Cecilia Bouwer and Thea Guldenpfennig
Faculty of Education, University of Pretoria

The proof of the *Wordwise*-pudding: Independent reading strategies in English acquired by Gr.4-learners from historically African schools[1] in South Africa

ABSTRACT

The learning experiences of most African learners in South Africa could be considerably enhanced by means of cognitive education, including a timeous focus on the development of their reading skills and strategies to access factual text in English independently. The development of the **Wordwise** Reading Programme was co-ordinated by the Human Sciences Research Council and based on their research into the current problematic dynamics of English reading education in the intermediate phase. The article looks briefly at the interaction between the cognitive demands of acquiring academic reading proficiency in English and problems facing learners and teachers in the historically African primary school in South Africa. Criteria are formulated for a reading programme to support the development of independent and academic reading strategies in a second language. The model of the **Wordwise** programme is described. An evaluation of its use by African learners in Grade Four is reported and discussed.

1. Introduction

An understanding of the difficulties of African learners in South Africa who need to use English as their language of learning has been growing steadily during the past 25 years, largely owing to the impressive body of research and development of the Molteno and Threshold Projects (Kingwill 1998; Macdonald 1990). By Gr.8 at the latest, African learners are generally expected to control English as a virtually transparent medium to acquire new knowledge and skills in all areas of their learning. Within the integrated approach of Curriculum 2005 to language, literacy and communication education, their academic reading skills in English should therefore be systematically developed in all primary schools.

Many African learners still appear to be orientated towards spoken communication and learning by rote instead of resorting to

---

1. Schools formerly under the direction of the Department of Education and Training in South Africa, termed *African schools* in the article.

books spontaneously for their learning. Besides reflecting the teaching style maintained in many African classrooms, this focus would seem related to factors such as the African tradition of oral narrative, a lack of printed materials in many African homes and schools and failure to actively endorse a culture of literacy. The tonal nature of African languages also merits consideration, in that young learners may experience that the printed form of communication in their language obscures, diminishes and even changes the meaning of the message.

In this article, the barrier to learning which is cast up in the African primary school in South Africa by poorly developed academic reading proficiency in English, is briefly contemplated from an educational psychological perspective by looking at the interactions among the cognitive demands of the task and the difficulties of learners and teachers (Jones & Charlton 1996:15–30). Criteria are formulated for reading programmes to support the development of independent and academic reading strategies in English in the African primary school. The model of the **Wordwise** Reading Programme (1993 & 1996) is described. An evaluation of the use of **Wordwise** by African learners in Gr.4 is reported and discussed.

2. A barrier to learning in African primary schools: Lack of academic reading proficiency in English

2.1 The cognitive demands of reading-to-learn

Reading fluency denotes the skills of maintaining an adequate and constant reading speed by means of accurate word recognition and facile decoding, **only inasmuch as these are integrally related to processing textual meaning attentively and with understanding.**

Constructing meaning from text contains a particular challenge on account of the decontextualised nature of print. Marsden-Huggins (1994:77) actually argues that, in forcing readers to step beyond the immediacy of their own situation and view the textual content from a different perspective, written language develops abstract thought.

Reading comprehension partly depends on the measure in which the content reflects or elaborates on the reader's prior knowledge (Smith in Weaver 1994:15). Reading materials with scant personal relevance, as when texts intended for use in South African schools neglect to accommodate the life-world of the African learner, obviously lose much of their meaning (Spangenberg-Urbschat & Pritchard 1994:52).

In influencing the development of language competence, problem-solving skills and areas of knowledge, the culture of learning mediated by parents and schools impacts on learners' academic reading competence. As also realised early in the Molteno Project (Kingwill 1998: 19), African learners from a disadvantaged home environment and/or in schools which under-emphasise language-*cum*-cognitive development in the home language (L1), could have considerable difficulty mastering the strategies of reading for meaning in the L2. Spangenberg-Urbschat and Pritchard (1994:51) confirmed that learners with limited academic skills in the L1 are deficient even in the elementary cognitive skills of planning, implementing and monitoring rote recall strategies.

Reading is a strategic cognitive activity requiring metacognitive control, by which readers consciously manage their understanding and reasoning while reading for different purposes and applying their knowledge of strategies for learning from text (Spangenberg-Urbschat & Pritchard 1994:54). Skilful readers are flexible and use strategies appropriate to the particular reading situation (Lerner 1993:397).

