Per Linguam 2016 32(1):102-122
http://dx.doi.org/10.5785/32-1-647

Journal Home Page:
http://perlinguam.journals.ac.za

Per Linguam

A Journal for Language Learning
Tydskrif vir Taalaanleer

RESEARCH PARTNERSHIP BETWEEN SOUTH AFRICA AND CHINA: EMERGENT LITERACY TEACHING AND LEARNING IN EARLY CHILDHOOD EDUCATION IN SOUTH AFRICA

Norma Nel, Soezin Krog, Kesh Mohangi, Helene Muller & O Stephens
University of South Africa

Due to concern about the literacy situation in South Africa (schools being near the bottom of the international systemic measures of performance in literacy), and the important role that literacy plays in China, the researchers of both countries embarked on a collaborative research project. The overall aim is to explore the literacy perceptions and classroom practices of teachers in primary schools in both countries. In this article, the second of a series, the researchers explored Grade R teachers' attitudes towards reading literacy in primary schools and what the reading-literacy teaching practices are that they employ, with particular emphasis on reading comprehension. The expected outcome was to provide an overview of the literacy situation in Grade R in South Africa as a precursor for the next phase of the project. An exploratory, mixed methods design was employed of which the quantitative part is reported in this article. Grade R teachers were selected from ten schools which had Grade R classrooms in two cities in Gauteng Province and one city in Mpumalanga Province. Data was collected through the use of questionnaires. The statistical analyses were conducted using the SAS/STATS module of the Statistical Software System (SAS), version 9.4 statistical package. The findings are presented as part of the overview.

INTRODUCTION

This is an exploratory small-scale study that aims to provide an overview of Grade R teachers' attitudes towards reading literacy in primary schools and, to establish their current reading literacy teaching practices.

The literacy situation in South Africa – being near the bottom of international systemic measures of performance in literacy, e.g. PIRLS 2006 and 2011 necessitated such high priority research (Howie, Venter, Van Staden, Zimmerman, Long & Scherman, 2008; Howie, Van Staden, Tshele, Dowse & Zimmerman, 2012). South Africa's high rate of dysfunctional schools is a result of inter alia, teachers' limited content and pedagogic knowledge as well as the root causes for difficulties in learning and teaching, namely language, literacy and identity issues (Janks, 2014: 10-11) which call for a specific research approach. Similarly, China also experiences literacy problems and calls for further research, such as the reported research in this article. Chen and Gao (2015) stress the importance of early reading education in China, however, a number of problems exist in this area. These are inter alia: too much emphasis on cognition and the

assumption that the child will automatically acquire knowledge through reading – the emphasis is on learning Chinese characters; there are limited quality reading materials of which many are outdated, easy and boring; inappropriate teaching methods, e.g. emphasising memorisation, focusing on literacy teaching alone without also including ~~r~~eading; poor reading environments which are rigid and too serious.

The South African researchers of this article concur with Janks's (2014:8, 11) futures-orientated, sociocultural literacy pedagogies which focus on producing socially situated meanings 'that are inclusive of diversity'. Janks explains that children need to know what literacy is for and how to use it to their own benefit and development, as 'literacy is a social practice that has social effects, and we have to deal with the consequences of our literacy actions' (ibid. 23). Janks (2014: 11) points out that language and literacy skills are fundamental in order to learn all areas of the curriculum. A prerequisite for young children is to understand the language of teaching in order for the lessons to have meaning and for them to participate in these lessons. Additionally, they need to develop a vocabulary base and to be able to decode texts with automaticity which will lead to comprehension of the texts and the ability to interact with those texts.

The authors also consider Stephen Krashen's emphasis on input which led to the "Input-Interacting-Output" approach which is regarded as the main school of Second Language Acquisition studies. Krashen's monitor model is cognitivist which provides "input to a language acquisition device, which, depending on whether (1) the input was "comprehensible," and (2) an "affective filter" (a "mental block," …) was "up" or "down," gained access to that input for processing purposes. If it did, and there was enough input, language acquisition automatically ensued." (Atkinson 2011: 13). Atkinson's convictions regarding how the mind, the body and the world work together integratively when learning an additional language/second language acquisition lean towards the sociocognitive approach (Atkinson 2011: 143).

