use, that may either hinder or support learners' reading literacy development.

In this article, we report on reading material resource shortages and inadequacies for reading literacy learning from the PIRLS main studies in South Africa, as a developing country. We then consider the findings from the investigation of the resource use and management practice qualities of high-performing reading literacy schools as identified from the PIRLS 2006 database via their juxtaposition with the

practices of low-performing schools. Six case study schools with varying contexts and performance levels are compared. In the next sections of the article, the role of classroom reading resources for literacy development generally, and then in Africa and South Africa specifically, is discussed. Thereafter, an overview of the research design and methods summarised from the larger study (Zimmerman 2011) is provided as this links to the case study schools. Selected case study findings are presented followed by the conclusion and recommendations reflecting on potential models for instructional and management practices for reading related materials.

2. THE IMPORTANCE OF ACCESS TO AND USE OF READING RESOURCES

In highlighting the key factors for effective primary schools for reading, amongst other features, Allington and Cunningham (2007) acknowledge that there is investment in classroom libraries and reading material resources. Learners in well-resourced schools are inclined to attain higher literacy levels than learners from schools with high levels of poverty (Pretorius and Machet 2004). According to Lockheed and Verspoor (1991, 47), 'Instructional materials are critical ingredients in learning, and the intended curriculum cannot be easily implemented without them'.

As suggested by the International Reading Association (IRA 2007), effective literacy instruction involves teachers who can engage learners with instructional materials and other texts within a rich literacy environment that can support teaching. To do this teachers must know and be able to apply strategies to create a high quality classroom environment which includes attention to children's and young adults' literature; commercial reading series; electronic-based information resources; and locally created materials. Teachers must also be able to critically analyse, adapt and use instructional materials for instruction within their particular teaching context (IRA 2007). Ready access to books, magazines and other reading materials is an essential factor to enhance learners' literacy development, and in this regard, classroom libraries are particularly important. Copious amounts of easy and interesting reading materials are also essential to develop reading strategies and foster positive reading motivation, especially for those learners who struggle (Allington and Cunningham 2007). In the United States, a study of effective Grade 4 teachers found that they use multiple curricular materials and vary the activities and materials weekly, utilising a range of sources, genres, difficulty levels and experiences of learners. The teachers often achieve this using their own funds with limited organisational support (Allington and Johnston 2002; Zimmerman 2011).

3. READING RESOURCES FOR LITERACY DEVELOPMENT: THE SOUTH AFRICAN SITUATION IN CONTEXT

Researchers have argued that there is a so-called ‘book famine’ in Africa (Perry 2008, 64). Schools in rural areas are thought to experience particular challenges in gaining access to books, and even where they are available, there are not always enough for all learners. Books other than textbooks may be even rarer. Textbooks play a significant role in Southern African education, so shortages have serious consequences for teaching and learning. However, access to textbooks is not enough to promote reading achievement in developing countries, as learners must have access to a wide range of reading materials, especially for the majority of second language learners. The scarcity of books may also mean that African children have little opportunity to read for enjoyment, and outside school, enter a nearly bookless culture (Perry 2008).

In illustrating literacy instruction resources in South Africa specifically, Scheepers (2008) reveals that the print environments in many schools are poor. As in the rest of Southern Africa, children in township and rural schools mostly use textbooks, which often need to be shared. Moreover, she relates that there is a dearth of both fiction and non-fiction titles published in the African languages, giving learners scant opportunities to develop first language vocabulary (Scheepers 2008). Pretorius and Currin (2010) concur by highlighting that, in South African schools, there are few if any storybooks or class readers in the African languages, and as schools are poorly resourced, storybook reading seldom occurs in the classroom (Pretorius and Currin 2010).

The National Reading Strategy (DoE 2008a) document reports that it is rare to find schools with well-used general libraries. This government document further acknowledges that some classrooms have no books, and even those that do have sets of readers may have them at a developmentally inappropriate level. In launching the Foundations for Learning Campaign (2008b), the Department of Education (DoE) sought to improve the literacy performance of South African learners. The need for appropriate resources for effective teaching was foregrounded as essential to the campaign goals. Each school had to ensure that teachers had access to the basic minimum literacy resources in the classroom which included wall charts, phonic friezes, writing materials, textbooks, reading series and workbooks. Evaluation found that the campaign did not have a good impact overall but that it could help under-resourced schools, provided that these schools received the programme materials on time, and that teachers were guided to use these with confidence (Meier 2011).