The effective application of reading strategies for purposes of study would qualify as the ultimate level of reading competence. To this end, the learner needs to achieve the integration of distinct textual components of the content with the overall textual intention – a strategy seldom explicitly developed in African primary schools.

2.2 African learners' reading of English

As pointed out above, learners' development of reading comprehension strategies interacts with their cognitive development, which is reflected in their level of L1 development. Poorly developed reading competence in the L1 impedes the processing of both narrative and academic text in another language. African learners who for various reasons are not receiving an education rich in their L1 and/or are socio-economically disadvantaged, tend to lack the essential linguistic, conceptual and experiential frames of reference to make meaning from English text (Donald, Lazarus & Lolwana 1997:157) and require scaffolding to neutralise and, in time, overcome the deficit.

Reading is firmly underpinned by a process of word closure based chiefly on contextual, lexical and syntactic information. A lack of knowledge in any of these areas obviously complicates reading in the L2. Research on the reading strategies of L2 readers has indeed confirmed that they tend to have difficulty utilising contextual information optimally and focus more on grapho-phonic transformation than do L1 readers (Geva & Clifton 1994: 649). Since the depth of the orthography of a language influences the sounding-out aspect of word recognition (Klein 1996:353–354), this alternative is fraught with obstacles for African learners transferring to English print from the safely regular spelling system of their L1.

The limited exposure of African learners to English outside the formal classroom obviously compounds their difficulties in developing comprehension skills (Malefo 1992:56). Not only does it restrict incidental learning and extension of the English core vocabulary and grammar, but differences in the style of social interaction which remain unexplored could prove an obstacle in reading even simple narrative text with ready understanding.

Narrative text written by L1 speakers represents the distinctive styles of thought and interaction of members of their culture. For the young L2 learner reading cross-culturally, comprehension may therefore be somewhat clouded. For example, in Western cultures narrative text largely reflects a turn-taking convention of direct response and repartee in dialogue which underscores individualism and ventures personal opinion – whereas the African learner might feel more comfortable with a style of dialogue by and large consisting of parallel remarks and inching towards consensus by means of careful, searching formulation which endeavours to explore the stance taken by other participants, especially in interactions between children and adults or about contentious issues.

Yet the complexities described here do not mean that L2 learners must first have a rich vocabulary and a good command of the target language and the code underpinning the interactions of its users in order to learn to read it. In truly integrated fashion, copious reading in the L2 lends vital support to the development of all other L2 skills (Boyle & Peregoy 1990:195–196). Enjoyment, a growing sense of the meaningfulness of written text and the measure of confidence which learners have in their reading skill influence how often and how well they read in a spiral process operating both positively and negatively. 'Reading is learnt, rather than taught, and only the learners can do the learning' (Nuttall 1996:33). The variety and relevance of reading materials provided and the model of reading development adhered to by the school are obviously determining factors. In most African primary schools, the inadequate supply of an appropriate stock of English reading material is literally preventing the development of the cognitive and reading skills which are so crucial to the overall progress of their learners.

The task facing teachers in African schools with regard to the English reading needs of their learners is indeed enormous. In fact, an analysis of the English reading comprehension skills of 1 600 South African learners in Gr.4–7 revealed the school to be the strongest predictor of performance in Grades 4 and 5, even above the established criteria of gender, teacher ratings and overall school performance (Bouwer 1991:84–90).

2.3 The teaching of English reading in African schools

The culture of reading in a school reflects its culture of learning. Learning to read competently requires sustained attention over several years by both teachers and learners. The teachers of a school should collaborate in engaging and maintaining the interest, enjoyment and involvement of their learners in reading activities. It is important to ensure relevance of the reading texts to the life-world and learning needs of especially the young learner. It is essential to accommodate varying levels of competence within one class.

Despite the in-service training efforts of numerous institutions in recent years, many teachers in African schools fail to apply the communicative, integrative approach to L2 learning which is especially important when learners have little exposure to English outside of school. An undue emphasis on drills and a formulaic treatment of specific language patterns still prevail (Macdonald 1990:116–125; Bouwer 1989:103–113).