Current problems with teachers' classroom practices

Instead of relying only on practice, teachers also need sound content knowledge and pedagogic content knowledge to interpret the curriculum in a way that yields good outcomes, in this case, in China and South Africa. Gains and Graham (2011: 85) explain that 'action research where teachers are supported to implement and reflect on changed writing pedagogy may be the right way to help teachers to engage reflectively with education innovation and to explore its impact on children's confidence and competence as meaning-makers'. In addition, Happo and Määttä (2011: 97) stress the importance of early childhood educators reflecting on their work in order to become experts in this field and they need to recognise that '(e)arly childhood education and care can be seen as educational interaction taking place in young children's different living environments' (ibid. 91).

Zhu and Zhang (2008: 173) emphasise that in Chinese early childhood education, teachers need to think of how to make teaching and learning more meaningful and to be more concerned about the practical than the theoretical effectiveness of the curriculum. In this light and with regard to the South African context, Prinsloo and Stein (2004: 82) argue that the manner in which different teachers engage with literacy pedagogy has important consequences for the kinds of readers and writers the children will become, both within school environments, and as independent readers

outside of school. These authors (Prinsloo & Stein, 2004: 82) also conjecture that literacy pedagogies which work productively and sensitively with indigenous, local forms of knowledge, drawing on children's multiple semiotic resources in combination with other forms of knowledge which are dominant and powerful, like academic and critical literacy, might be an important starting point when considering what the appropriate pedagogies are when teaching literacy to young children.

The South African education system requires compulsory Grade R teaching for all learners by the year 2019. The Department of Education introduced the Curriculum Assessment Policy Statement (CAPS) Grade R-3 which was implemented in January 2011. CAPS: Home Languages include attainment of skills in listening and speaking; reading and phonics; writing and handwriting. An integrated approach has been adopted where the language programme is integrated into all the other subject areas (Department of Basic Education, 2011: 10).

Of concern is that Grade R may be regarded as comprising a 'diluted' Grade1 curriculum, resulting in a lack of stimulation appropriate for preschoolers. This is as a result of the fact that Grade R is not formally part of all primary schools in South Africa and it might still be part of privately owned preschool centres in the community. Furthermore, the 'what' and 'how' are lacking in the CAPS document in terms of 'what' and 'why' structured play should be included, and training stipulations for teachers are not clear. Internationally and nationally, research indicates that early literacy and the 'exposure to reading, pictures and mediation by an adept reader are the primary determinants of later school success' (Department of Basic Education, 2011: 6-7). According to research, early education can make a significant impact on a child's life; however, the emphasis is on the quality of such educational experiences (Hoadley, 2013: 75 & 77). Gains and Graham (2011: 77) rightfully assert that most early literacy teachers do not have expressive writing experiences themselves hence writing does not feature in early literacy classrooms in public schools. With regard to the teaching of reading, oral drill sequences are still being taught and, as such, learners often do not progress further than technical decoding skills, which are not always well developed as some of the ANA results indicate. Thus, learners have limited understanding of the meaning of the texts they read (Hoadley, 2012).

Despite the well-intended emphasis on knowledge, skills and values as expounded in the CAPS document: Foundation phase, home language (Grades R-3) (Department of Education, 2011: 6-7), the problems of articulation of these policy ideals at classroom level persist. Therefore, while there appears to be a confluence of efforts from different levels aimed at a common goal of enhanced literacy teaching and learning, the education system is nonetheless buckling as a result of sparse funding, insufficient numbers of adequately trained teachers and a general sense of nonchalance where emergent literacy teaching and literacy at ECD level is concerned.