In 2010, it was reported that of the 28 000 public primary and high schools in South Africa, only about 7 per cent had functional school libraries (Wessels and Mnkeni-Saurombe 2012). Lack of access to school libraries compounds the issue of non-availability or poor quality of books in classrooms. For the PIRLS 2006 main study, 60 per cent of the sampled South African learners were in schools without a school library and those in schools with a school library fared far better in the assessments than their peers who were not (Howie et al. 2008).

Internationally, principals in PIRLS 2006 reported that, on average, about half the learners (52%) across countries were in schools that were not constrained by resource shortages. However, on average, 15 per cent of learners were in schools where resource shortages greatly affected the provision of reading instruction. In general, ‘there was a positive relationship between an absence of school resource shortages and average reading achievement’ (Mullis et al. 2007, 11). In South Africa (see Table 1), only a fifth of learners were in schools that were not affected by a shortage of instructional materials and these learners’ achievement was almost 100 points higher (372:274) than learners in schools (25.5%) that were greatly affected by the inadequacy of instructional materials.

Table 1: South African schools’ capacity to provide instruction affected by a shortage or an inadequacy of instructional materials in PIRLS 2006

Not		A little		Some		A lot	
% of learners	Average achievement	% of learners	Average achievement	% of learners	Average achievement	% of learners	Average achievement
20.4	372	26.2	302	27.9	278	25.5	274

Source: SA PIRLS 2006 database

In South Africa, principals in PIRLS 2011 who reported that instruction was affected by a lack of resources were from low-performing schools scoring on average 414 to 454 points (see Table 2). Schools not affected by shortages were very few and tended to be high-performing schools scoring more than 90 points more than schools affected by shortages. This confirmed the relationship established between resources and achievement in 2006 (see Table 1).

Table 2: Instruction affected by shortages of reading resources

Not affected		Somewhat affected		Affected a lot	
% of learners	Average achievement	% of learners	Average achievement	% of learners	Average achievement
3	547	92	454	4	414

Source: SA prePIRLS 2011 database

4. SUMMARY OF RESEARCH DESIGN AND METHODS

In this section, we summarise the design and methods utilised to collect and analyse the data reported in the article

4.1. Sampling for purposively selected case studies

PIRLS is an international comparative assessment where tests of Grade 4 learners and questionnaires were administered to Grade 4 learners, parents, teachers and principals nationally in a survey. In South Africa, as part of a larger mixed methods study (Zimmerman 2011; Zimmerman, Howie and Smit 2011) linked to the PIRLS 2006, qualitative case studies of school and classroom-level reading literacy practices were undertaken. Six case study schools were purposively selected from the PIRLS national sample of 429, based upon their language profiles and performance in PIRLS 2006. International benchmarks were used (see Table 3) and national benchmarks were created based upon the distribution of performance nationally.^{2,3}

For PIRLS 2006, learners' performance ranges were aligned with four set benchmarks along the scoring scale, namely: Low (400); Intermediate (475); High (550); and Advanced (625). The learners who were able to reach the higher benchmarks also displayed the knowledge and skills for the lower benchmarks (Howie et al. 2008). Table 3 outlines the median percentage of Grade 4 learners who reached the international benchmarks for PIRLS 2006 internationally as well as in South Africa (Howie et al. 2008; Zimmerman et al. 2011).

Table 3: Percentage of South African learners at the PIRLS 2006 international benchmarks compared to international learners (Zimmerman 2011, 35)

PIRLS 2006 international benchmarks	Benchmark descriptions	International Grade 4 learners reaching benchmarks Median % (SE)	South African Grade 4 learners reaching benchmarks Median % (SE)
Low (400–474)	Basic reading skills and strategies (retrieve explicitly stated information in texts and answers some questions seeking straightforward inferences).	94	13 (0.5)
Intermediate (475–549)	Some reading proficiency and can understand the plot at a literal level and can make some inferences and connections across texts.	76	7 (1.1)
High (550–624)	Competent readers who have the ability to retrieve significant details embedded across the text and can provide text-based support for inferences.	41	3 (2.0)
Advanced (625+)	Respond fully by means of their integration of information across relatively challenging texts and the provision of full text-based support in their answers.	7	1 (1.5)