Applying principles of formal language teaching to English reading development – even in the intermediate phase, when English is in the process of becoming the language of learning – many African teachers focus on first getting learners to memorise the pronunciation and meaning of an endless string of words occurring in the new "lesson" of an outdated basal reader. The text is then read aloud countless times, both chorally and individually, to achieve fluency and dramatic expression. For one text of standard length, the routine has been found to consume up to ten reading periods or one month. As little as one period of this time is spent on comprehension of some discrete aspects of the content, and many teachers have expressed awareness of their inadequate questioning skills (Bouwer 1989:169–171).

The lack of English proficiency displayed by many African teachers obviously compounds the didactic problem. Even in urban township schools some teachers are unable to read English well (Guldenpfennig 1997:29). In rural areas, their difficulties are pervasive and severe (Bouwer 1989:209).

Many African teachers could only be enabled to change to a model of meaning-based reading development in English with the guiding support of a well constructed programme containing a sufficient volume of graded, self-assessing material by means of which learners can virtually be put through their paces and manage much of their learning themselves over a considerable period of time.

3. Criteria for an English reading programme to develop academic reading strategies in the primary school

The situation analysis above translates into the following criteria for an English reading programme to develop academic reading proficiency in African primary schools:

The programme should focus on the total educational development of learners and strive for integrated learning outcomes.

In order to cultivate effective, meaning-directed reading strategies in English as early as possible and prevent having to unlearn fruitless and even counter-productive ones later, the programme must cater for learners from Gr.4 upwards.

The programme should build on the learners' reading competence already achieved in the L1. Texts should be graded in terms of lexicon, syntax and content familiarity, not phonological principles.

Learners must learn to read independently: Texts should strive for personal relevance and be attuned to the existing knowledge of the reader (specifically the culture and life-world of the African learner) and accommodate existing deficiencies in language and reading strategies, to begin developing learning and reading strategies from the present level of functioning of each learner.

The limited exposure to English which African learners have outside the formal classroom necessitates clearly defined but communicative cuts of experience for processing at their own pace.

The programme must cultivate the learner's self-confidence by ensuring success accord-ding to his/her own potential and level of performance. The design should support a graded transition from the comfort zone of contextualised, spoken communication to processing decontextualised text.

A focus must be maintained not on rote fluency and isolated facts, but on processing the entire text. Concept formation and extension of the learner's lexicon should be bolstered contextually rather than through explanation and definition. New lexical information should be reinforced across texts, to simulate natural L2 exposure.

At lower levels, annotated illustrations should reflect information crucial to understanding the text.

The principles of communicative language learning must be recognised. The design should allow for paired and co-operative activities, but without obstructing the aim of independent silent reading.

The procedure must be structured to teach learners to perform self-corrective strategic actions when a reading-to-learn task appears difficult, and support a growing awareness and independent application of constructive reading strategies to achieve full understanding by their own means.

The programme should contain a sufficient number and variety of texts at each level of complexity. Levels should also overlap between sets, to support full development of reading competence and avoid an untimely, forced movement to a more demanding level in the subsequent year.

The development of abstract thought should be systematically supported by posing questions which require the reader to view textual content from different perspectives.

The programme should contribute to a culture of reading by providing learners some opportunity to experience the pleasure of reading for enjoyment. Therefore the content and appearance of materials should be inviting and not all should contain set questions.

The programme must support teachers by means of design and content, to achieve a systematic, concerted development of academic reading strategies in English throughout the school. Teachers should have a facilitator's role, enabling them to share what expertise they have. The lack of English proficiency and/or didactic skill of some teachers could be compensated for by getting learners to function more independently and allowing for different levels of competence, which might even exceed their own. Problems regarding classroom management and class size should be addressed. Per unit, the text-*cum*-task should take no more than a half-hour to complete.

4.   The *Wordwise* Reading Programme

The **Wordwise** Reading Programme can be stated by and large to meet the criteria presented above, although limited space does not allow detailed argument of the point.

When completed, **Wordwise** will consist of three Programme Levels. In following the model of the SRA Reading Laboratory (SRA, 1989) in some respects, it has steered away from the book format and contains a wide variety of Reading Cards and Library Cards / Cognitive Skill Cards. The cards are graded into six colour-coded reading bands (levels) per Programme Level in accordance with research findings by the HSRC on content preference and reading levels of African learners in South Africa in Gr.4–7 (Bouwer 1991). Individual progress is recorded in a Workbook and on a Wordscore Chart.