CAPS guidelines

According to CAPS guidelines, Grades R to 2 are allocated 23 hours per week as part of direct teaching instruction time. Subsumed within these 23 hours, 10 hours of instruction time are set aside for language. Of these 10 hours, a maximum of 8 hours and a minimum of 7 hours have been reserved for Home Language instruction and development and a maximum of 3 hours and a minimum of 2 hours for Additional Language instruction and development. However, what

happens in the remaining 13 hours is unclear. Furthermore, it is stipulated in the CAPS document that the skills expected to be mastered in the foundation phase (Home Language) include listening and speaking; reading and phonics; as well as writing and handwriting. In addition, thinking, reasoning and language structure ought to be infused into the delivery of listening, speaking, reading and writing skills (Department of Basic Education, 2011: 10).

Once a learner enters Grade 1, it is expected that a preliminary assessment will be conducted to establish literacy levels, upon which learning outcomes and planning for instruction can be based. During the Grade R year planning for *listening and speaking* instruction is usually scheduled for the morning. This entails teachers engaging in conversation regarding news of the day, other newsworthy items for discussion, weather, special events, and talking about objects or pictures. Verbal expression by means of 'show and tell' takes place. As is clear, the targeted skills of *listening and speaking* are encouraged (Department of Basic Education, 2011: 13).

Grade R language teaching and learning

While the teaching of language and literacy in Grade R is primarily focused on play-based learning within structures directed by the curriculum, various formal and informal opportunities for language teaching and instruction in the Grade R classroom exist. Literacy entails, inter alia, the ability to recognise initial consonants and vowels in words; developing emergent reading skills such as interpreting pictures, holding the book the right way up, recognising own name, beginning to read high frequency words, engaging in shared reading of enlarged texts, answering questions from texts read; listening to rhythmic patterns; listening and recalling simple word sequences; singing songs; talking about pictures; identifying rhyming words; recognising that words are made up of sounds; and to segment oral sentences into single words. Learners are not required to be able to write their own names in Grade R. The focus is on phonemic awareness (the ability to recognise sounds within words). The teacher constructs learning opportunities during free-play sessions and interactions in, for example, *the fantasy corner*, during *block constructions*, *story ring* as well as on the *playground (outdoor free-play)* when skills that enhance the social, emotional and motor development of the young learner are encouraged. Other nodes of opportunities for literacy development may be encouraged during *creative art activities, perceptual rings, movement, music* and *drama rings* with particular focus on perceptual-motor concepts and skills underpinning formal reading. Incidental opportunities during the routines of the school day include *meal times* and *bathroom breaks.*

At all activity points, the teacher may provide opportunities for engaging metacognitive responses by means of open-ended questioning and response discussions, making choices and providing reasons for choices (metacognitive problem-solving skills), enhancing memory and vocabulary enrichment. Metacognition is about increasing one's awareness of what one thinks, how one thinks and why we think in a certain way (Flavell, 1979). Metacognitive skills may occur during the daily structured teacher-guided activities, routine activities, and learner-initiated activities or during free-play engagement. Engagement with learners provides opportunities for teachers to informally assess the learners' levels of literacy development and furthermore, to reflect on their own success with literacy pedagogy.

AIM OF THIS ARTICLE

The low literacy levels reported in South Africa put the spotlight on Grade R as the preparation ground for literacy development in Grade 1 which needs urgent attention in terms of teaching and learning. A questionnaire was specifically designed to collect data from the Grade R teachers of the 10 selected schools in the two provinces which were part of this study. The aim of this paper is to report on a proposed analysis strategy for the quantitative questions of the study on exploring teachers' literacy perceptions and classroom practices in Grade R in primary schools. In this paper, we provide insight into literacy practices at selected Early Childhood Development (ECD) centres in South Africa by providing quantitative results obtained from the data collection processes.

RESEARCH METHODOLOGY

Gains and Graham (2011: 92) found in their parallel research (South Africa and Tanzania), that it was not necessary for both countries' researchers to replicate the research design, but rather to consider the situations in their respective countries and to use the most appropriate design. In this way the researchers learn together in developing designs and learn from each other as well as reflect on their own responses and on each other's analyses. The South African research methodology follows hereon.