Table 4 provides the case study sample as derived from learners aligned to their class average in PIRLS 2006 and further stratified by language of instruction. Approximately 70 per cent of learners tested in English were in English First Language (EFL) classes where the class average was below the PIRLS international benchmarks and all learners tested in an African language were in English Additional Language (EAL) classes with an average below the international benchmarks. A very small percentage of learners were in classes where the class average reached the Low, Intermediate or High international benchmark. No learners were in classes with an average at the Advanced international benchmark (Zimmerman 2011).

Table 4: Percentage of learners according to PIRLS 2006 class benchmarks per EAL and EFL class reclassification (Zimmerman 2011, 93)

PIRLS 2006 international benchmarks	South African Grade 4 learners in classes with average at each benchmark Median % (SE)	Case study EFL sample reaching benchmarks Median % (SE)	Case study EAL sample reaching benchmarks Median % (SE)
Below international benchmarks	93 (1.4)	70 (5.3)	100
Low (400–474)	3 (1.1)	11 (4.3)	0
Intermediate (475–549)	3 (1.2)	13 (5.0)	0
High (550–624)	1 (1.0)	6 (3.9)	0
Advanced (625+)	0	0	0

Given the learners' lack of class average representation at the international benchmarks, national benchmarks had to be created to allow for greater insight into group variations between classes. Using additional South African benchmarks of 175 and 325 and the PIRLS 2006 Low (400), Intermediate (475) and High (550) international benchmarks, seven educational profiles defined by average class performance on the benchmarks and class language (i.e. EFL and EAL 175, EFL and EAL 325, EFL 400, EFL 475 and EFL 550) were identified for the first phase secondary analysis (Zimmerman 2011).

Each of these seven profile samples for the first phase then provided the sampling frame for case study selection in the second phase. Schools (with performances aligned with each of the PIRLS 2006 international and South African benchmarks) in Gauteng⁴ were approached for participation. The selected schools' characteristics are described in Table 5.

Table 5: School, class and teacher case characteristics (Zimmerman 2011, 103)

Characteristics	South African benchmark C (175–249)	South African benchmark A (325–399)	Low international benchmark (400–474)	Intermediate international benchmark (475–549)	High international benchmark (550–624)
Language background of class	EAL	EFL	EFL	EFL	EFL
Province	Gauteng	Gauteng	Gauteng	KwaZulu-Natal	Gauteng
Location	Rural township	Urban Township	Urban	Suburban	Suburban
School pseudonym	F	E	C	B	A
Private/Public	Public	Public	Public	Public	Independent
Teacher's years of teaching experience	12	14	12	15	31
Teacher's years of experience at Grade 4	1	7	2	8	10
Number of learners in 2009 Grade 4 class observed	50	40	40	36	22
Racial profile of learners	Black	Black and coloured	Mostly black	Black, white, Indian and Asian	Mostly white

4.2. Data collection and analysis strategies

Six data sources were collected for each case. These included: teacher and Head of Department (HoD) interviews; learner workbook reviews; photographs of classroom environments; questionnaires; and lesson observations. The findings derived from teacher and HoD interviews are included together with observations linked to

the photographs of classroom environments and learner workbooks in terms of reading material resource access and management. The interviews were analysed using constructivist grounded theory principles (Charmaz 2006), organised by the Computer Aided Qualitative Data Analysis Software, Atlas.ti (Zimmerman 2011).

5. FINDINGS

In this section, firstly the reading materials that teachers used with their Grade 4 learners at each of the case study schools are presented. This is followed by the discussion of classroom reading resource access and management in each of the schools and, finally, by consideration of school policy on the creation of literate classroom environments for learning (Zimmerman 2011).

5.1. Classroom reading material use

Grade 4 teachers and subject area leaders or HoDs were asked about reading material access and use at the six case study schools. Teachers at the high-performing schools A (EFL 550), B (EFL 475) and C (EFL 400),⁵ and the low-performing School E (EFL 325) reported that they used the same materials with learners at different reading levels but that the learners worked at different speeds. At the low-performing schools D (EFL 325) and F (EAL 175), the teachers indicated using different materials with learners at different reading levels.