The programme targets the systematic development of reading comprehension in English. The lexicon is lightly controlled following a guideline of HSRC research data on degree of concept familiarity among L1 learners in Gr.1 and L2 learners in Gr.4, as judged by their teachers (Vorster 1991). The lexicon is systematically developed and reinforced by

means of contextual exercises on the Reading Cards, and glossary-type entries on the Library Cards and Cognitive Skill Cards. The programme design, illustrations and content mainly about Southern Africa address some of the constraints presently observed in the South African education situation and the non-English and/or non-reading environment of many learners.

The uniform degree of complexity within a reading level affords each learner in the class sufficient scope for practice in accordance with his/her performance on a criterion-based test specially developed for each Programme Level. Learners deal with the Reading Cards in random order according to personal preference. The reading levels overlap between Programme Levels.

Wordwise Box 1, used in this research, is declared suitable for learners ranging between their second and fourth year of schooling, who have already begun to read English. It contains 144 Reading Cards and 90 Library Cards. To ensure sufficient practice for those learners with deficits in their prior learning, the two lowest levels contain 36 Reading Cards and the other four contain 18.

5. Programme evaluation

5.1 Aim, sample and method

The aim of the research was to gain an understanding of the implementation potential of Box 1 of the **Wordwise** Reading Programme in historically disadvantaged African schools, by qualitatively and quantitatively evaluating the learning behaviour and performance of African learners in Gr.4 in two education situation.

The sample consisted of 158 African learners in Gr.4 from urban schools in a Pretoria township representing two learning environments: S1 was a non-profit, community-based education programme run on Saturdays (SUPEDI: Supplementary Education Programme Saturday Schools) and S2 was a State primary school. Accepting a flexible age range norm of 9;0 – 11;11 years for Gr.4, the sample information supplied in **Table 1** demonstrates that S1 contained vastly more under-aged learners (at least 43,9%) than S2 (at least 3,4%). S2 contained more over-aged learners (at least 29,1%) than S1 (at least 4,8%) and also more learners (30,8% : 9,8%) who had failed prior to the evaluation period.

Table 1: Biographical distribution

Variables	S1		S2	
n	41		117	
	n	%	n	%
Male	27	65,9	70	59,8
Female	14	34,1	47	40,2
Age: 8;0–8;11	18	43,9	4	3,4
9;0–9;11	12	29,3	27	23,1
10;0–10;11	8	19,5	24	20,5
11;0–11;11	1	2,4	28	23,9
12;0–12;11	1	2,4	17	14,5
13;0–13;11	1	2,4	12	10,3
14;0+	0	0,0	5	4,3
Failed prior to Gr.4	4	9,8	36	30,8

The **Wordwise** Reading Programme, Box 1 was used through eight months with all learners in S1 (regularly, by the researcher) and S2 (less frequently, in a special period on Fridays, by class teachers trained and advised monthly by the researcher). A qualitative, non-comparative focus was maintained by means of systematic observation of the particular dynamics of each teaching-learning situation. Counter-measures were taken to address problems when observed. Learners' progress was assessed quantitatively by an intra-analysis of Pre- and Post-test data using the **Wordwise**-test. **Table 2** contains information on class size for the data finally analysed and the number of sessions devoted to the programme.

Table 2: Class distribution*

Classes	S1	S2a	S2b	S2c
n	41	34	30	37
T's qualification	BEd (Ed Psych)	T's Diploma Studying for BA	T's Diploma	T's Diploma
***W/wise* sessions**	21	8	10	12

* Frequencies differ due to missing values

5.2 Findings

5.2.1 *Observations and counter-measures from qualitative analysis*

The qualitative analysis dealt with the role of the learners, the teacher and content as inter-related factors. Measures taken to address problems observed during the research are printed in italics.

(a) Learners' lesson participation

The reading activities required by the **Wordwise** Programme are distinctly different from those to which the learners in both groups were accustomed. S1-learners had difficulty following instructions during the introductory sessions and administration of the Pre-test, since the teacher was unable to explain the procedures in their L1. Various forms of inappropriate behaviour were observed, including copying, guessing and perseverating; failing to work independently; writing words instead of symbols; and poor time management. *In the S2-groups procedures were explained in the learners' L1 and were therefore better understood. Consequently, fewer problems occurred.*

The graded-level design of the programme holds the danger of negatively influencing learners to centre unduly on achievement. Learners focused excessively on their performance scores and displayed a tendency to cheat for full score on the Reading Cards. *In S1, the emphasis was successfully shifted to the act of reading per se by adapting the procedure as follows:*