In the present comparative study (South African and China), a pilot study was conducted using a mixed-method design to collect the data. Firstly, a qualitative approach was employed whereby the responses to the open-ended questions of a questionnaire were further explored by observations and Heads of Department (HOD) interviews. These collated methods of data collection provided sufficient detail which enabled the researchers to arrive at a saturation point in order to gain an overview of literacy teaching and learning with an emphasis on how teachers address barriers to literacy learning in Grade R classrooms in two provinces in South Africa.

The quantitative part of the questionnaire (which is discussed in the 'Findings' section below) was designed as a data collection tool to complement the findings of the qualitative design (i.e. the teachers' responses to the open-ended questions of the questionnaire, researchers' observations and HOD interviews). The aim was to obtain quantifiable results of Grade R literacy teaching from a teacher's perspective, thereby making further contributions to existing qualitative data. As De Vos, Strydom, Fouche and Delport (2011: 434) describe, mixed method (in this case) means 'to come up with a more complete picture of the research problem'. Osborne (2008:4) explains that *qualitative* and *quantitative* methods are used in complementarity studies in order to examine how different aspects of a phenomenon intersect. It is difficult to do justice to the qualitative as well as the quantitative research pieces in one article, hence the decision to conduct the qualitative and quantitative studies in a complementary manner and to publish each in separate articles (Willig & Stainton-Rogers, 2008: 16); in this case the quantitative part of the research. Ethics clearance for this study was obtained from the Research Ethics Committee, College of Education at Unisa. Permission was also obtained from the Gauteng Department of Education, principals of the schools and consent from teachers who participated in the research. Participants were briefed on the aim of the study and were assured of confidentiality and were informed that they were under no obligation and could withdraw at any given time. The

participants were assured that the results of the research will be recorded as accurately as possible and reflected and recorded in an article for publication in an accredited journal.

Sampling procedures: Participants and context

Purposeful and convenient sampling strategies were utilised to select schools and participants from the schools to participate in the study in order to 'purposefully inform an understanding of the research problem and central phenomenon in the study' (Creswell, 2007: 125).

We selected ten schools with Grade R classrooms in two cities in Gauteng and one city in Mpumalanga. The criteria for selection of these schools were that they matched the profile the researchers required for inner city, rural and township schools, as well as that they had operational Grade R classrooms and were in close proximity to the overseeing university (this resulted in a sampling bias towards white Afrikaans schools). The number of Grade R classrooms at schools varied from three to six.

Participants at each school were the Grade R teachers and the HODs. After the formalities of informed consent, the principals were requested to distribute questionnaires to all their Grade R teachers. Teachers were encouraged to complete and return the questionnaires to researchers within two weeks. Observations of Grade R literacy lessons were also conducted in the selected schools as well as general observations of these classrooms. This article reports on the teachers' responses to the structured (quantitative) part of the questionnaire titled '*Reading and teaching survey: Grade R teachers*', which is situated in phase 1 of the study.

Questionnaire design, administration and analysis strategy

The questionnaire consists of 43 questions (36 closed-ended and 7 open-ended) that investigate five aspects of reading literacy, namely, the contextual setting of the research (biographical and language characteristics of research participants (the teachers and learners); current reading practices followed by Grade R teachers; barriers to learning that teachers experience; teacher perceptions of learners' reading abilities and reading culture; and the reading habits and literacy level of Grade R teachers. Responses to the closed-ended questions in the questionnaire consisted of a choice (e.g. a participant's home language or age group), and rating level responses (e.g. rating the frequency-level of reading a book). The details of the various questions are listed in the frequency tables which follow in the analysis and results discussion.

The questionnaire was administered to 28 Grade R teachers in three rural schools (in one city) and three township schools (in another city) in Gauteng, as well as three public town schools and one private town school in a city in Mpumalanga. Of the 28 questionnaires distributed, all 28 were returned and the responses to the closed-ended questions were entered into an EXCEL database. The statistical analyses on the quantitative data were conducted using the SAS/STATS module of the SAS, version 9.4 statistical package. Thematic content analysis was conducted on the open-ended question responses on the questionnaire and served to enrich the analysis results of the closed-ended findings. These results will be recorded in a follow-up article. The results section discusses the details of the individual questionnaire questions (as captured in the various

frequency tables), the analysis techniques employed and the analyses results on the closed-ended questions data.