Whereas the Grade 4 teachers at high-performing schools (A, B and C) ostensibly had no major problems with access to reading materials, at the low-performing schools (D, E and F) reading material access was less optimal. Learners in the Grade 4 classes at schools A, B and C had access to reading series; however, at School B the reading series had to be shared between the Grade 4 classes for group reading due to the limited number of books available in the series. As the teacher explained:

I've got some [reading series] books. We've got one box that we share between the entire grade...and there's only three of each kind of book. So if you put [the learners] in reading groups you have to put them in groups of three. It's really tricky...because they're expensive...whenever we sit them outside in the sun to read, then they read that, but they don't take them home, because there's not enough (School B).

At high-performing schools, and perhaps revealing higher teaching expectations and/or learners' more advanced reading abilities, learners at schools A, B and C read set work novels, each of which were of similar length (between 157 and 192 pages per book), genre and suitability for the Grade 4 learners' developmental status. At School A, learners read a set work novel per term, resulting in the completion of three novels. At School B, the teacher also used three fiction titles per year for literature study, each with a workbook containing grammar exercises and comprehension questions for the learners to work through. Each Grade 4 class read these titles at

different times of the year so that there were enough books for each class. Learners at School C read two set work novels per year, one less than learners at schools A and B. Suggesting the need to challenge learners in spite of their abilities and language status (the majority being non-English home language speakers), the teacher found that these novels were a positive reading experience for them:

...the choice of readers that I have requested for my Grade 4s this year...has really fostered an enthusiasm even in the weaker readers because once they get into the story even if the vocabulary is a little over their head[s]...As long as they enjoy the story and they want to know what's coming next, I think that the love for reading is fostered there and some of my children were bad readers, they didn't like reading, but after reading a little, they went and found Roald Dahl books in the library...so they're really enjoying it. (School C)

Over and above reading series and set work novels, multiple text types were used for reading instruction at School A. As indicated by the subject area leader, 'we try to focus on contextual and current affairs as well as folklore, animal tales, etc.'. Specific texts used for comprehension at Grade 4 level included: newspaper articles; satirical cartoons; pictures for visual literacy; recipes; and telephone directories. Teachers at the school liked to work with current texts, and this meant that they did not rely on published fiction and non-fiction texts. Current news texts were used instead, which meant that the learners could relate to them as they were hearing about them and seeing posters in their everyday environment. Sometimes two texts with a different slant on the same event would be used for comparative study purposes, thereby promoting critical thinking. A variety of texts was evidenced in the School A learner's workbook too. At School C, the learner's workbook also had evidence of the use of a variety of text types over and above reading series and set work novels, for example, visual literacy exercises, posters, poems, recipes, menus, a letter, advertisements, visual graphs and maps. Significantly, the School C teacher acknowledged that there was no single EFL textbook available that was appropriate for her EAL learners expressly as the language could be too abstract. Furthermore, the EAL textbooks had very simple language and she wanted her children '...to be more than that'. As a result, the teacher adapted to her learners' needs, using 'a bit from here, a bit from there' and by making her own worksheets.

At low-performing schools (D, E and F), reading series and set work novels were not used. The texts in the reader were not at the level of the set work novels at the high-performing schools. At School D, a textbook reader and a grammar book which did contain some reading materials were used to answer questions. The teacher also mentioned that teachers were encouraged to use extra materials, extra books and handouts, and informally shared materials by photocopying. Another strategy was to let learners watch a film of a book in the library first, ask them questions and then show them the book, thus motivating them to read it. The teacher also found that the learners liked it when she read extra stories which were not from their readers.