- *For the first ten minutes after settling down with their Reading Cards, every learner should be engaged in reading. Nobody is allowed to write. Then signal that they may start answering the questions whenever they are ready.*
- *Use remarks such as, 'It's good to read a story a few times, try to answer the questions on your own. Mark your answers, read what they should be. Even if you scored 0 or 1, it would make me proud.'*
- *Do not check learners' answers in their presence.*

Not all learners placed on the lowest level (Red) by the test results may be able to read even such elementary texts independently. In S1, non-reading behaviour was observed in many learners on Red. Individual testing revealed them to have

reading problems. *The procedure was adapted as follows:*

- *Pair excessively weak readers.*
- *Consistently emphasise the illustrations as aids to understand the story better.*
- *Use the first ten minutes (while the rest of the class are engaged in silent, independent reading) to discuss the illustrations tho-roughly with each pair of learners, repeating the guiding words often.*
- *Focus on a positive attitude towards reading and aim to improve their self-confidence as readers.*
- *Encourage them to work together to make out the words and their meanings, and freely to ask other readers and the teacher for help.*
- *Focus on making meaning in all possible ways; require informal procedures in answering questions.*
- *During the latter half of each period, spend some time with at least one pair of these floundering learners to render more personalised assistance.*

The code of learner-behaviour generally exacted in each class appears to influence learners' engagement with the programme. In S2a and S2b, where the noise-level was controlled and discipline was strictly and even harshly maintained, learners appeared inhibited and chiefly gave closed group-responses to questions (e.g. 'Yes, Ma'am!'). *In S1 and S2c, where learners were encouraged to participate, interactions with the teacher and peers were mostly task-related and became frequently self-initiated.*

(b) Teachers' presentation

The **Wordwise** Reading Programme reflects recent development in language and reading education and may therefore demand some new skills from teachers. The African teachers in S2 followed the instructions on the Start-up Card closely, but they failed to deal with the reading difficulties of their learners and themselves according to the aims and philosophy of the programme. *Directions for the addi-tional procedures reported in (1) should be included on the Start-up Card.*

Initially, S1-learners grabbed and fought for Reading Cards during the early part of a period. *The researcher maintained order by devising the following procedure:*

- *First, the learners who had been unable to complete their cards in the previous period, were instructed to find those from the box while other learners were moving into their colour groups.*
- *Then each colour pack was circulated in the appropriate group and learners quickly selected cards.*
- *The Reading and Library Cards were placed near the group. Learners who finished ahead of time could return their Reading Cards to the correct slots, and select a Library Card.*
- *Learners failing to complete their work by the end of the period handed their cards to their group leader, who ensured that all cards were in their slots before returning the pack to the box.*

All S2-teachers focused on reading aloud and seemed to regard reading comprehension as less important. They had difficulty reading the Practice Cards themselves and committed errors such as omission, wrong pronunciation and poor intonation.

Perhaps adhering to the rote rhythm method of teaching (Macdonald 1990: 116–125), S2-teachers tended to supply the answers to questions on the Practice Cards immediately after reading them. Sentences and instructions were generally repeated (sometimes up to four times), obviously delaying the process and reducing learner participation.

S2-teachers were sometimes insufficiently prepared for the **Wordwise** sessions. The lack of control at the beginning of such sessions had a visibly negative effect on the entire period. The teachers sometimes also lacked dedication, and would sit down at their desks or even leave the classroom when the learners had settled down to their reading.

(c)   Content and design

Learners found the format of the programme foreign and difficult to use at first, but they mastered it in accordance with the degree of supervision and guidance provided by each teacher.

The first Practice Card was sufficiently clear. The learners participated in the discussion and experienced success in answering the questions. The second Practice Card was less effective at the Gr.4-level. None of the S2-teachers or their learners understood the title and much time was consumed in sorting this out.

The irregular font types of titles on the Reading Cards caused some difficulty. Howver, the titles and illustrations had considerable appeal and generally motivated learners in their choice of cards. S1-learners readily approached their teacher to ask about a title and its meaning when unable to read it.

The content of both the Reading and Library Cards was mostly relevant. Even cards containing relatively unfamiliar (but well supported) information appeared to stimulate the learners' interest.