RESULTS

In line with the exploratory aim of this study, namely to find out more about teachers' literacy perceptions and classroom practices in Grade R in primary schools, the questionnaire content and analysis results pertaining to five aspects of reading literacy are described and discussed in sections (i) to (iv) below.

i) The contextual setting of the study with regard to teachers' biographical/ academic background:

Variables (and questionnaire questions) that contextualise the study with regard to participant properties include: teaching experience, age, gender, qualifications, and specialisation field/s.

The results indicate that all participants were female and 50% (n=17) were younger than 40. Most of the participants (76.06%) indicated a Grade 10 certificate or a diploma as their highest qualification and almost half the respondents (48.2%) reported at least six years' teaching experience. The results of the specialisation fields of participants indicate ample exposure to a variety of different specialisation fields such as reading skills (14.8%); remedial reading (8.9); SLL (7.9%); language development (12.8%); and English language teaching (18.8%). The sampled participants therefore represent a female response group with a reasonable experience level but not highly qualified (only 5.9% have post-graduate qualifications).

ii) The contextual setting of the study with regard to language diversity of teachers (research participants) and the Grade R learners they teach

The variables that describe the language environment of teachers include the home and second languages of teachers, and the language of tuition of the individual schools. These findings reflect frequency distributions that indicate that teachers' home languages are mostly either Afrikaans (50%) or English (20%), with a small proportion of Sepedi (16.67%), isiZulu (6.67%) and siSwati home languages speakers. This means that the purposive sampling was skewed to white (Afrikaans) schools and consequently affects the outcomes of the questionnaire.

A second language preference for English was indicated by 60.61% of the sampled teachers. The language spoken by Grade R learners when communicating informally among themselves is compared to the languages of tuition of their school. The Grade R learner environment is furthermore described in the frequency distribution of the number of learners per class. (The research argues that smaller classes can more readily accommodate language diversity). A cross-tabulation of the combinations of informal interaction languages and tuition languages was also established. All this data is available in the accompanying tables (Tables 1 – 5).

On the other hand, of an average learner class size of 29.29 for Grade R learners, nine languages are used by learners when interacting informally [Afrikaans (18.37%); English (18.37%); isiXhosa (8.16); isiZulu (18.37); Sesotho (2.04%); Setswana (16.33%); siSwati (2.04%); Xitsonga (4.08%) and Sepedi (12.24), compared to five tuition languages used to instruct

learners at these schools (Afrikaans 28.21%; English 53.85%; isiXhosa 2.56%; isiZulu 5.13%; Ndebele; and Sepedi 7.69%). Up to four different languages were reported at schools as informal communication languages (English; isiZulu; siSwati and Xitsonga) and three tuition languages (English, isiZulu and isiNdebele).

The interaction and tuition language combinations reported for the sample describe how language diversity is managed at schools. Since the 34 research participants (28 teachers and 6 HODs) often indicated several tuition and informal communication languages at their schools, a total of 56 tuition and informal language combination responses are summarised, which indicate that:

- 22 of 56 (39.29%) response combinations identify informal and tuition language agreement (language combinations are the same for Afrikaans, English, isiZulu and Sepedi);
- 60.71% of the informal language interaction and tuition language combinations do not correspond;
- in 33 of the 56 (58.9?%) informal interaction and tuition language combinations, English constitutes the language of instruction, followed by Afrikaans (14 of 56, 25 %; isiXhosa 1 of 56, 1.78%; isiZulu 4 of 56, 7,14%; and Sepedi, also 4 of 56, 7.14 % of the combination).

The complex situations of the informal interaction language of Grade R learners and the tuition language of Grade R learners are thus obvious.