The School E teacher had problems with access to reading resources, having only 20 English readers for the 40 learners in her class. Thus, the learners had to share books, which could be frustrating especially if they were paired with a peer of differing reading ability. The teacher had also been confused about whether to use materials for EFL or EAL learners, since the learners were not English home language learners but were actually in a first language medium class:

These are second language children, must I use, must I make use of second language material or first language material, then they called me in and said: 'Okay, the English classes are first language, the two Afrikaans classes is second language.' So, I had to go back and then draw up some work for first language learners and then second language learners. (School E)

At School F, the learners did not have access to a class reader or any other reading books. Typed and photocopied stories were used for reading instruction. The teacher herself stated that she '...can't say reading material is a challenge because I can improvise'. The teacher also sometimes used magazine and newspaper articles where the learners read a text linked to the current theme for learning.

At schools B, D, E and F, the learners' workbooks did not reveal the same variety of exposure to different texts as those of schools A and C. Nevertheless, the School B teacher reported making reading cards for her learners using expository texts from the children's sections of magazines. Moreover, she typed out comprehension cards to create work for them, and they had a workbook containing crossword puzzles. At schools D, E and F, the learners' workbooks showed no evidence of use of a variety of texts. At School D, there were no worksheets or texts pasted into the book, and at School F, there was only one photocopy handout of a story pasted into the book. At School E, there were three texts pasted into the book, all of which were short stories (Zimmerman 2011).

5.2. Classroom reading resource access and management

There appeared to be substantial classroom reading resource availability differences between high- and low-performing schools. At schools A and C, no indication of resource access problems was suggested. The subject area leader at School A and teacher at School C affirmed this with the following statements:

...there's so much available in a variety of sources that I think [the children] don't get time to get bored and that's why they're active learners and really very spontaneous. (School A)

...At this school, we are fantastically fortunate that whatever resources we require for reading, they are provided almost immediately. My principal is passionate about reading and one of the school's goals is to improve literacy and to encourage a love for reading, so as far as resources go, it's fine. (School C)

There was a budget allocation for books at School C to purchase whatever was needed. Although School B could be considered very well-resourced in comparison to schools D, E and F, the HoD nevertheless referred to the negative impact of government budget cuts, meaning that school fees were used to supply resources. Rising costs meant that this was not adequate and funding for such resources had to be staggered with a grade receiving the money each year.

School B's HoD also found it difficult to access appropriate information and reading material samples to help make decisions on reading material purchases at the school. The HoD specifically commented about the need for differentiated reading materials at each grade. As she further explained:

...you have to make a decision and sometimes you make an incorrect decision...you know, sometimes it might be a book for Grade 5 but our Grade 4s need that book because they are a bright bunch or vice versa, ...so it is no good saying [to publishers], 'right, I teach Grade 7, bring what is available'. I need to know what's in Grade 8 and in Grade 6. (School B)

The HoD also wanted to implement a reading series programme in the Intermediate Phase, as the teachers did not have access to one reading scheme. She felt that there was a need for a reading series programme and perceived that learners would benefit from the continuity offered from grade to grade.

Monitoring of the success of purchased literacy programmes by all role-players was seemingly unique to School A. The process was described by the subject area leader:

[Management] would have reviewed...[the programme] first before giving us the go-ahead to purchase it. They will call us in, first of all, as subject leaders and they would say, 'How is your staff finding it?' They would then go to the staff themselves and say, 'How are you finding it?' and on the odd occasion they do call in children and say, 'How are you finding it?' So every stakeholder will report back on the success of what has been purchased and then ultimately the subject leader would be responsible then to reporting to the principal of the primary school and then quite regularly a yearly interview with the executive head where we are questioned on the progress of what has been done. So there's that constant monitoring to make sure that our standards are upheld. (School A)

At School E, the teacher experienced reading materials resource problems not only in English but also in other subject areas. The teacher had to buy books using her own salary, or get worksheets from other schools as materials were not always available. The teacher found this unacceptable and had spoken to the principal, who told her to ask other teachers which books they were using and then fill out a Learning and Teaching Support Materials (LTSM) form so that she could get new books. The teacher acknowledged that she had to find a solution to the problems she experienced with resources in the classroom by asking the School Management Team (SMT) for assistance. Thus, it seems that there was no proactive support on the part of school management to assist the teacher in this regard.