The Wordscore Chart was not utilised in S2 since the teachers didn't agree with its purpose (self-motivation and monitoring), and because of a time constraint. In S1 it proved useful.

At the more advanced reading levels, the style of dealing with the Reading Cards gradually changed. Learners appeared more focused on the text, depended less on the illustrations to support their understanding and were more inclined to use a dictionary for unfamiliar words.

5.2.2 Quantitative results

To examine the movement of learners in the programme as intended by the design, Pre-test/Post-test performance on the **Wordwise** Grading Test was not recorded as discrete reading scores, but in terms of the intervals representing the colour levels for reading. **Table 3** shows the performance of S1-learners.

Table 3: Reading level improvement of S1 in *Wordwise* Grading Test

		Red	Orange	Yellow	Green	Blue	Violet
Pre-test Level	N = 41	14	18	2	5	1	1
Red	1	1					.
Orange	9	6	2		1		
Yellow	5	2	3				
Green	9	4	5				
Blue	11	1	4	2	3	1	
Violet	6		4		1		1

(End: Post-test)

- Level unchanged; cells above = deterioration; cells below = improvement

Most S1-learners performed at a higher level after using the programme. Only 5 remained in the same position and 1 dropped to a lower level. For example, of the 14 learners starting at Red only 1 failed to show improvement – 6 recorded progress to Orange, 2 to Yellow, 4 to

Green and 1 learner even qualified for blue, 4 levels above Red. Learners starting at the higher levels improved less than those at the lower, with the 2 starting at Blue and Violet showing no improvement. Only 1 learner each started at Blue and Violet, but 11 and 6 respectively ended there. Since the Blue level represents the advanced level of competence for Gr.4 (Violet being an extension level) this fact would seem to confirm a desirable improvement.

Table 4 shows the performance of all the learners in S2. More learners (44=43,6%) showed improvement than those who dropped back (26=25,7%). In reflecting on this finding, two factors should be borne in mind: All S2-classes had had considerably less exposure to the programme than S1; and the initial placements had possibly been inaccurate since the classrooms had been crowded and two of the three classes had been left unattended during the Pre-test (raising a possibility of cheating), whereas the Post-test was better supervised.

Table 4: Reading level improvement of S2 in *Wordwise* Grading Test

			Red	Orange	Yellow	Green	Blue	Violet
Pre-test Level		**N = 101***	**18**	**48**	**11**	**20**	**4**	**0**
End: Post-test	**Red**	**16**	1	5	7	3		
	Orange	**40**	9	23		7	1	
	Yellow	**3**		1	1	1		
	Green	**34**	7	17	3	5	2	
	Blue	**8**	1	2		4	1	
	Violet	**0**						

* Frequencies differ due to missing values

Only 1 of the 18 learners originally placed on Red remained there (confirming the improvement demonstrated on this level in S1) – but, in striking contrast to S1, 15 (14,9%) other learners (many of whom had possibly been dishonest in the Pre-test) dropped back all the way to Red. This suggests that the programme effectively supports the reading development of even poor readers who begin at the level truly reflecting their reading competence, whereas learners who start at an inappropriate level improve considerably less, if at all.

Tables 5–7 show the breakdown for the separate S2-classes, suggesting that teachers might influence the results rather considerably. Class S2a (Table 5) attended only eight, irregularly spaced, **Wordwise** periods, S2b (Table 6) attended ten periods, and S2c (Table 7) twelve. Both S2a and S2b improved only on Red and Orange, with more learners making progress in S2a (35,3%) than in S2b (16,7%). Learners in S2c initially placed on Red and Orange made considerably more progress (76,9% moved up) and 62,2% of the learners ended on Green or Blue in comparison with 32,4% in S2a and 27,3% in S2b. Although the number of lesson periods spent on the programme is important, this alone would not seem to translate directly into gain. The teacher of S2a, in the final year of graduate study, might have had a deeper understanding of literacy education which led to some success on the programme despite the limited time. In S2c, accurate initial placement

may be one reason for the greater improvement, since the researcher had been requested by the teacher to assist during the Pre-test and supervision was well maintained. The Pre-test distribution of S2c-learners across levels indeed resembles that of S1. The S2c-teacher also encouraged her learners to participate and interact during the **Wordwise**-periods.