(iii) Teachers' reading habits, attitudes towards reading, and perception of their Grade R learners' reading readiness

The results indicate that 85.29% of the sampled teachers enjoy reading; 61.76% read books at least on a weekly basis; 48% read daily for enjoyment; 67.65% buy periodicals and newspapers at least on a weekly basis; and 67.65% read at least 50 books per annum. Forty-two percent of teachers indicated that they perceive themselves to be skilled readers and 45.45% rated themselves as average readers. The picture thus emerges (from the teachers' perspective) of a reading-literate group of teachers with a positive attitude towards reading. (The fact that 76.47% of the respondents rated themselves an average or high rating on the literacy score confirms the findings of the teachers' perceptions). Despite these results, the researchers felt that the results could have been attributed to social desirability effects rather than the respondents being avid readers.

Table 1

Findings derived from Table 1 with respect to the teachers' perceptions of their Grade R learners' reading readiness indicate that 66.67% of the teachers rate their learners' reading readiness as average to good. However, 63.33% of the sampled teachers also indicated that their learners had limited exposure to outside reading opportunities. The majority of sampled teachers (74.19%) indicated a strong reading culture at their schools and daily reading instruction (79.41%). The deduction can be made that reading exposure within the school is favourable, but the same cannot be said of the outside school environment.

Table 1: Frequency distributions and percentages (f_i and $\%_i$) of variables of teachers' perceptions of the current status of learners' reading literacy

Question 2 **Classification of reading readiness of learners**			**Question 4** **Exposure to reading outside school environment**		
Level/ or activity	**f_i**	**$\%_i$**	**Level/ or activity**	**f_i**	**$\%_i$**
Poor	7	33.33	**regular exposure**	8	26.67
Average	9	42.86	**limited exposure**	19	63.33
Good/excellent	5	23.81	**no exposure**	3	10.00
Question 3 **Reading culture at schools**			**Question 5** **Frequency of reading instruction**		
Strong reading culture	23	74.19	**Daily**	27	79.41
Not much done	4	12.90	**3-4 times/ week**	6	17.65
Teachers not qualified to teach reading	1	3.23	**< 3 times/ week**	1	2.94
Poor motivation/ interest in reading	3	9.68	**Score obtained on reading proficiency test**		
Condensed learner reading proficiency score (low: 2-4: average: 5-6; high: 7-9)					
Low	8	23.53	**Score of 2**	2	5.88
Average	15	44.12	**Score of 3**	4	11.76
High	11	32.35	**Score of 4**	2	5.88
f_i: the frequency / number of times a specific option was selected for any variable $\%_i$: the frequency-percentage per cell of options selected for a particular attribute			**Score of 5**	10	29.41
			Score of 6	5	14.71
			Score of 7	5	14.71
			Score of 8	4	11.76
			Score of 9	2	5.88

The reading literacy score/reading habits score of the teachers was correlated with the reading literacy score of the learners to determine whether teachers with good reading habits/ reading literacy evaluate the reading readiness of their learners differently from that of their colleagues who are not fond of reading. The Spearman correlation coefficient of 0.068 was low and statistically non-significant indicating that there is no relationship between teachers' self-reported reading habits and their evaluation of their learners' literacy levels. This lack of relationship may have been obtained because of social desirability in teachers' response. This deduction is confirmed in the cross-tabulation of the frequencies of learners' reading literacy scores and teachers' reading habits/ reading literacy scores. The chi-square test in this instance indicated a non-significant dependency between teacher and learner scores.

(iv) The current status of teaching practices to improve reading skills and develop reading literacy in Grade R learners

Tables 2-4 which follow below, report the results of the teaching practice variables probed in the questionnaire to evaluate the current status of teaching practice on reading tuition in Grade R classes. The frequency distributions on the following variables are reported in tables 2, 3 and 4.