At School F, the HoD pointed out that there was a problem with the availability of reading materials for each grade and there were very few readers. At the time of the research visit, readers had been ordered as the school had just been declared a 'No-fee school', resulting in an LTSM budget allocation. In the interim, the HoD reported that teachers would write letters on the classroom chalkboard so that the children would be able to see the letters to pronounce them. Photocopy handouts of stories that the teachers had typed out were also being used for reading instruction. Another strategy was to use stories available in the textbooks for other learning areas. Older Sepedi materials were also used for instruction. In addressing difficulties in identifying appropriate materials and confusion about links between curricula and reading materials, the HoD mentioned that they used phased-out Revised National Curriculum Statement (RNCS) books:

Well, there are these old RNCS books that...we requested them during that time [of the RNCS]. We are still using them now because we don't have anything of NCS. The teachers checked the latest material and they did not like them so there is nothing of them. (School F) (Zimmerman 2011)

5.3. School policy on creation of literate classroom environments for learning

At the three low-performing schools (D, E and F), poor literate classroom environments were observed, with few or no posters or other visual texts for incidental reading (see figures 1 and 2). None of the three schools had a reading corner or bookshelf and only classroom book boxes were reported.



Figure 1: School E Grade 4 classroom



Figure 2: Display boards in School D Grade 4 classroom

At the high-performing schools (A, B and C), there were more posters evident and a reading bookshelf or corner in each Grade 4 classroom. Indeed, at schools A and C, posters and other texts, as well as reading corners, were explicit school policy (e.g. see Figure 3). Nonetheless, at School C, most of the commercially-bought posters evident in the classroom had content for other learning areas, with only a few posters related to language. At School A, it was also policy for classrooms to have author boxes, flash cards and current affairs texts displayed.



Figure 3: School A Grade 4 classroom

At School B, these literacy resources were teacher-initiated without monitoring at school level. The School B teacher explained that the school did not have money to make books available in the classroom so the teacher provided them, together with old children's magazines. In addition, some learners donated them. The discrepancy between the literate classroom environments at Grade 3 and Grade 4 were noticeable at schools C, D, E and F, with Grade 3 classrooms being superior in this regard (see Figure 4 as an example of the Grade 3 classroom at School C). The reason for this was not clear, but it did seem that somehow reading materials and wall posters to create a print-rich environment received more attention in the Foundation Phase and were perhaps no longer considered important in the Intermediate Phase (Zimmerman 2011).



Figure 4: The language rich literacy environment in a School C Grade 3 classroom

6. DISCUSSION AND CONCLUSIONS

At the case study schools, differences in reading resource availability and management between the low- and high-performing schools were apparent. At the three high-performing schools, resource allocation was either not a problem or required careful management or budgeting due to government budget cuts. The highest performing school sampled as a case (EFL 550) appeared to be the only one with staff who monitored the effectiveness of reading programmes and materials purchased. Specific problem areas in terms of materials allocation at the low-performing case

study schools were lack of budget for materials and lack of information or support from management to acquire them.

Thus, the study findings have affirmed that schools with high learner achievement are better equipped and managed than schools with low learner achievement (Postlethwaite and Ross 1992). As Allington and Cunningham (2007) point out, substantive amounts of easy and interesting reading materials are an absolute necessity to develop effective reading strategies, and a strong, balanced literacy curriculum requires children's access to a large supply of books. The high-performing schools also seemed to have teachers who know how to use materials to challenge and extend their learners' reading abilities to new levels with the use of a variety of materials, particularly set work novels not evident at the other schools. In instances of budget constraint, this again requires creative management of resources – specifically set work rotation amongst the Grade 4 classes.

At the low-performing schools, poor print environments were observed in the Grade 4 classrooms. At the high-performing EFL 400 and EFL 550 case study schools, the creation of print-rich classes with reading corners was school policy. Whilst this qualitative data is not generalisable to all schools, this lack of access to reading materials and poor classroom print environments at the low-performing schools, when linked to the PIRLS 2006 and 2011 evidence, could suggest extremely deprived literate language environments in the majority of South African schools.