Table 5: Reading level improvement of S2a in *Wordwise* Grading Test

	Pre-test Level			Red	Orange	Yellow	Green	Blue	Violet
	Pre-test Level		N = 34	5	20	0	7	2	0
End: Post-test		Red	3		2		1		
		Orange	19	3	11		4	1	
		Yellow	1		1				
		Green	10	2	5		2	1	
		Blue	1		1				
		Violet	0						

Table 6: Reading level improvement of S2b in *Wordwise* Grading Test

	Pre-test Level			Red	Orange	Yellow	Green	Blue	Violet
	Pre-test Level		N = 30	2	12	7	7	2	0
End: Post-test		Red	12		3	7	2		
		Orange	9	1	6		2		
		Yellow	1				1		
		Green	7	1	3		2	1	
		Blue	1					1	
		Violet	0						

Table 7: Reading level improvement of S2c in *Wordwise* Grading Test

			Red	Orange	Yellow	Green	Blue	Violet
Pre-test Level		N = 37	11	16	4	6	0	0
End: Post-test	Red	1	1					
	Orange	12	5	6		1		
	Yellow	1			1			
	Green	17	4	9	3	1		
	Blue	6	1	1		4		
	Violet	0						1

Table 8 compares the movement of S1-learners to subsequent levels as conservatively managed by the researcher with the actual improvement reflected by the Post-test results. The differences raise the possibility that learners could have shown greater gains if they had been permitted to move on more readily, thus being exposed to more advanced levels of text. On the Red level, for example, the researcher had judged only 2 of the 14 learners ready for the Orange level at some stage during the intervention whereas the Post-test revealed that 13 had been competent and 7 could actually have been promoted to levels above Orange. On account of the limited number of sessions in S2, no learners had changed levels.

Table 8: Comparison of reading level improvement of S1 in *Wordwise* Grading Test, with teacher's placements

			Red	Orange	Yellow	Green	Blue	Violet
Pre-test Level		N = 41	**14**	**18**	**2**	**5**	**1**	**1**
End: Post-test	Red	**12**/1	**12**/1					
	Orange	**12**/9	**2**/6	**10**/2		**0**/1		
	Yellow	**9**/5	**0**/2	**7**/3	**1**/0	**1**/0		
	Green	**5**/9	**0**/4	**1**/5	**1**/0	**3**/0		
	Blue	**1**/11	**0**/1	**0**/4	**0**/2	**1**/3	**0**/1	
	Violet	**2**/6		**0**/4		**0**/1	**1**/0	**1**/1

bold   - Placed/promoted by researcher
/light   - Test results

6. Recommendations

The measures taken to address problems which were observed in the implementation of **Wordwise**, printed in italics in 5.2.1, all proved their worth and are proposed as recommendations. In addition, the following recommendations should be considered:

The **Start-up Card** should be extended to include directions on problems such as the following:

- Teachers lacking proficiency in English need to practise the lesson prior to reading it aloud in class.
- Pairs of learners reading aloud raise the noise level. Teachers who maintain silence in class must be persuaded to adapt to this change.
- Immovable furniture prevents proper grouping of the learners. The teacher could group learners in rows or find a venue where seating could be manipulated.

The Programme Guide

- Preparation is hampered when teachers are required to share manuals. More than one copy of the Programme Guide should be provided.
- Emphasise that the teacher's use of the learners' L1 when introducing any one of the **Wordwise** procedures is of great value.
- Include directions on integrating the **Wordwise** reading activities across learning areas.

The Grading Test

- Learners must do all the Practice Examples of the Reading Cards in full detail before taking the test, to familiarise them sufficiently with the multiple-choice format. In case of doubt, devote additional sessions to Reading Cards before testing.
- On condition that no irregularities are allowed during testing, learners' test performance would seem a generally reliable indication of their entry point into the programme.
- Teachers are nevertheless advised to monitor performance closely during the first number of sessions to identify inappropriate placements.

The Reading Cards

- Teachers should be guided explicitly to reconceptualise the measure of comprehension genuinely obtained as being a prime indicator of success in reading. They should not over-emphasise controlled activities such as reading aloud or answering questions, but should devote sufficient time and attention to the act of reading itself. If necessary, especially at first, learners should be encouraged to spend two periods on one card rather than to rush (or cheat) for the rather hollow sake of performance scores.
- The habit of studying the first illustration and the labels naming particular objects before reading the text and consulting the final illustration upon completing the reading should be strongly encouraged.
- Dictionaries should be made available for all **Wordwise** sessions.
- Teachers should ensure that learners have consolidated their reading competence on one level before allowing them to move on – but all learners need not necessarily complete full levels: Early promotion to a subsequent level should receive special consideration.