Table 2

Table 2 below indicates that the following techniques are most commonly used by Grade R teachers when teaching reading, for example:

- **Phonics**: identifying rhyming words; recognising that words are made up of sounds; recognising initial vowels and consonants in words.
- **Encourage reading and viewing:** all techniques, for example shared reading and independent reading are used by all respondents.
- **Presentation of activities:** whole class reading and small group reading are the activities most commonly used by teachers.
- **Format of reading:** original books are most commonly used as opposed to prescribed books.
- **Different development levels:** the distribution of frequencies over the three response options suggests that teachers are not always sensitive to different developmental levels (since the question explicitly asks how teachers manage reading lessons when learners are not all on the same development level). Table 2 indicates that 28.13% of the teachers teach reading as though all have the same development level – irrespective of how the questions were worded (because the teacher assumes equal development?) and 37.5% simply ignore the fact that there are different development levels. Only 34.38% of the teachers make provision for developmental differences.

Table 2: Frequency distributions and percentages (f_i and $\%_i$) of the teaching practices to develop reading skills and phonics

Question 7 **Phonics practice**			**Question 11** **Practice re presentation of activities**		
Activity	**f_i**	**$\%_i$**	**Activity**	**f_i**	**$\%_i$**
Distinguish rhyming words	32	25.39	**Whole class reading**	24	43.36
Id words, sounds	32	25.39	**Small groups**	18	32.73
split sentences, words	17	13.49	**Read individual learners**	5	9.09
split multisylb. words	18	14.29	**Other**	3	5.45
Distinguish consonants/ vowels	22	17.46	**All of the above**	5	9.09
Other	5	3.98	**Question 13** **Format of reading test in reading lessons**		
Question 9 **Practice to encourage reading**					
Arrange pictures	32	21.19	**Photocopies of text**	12	35.20
Interpret pictures	30	19.87	**Original books**	22	64.71
Act out stories	29	19.21	**Computer programs**	0	0.00
Reading position	31	20.53	**Question 14** **Reading lessons, different development levels**		
Recognition	29	19.20			
f_i: the frequency / number of times a specific option was selected for any variable **$\%_i$:** the frequency-percentage per cell of options selected for a particular attribute			**Same material for all, all same level**	9	28.13
			Same material for all irrespective of level	12	37.50
			Different material	11	34.38

The current status of reading practice is described in relation to the most commonly used gross and fine motor development activities, namely:

- **Gross motor skills**: development of hand-eye coordination; body awareness; and spatial awareness. The frequency distribution for the activity of development of laterality suggests that this activity is not as commonly used as the other techniques. (The chi-square statistic calculated for the gross motor frequencies verifies this finding: the response pattern – over frequency-of-use scale – of some listed activities differs statistically significantly from the response patterns of other activities – in this instance the response pattern of the development of laterality differs from the response patterns of the abovementioned three techniques on the 1% level of significance.)

- **Fine motor skills**: tracing outlines to enhance completion ('beginning to end' cycle); and the drawing of pictures to convey a message were indicated as the most frequently used activities. However, if the 'always' and 'often'-rating frequencies are jointly considered,

the first six listed activities are used on a regular basis while the four activities listed last are employed less frequently. (The chi-square statistic calculated for the fine motor frequencies verifies that the response pattern – over frequency-of-use scale – of some listed activities differs statistically significantly from the response patterns of other activities – in this instance the last four activities. Significance was established on the 0.1% significance level.)

Table 3: Frequency distributions of the teaching practices to develop reading skills and phonics, gross and fine motor skills

Question 17: Gross motor skills					**Question 17: Fine motor skills**					
Frequency Row Percentage	**Always**	**Often**	**Seldom/Never**	**Total**		**Always**	**Often**	**Seldom**	**Never**	**Total**
develop hand-eye coordination	24 72.73	7 21.21	2 6.06	33	trace outlines: start to finish	26 81.25	5 15.63	1 3.13	0 0.00	32
develop laterality	15 46.88	11 34.38	6 18.75	32	form letters: start point/ direction	20 60.61	12 36.36	1 3.03	0 0.00	33
develop directionality	17 53.13	14 43.75	1 3.13	32	copy patterns: start point/ direction	20 62.50	12 37.50	0 0.00	0 0.00	32
develop body awareness	27 79.41	7 20.59	0 0.00	34	create pictures: relay message	23 67.65	11 32.35	0 0.00	0 0.00	34
develop spatial awareness	23 69.70	10 30.30	0 0.00	33	Copy letters of name	21 65.63	11 34.38	0 0.00	0 0.00	32
Total	106	49	9	164	write L/R; top /bottom	19 59.38	11 34.38	1 3.13	1 3.13	32
Probability (chi-square value equals 22.20 under null hypothesis that response patterns do not differ from one another over all gross motor activities) = 0.01** (statistically significant on 1% level of significance)					draw pictures, news book	14 43.75	8 25.00	8 25.00	2 6.25	32
					write letters: squiggles	15 48.39	13 41.94	2 6.45	1 3.23	31