Additionally, it was clear that the case study schools that reached the international benchmarks had better financial allocations and managerial support for the purchasing of reading materials. At the low-performing schools, the issues were lack of funds to acquire materials and lack of support from management for making purchases. A managerial factor across most schools could be a lack of monitoring of the effectiveness of materials purchased for reading literacy teaching and learning. At the high-performing schools, it was clear that awareness of and commitment to reading materials resource provision and monitoring of the quality thereof on the part of school management created an ethos of support for quality teaching and learning materials and teachers' attention to this in the classroom. A DoE (2009) task team review noted the crucial role of school management including HoDs in selecting and ordering LTSM and that expertise and responsibility for this task is not clear in many schools. No mention was made regarding the need for continued monitoring of those resources and their efficacy at that time which would include not only school management but teachers and learners too. It could also be possible that many teachers do not have the expertise to manage and maintain adequate resources (Zimmerman 2011).

Schools A and C were the only schools where the use of multiple text types was evident. The use of multiple text types for reading instruction was encouraged in the RNCS for languages (DoE 2002) so it is not clear why the other teachers did not attempt to use multiple texts in their teaching. In a study of literacy practices in

Ugandan primary schools, Muwanga et al. (2007) found that there was a widespread lack of commitment, creativity, innovativeness and resourcefulness among head teachers and teachers when it came to reading materials. Although at the time of the study, the South African curriculum called for use of a diversity of materials (DoE 2002), a variety of self-sourced and relatively inexpensive reading materials, such as magazine articles, newspapers and recipes which were evident in the learners' workbooks in the high-performing schools, were not evident in the work output in the learners' workbooks at the low-performing schools. This could mean that a lack of commitment, innovativeness, resourcefulness and creativity could also play a role with teachers in low-performing South African schools.

Other salient issues regarding reading resources and specifically important for publishers to consider in South Africa are: a lack of appropriate information and samples from publishers to help make informed decisions about purchases; a need for differentiated materials at each grade due to mixed ability learner groupings; and the need for affordable reading series. Another factor is the potential for vast differences in the interest and difficulty levels of EFL and EAL texts in the Intermediate Phase which could narrow the quality of the educational experiences of EAL learners.

There needs to be adequate reading materials provision in all schools but more especially poor schools. For practical purposes, teachers need to be provided with a variety of reading materials, and differentiated reading instruction materials in particular, as this was a concern for teachers at the case study schools. A caveat to this recommendation is provided by Taylor, Fleisch and Schindler (2008) who argue that although poor schools need to be provided with resources, such resources will have little impact on the quality of teaching and learning unless they are effectively managed and used by teachers. Thus, a policy directive on the effective management of the acquisition, utilisation and maintenance of reading resource materials at schools with an accompanying supportive intervention for teachers and managers is needed.

A pending national policy for the provision and management of learning and teaching support material (DBE 2014) is a start, but this policy only pertains to the procurement and retention of purchased materials. The policy does not deal clearly with the innovativeness, resourcefulness and creativity needed to ensure learners have optimal exposure to materials to enhance their reading literacy development, nor does it address the monitoring of school level stakeholders' experiences of the available materials. There is also no mention of the need for managers who are committed to ensuring the optimal use of reading materials. Managers need to encourage teachers to look beyond purchased school materials to seek reading experiences that inspire their learners and extend their life experiences. Thus, there is still risk of inefficient use of the available resources (Sedel 2005) impacting the quality of the teaching and learning processes which South Africa desperately needs in order to make significant progress.

NOTES

1. On a scale of 0–1 000 points, a mean of 500 and a standard deviation of 100 points.
2. Learner performance data for schools with learners tested in Afrikaans were removed from the sample.
3. The schools where the language of instruction had not changed at Grade 4 were referred to as EFL medium schools, and the schools where the language medium had changed, as EAL medium schools. Although these EAL learners learn in English as the main language of instruction from Grade 4, the learners were assessed in the language of instruction from grades 1 to 3, an African language, for PIRLS 2006.
4. The EFL schools with performance at 550, 475, 400 and 325 points as well as an EAL school with a performance level at 175 points were sampled from Gauteng. No school at EFL 175 was available to participate in the time allocated for data collection. As the only school in Gauteng which had a class average aligned to the EFL 475 benchmark declined to participate, a school in KwaZulu-Natal meeting this criterion was approached and agreed to participate (Zimmerman 2011).
5. Schools A, B and C are referred to in the article as high-performing schools as the class averages met the international benchmarks, whilst schools D, E and F are regarded as low-performing schools and did not meet the international benchmarks.

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