The Library Cards

- In order to develop a culture of reading among teachers and learners alike, it is vital to persuade teachers to introduce and promote the use of the Library Cards in their classes.

References

Bouwer, A.C. 1989. *Guidelines for an English reading programme for African primary school pupils Std 2–5.* Unpublished doctoral thesis, University of Pretoria.

Bouwer, A.C. 1991. *Content and reading levels for African pupils Std 2–5: Guidelines for a reading development kit.* Pretoria: HSRC.

Boyle, O.F. & Peregoy, S.F. 1990. Literacy scaffolds: Strategies for first- and second-language readers and writers. *The Reading Teacher* 44(3): 195–196.

Donald, D., Lazarus, S. & Lolwana, P. 1997. *Educational psychology in social context. Challenges of development, social issues, & special need in southern Africa.* Cape Town: Oxford University Press.

Geva, E. & Clifton, S. 1994. The development of first and second language reading skills in early French immersion. *The Canadian Modern Language Review* 50(4): 646–666.

Guldenpfennig, D. 1997. Evaluation of the *Wordwise* Reading Programme with African pupils in Grade Four: an orthodidactic perspective. Unpublished M.Ed.-dissertation, University of Pretoria.

Jones, K. & Charlton, T. 1996. *Overcoming learning and behaviour difficulties. Partnership with pupils.* London: Routledge.

Kingwill, P. 1998. *Transforming language education in Southern Africa.* Braamfontein: Molteno Project.

Klein, D. 1996. The effect of orthographic depth on dyslexia: An analysis with specific reference to the South African linguistic situation. In P. Engelbrecht, S.M. Kriegler & M.I. Booysen (Eds.), *Perspectives on learning difficulties. International concerns and South African realities.* Pretoria: JL van Schaik.

Lerner, J. 1993. *Learning disabilities. Theories, diagnosis, and teaching strategies.* (6th edn). Boston: Houghton.

Macdonald, C.A. 1990. *Crossing the threshold into Standard Three.* Report SOLING-16. Pretoria: HSRC.

Malefo, B.M. 1991. The communicative needs in English of African secondary school pupils: Implications for syllabus design and teacher training. Unpublished doctoral dissertation, Rand Afrikaans University.

Marsden-Huggins, J. 1994. Towards understanding of ESL education students' difficulties in lectures: A study of conceptions of subject matter, examination expectations, learning approaches and learning outcomes. Unpublished doctoral dissertation, University of Cape Town.

Nuttall, C. 1996. *Teaching reading skills in a foreign language.* Oxford: Heinemann.

Spangenberg-Urbschat, K. & Pritchard, R. (Eds.) 1994. *Kids come in all languages; reading instruction for ESL students.* Newark: International Reading Association.

SRA (1989) (Science Research Associates) *SRA Reading Laboratory Series.* Revision 2a, 2b, 2c. Henley-on-Thames: SRA Pergamon.

Vorster, J. 1991. Horses for courses: Incremental dictionaries for primary school classes. *Journal for Language Teaching* 25(3): 53–64.

Weaver, C. 1994. *Reading process and practice. From psycholinguistics to whole language.* Portsmouth: Heinemann.

Wordwise Reading Programme. Box 1:1993; Box 2:1996; Box 3 in development. Development co-ordinated by HSRC. Pietermaritzburg: Shuter & Shooter.

Mrs. Thea Güldenpfennig,
GDE District N1
Private Bag X75
PRETORIA 0001
Tel.(012)303-2873

Thea Güldenpfennig is an educational psychologist in the Gauteng Department of Education and has practical experience of the difficulties encountered by educationally disadvantaged learners. Her PhD research is on developing a support programme for parents of Low Birth Weight premature babies.

Prof. Cecilia Bouwer,
Dept Orthopedagogics
University of Pretoria
Hillcrest, PRETORIA 0002
Tel.(012)420-2339
Fax (012)362-5122
acbouwer@hakuna.up.ac.za

As a chief research specialist at the HSRC, Cecilia Bouwer was formerly involved in developing computer-assisted and paper-based reading programmes. Since 1995 she has been professor in Educational Psychology, with specialisation in learning and language problems.