	read these squiggles	12 38.71	14 45.16	5 16.13	0 0.00	31
	make book, class collection	7 23.33	9 30.00	12 40.00	2 6.67	30
	Total	177	106	30	6	319
	Probability (chi-square value equals 83.51 under the null hypothesis that response patterns do not differ from one another for all fine motor activities) < 0.0001*** (statistically significant on 0.1% level of significance)					

Table 4 indicates the most common activities to develop reading skills and phonics which assist the development of comprehension:

- **Comprehension includes:** reading aloud; discussion of pictures in the book to be read to learners; discussion of vocabulary in the text of the book; and the systematic teaching of vocabulary. In this instance the chi-square statistic with a value of 58.64, indicates that some response patterns of frequencies over the frequency-of-use levels of listed activities differ from others on the 0.1% level of significance. The response patterns that differ markedly are those for 'reading aloud in small groups' and 'busying learners in the book corner while others are busy with other activities'.
- **Comprehension includes:** 'questions on a story read': the frequency response pattern of this activity and 'telling what has been read' differs statistically significantly from the other activities listed (the chi-square value of 54.82 is statistically significant on the 0.1% level of significance). These two activities are most commonly used. The least commonly used activity includes 'conversing about what was read'.

Table 4: Frequency distributions and percentages (f_i and $\%_i$) of the teaching practices to develop reading skills and phonics: improving comprehension

Question 15 Comprehension, effective practices; f_i and $\%_i$					**Question 16** Questions asked on book read to learners; f_i and $\%_i$				
Activity	**Often**	**Sometimes**	**Never**	**Total**	**Activity**	**Weekly**	**Fortnightly**	**Seldom**	**Total**
Read aloud	32 96.97	1 3.03	0 0.00	33	**Question what was read**	30 93.75	1 3.13	1 3.13	32
Read aloud, small groups	9 36.00	10 40.00	6 24.00	25	**Draw what was read**	14 46.67	14 46.67	2 6.67	30
Discuss picture re story to be read	30 96.77	1 3.23	0 0.00	31	**Tell what was read**	26 83.87	5 16.13	0 0.00	31
Some book corner/ some other activities	10 52.63	6 31.58	3 15.79	19	**Converse what was read**	14 45.16	8 25.81	9 29.03	31
Engage books of choice	11 64.71	5 29.41	1 5.88	17	**Project what was read**	10 33.33	7 23.33	13 43.33	30
Teach 'book manners'	21 70.00	8 26.67	1 3.33	30	**Pictures sequence read**	18 58.06	8 25.81	5 16.13	31
Teach phonics	21 72.41	8 27.59	0 0.00	29	**Total**	112	43	30	185
Systematically teach vocabulary	23 76.67	6 20.00	1 3.33	30	**f_i:** the frequency / number of times a specific option was selected for any variable **$\%_i$:** the frequency-percentage per cell of options selected for a particular attribute				
Discuss vocabulary in read text	25 86.21	4 13.79	0 0.00	29					
Total	182	49	12	243					
Probability (chi-sq value equals 58.64 under null hypothesis that response patterns do not differ from one another for all activities) < 0.0001*** (statistically significant on 0.1% level of significance)					Probability (chi-square value equals 54.82 under the null hypothesis that the response patterns do not differ from one another for all activities) < 0.0001*** (statistically significant on 0.1% level of significance)				

Table 5 describes the status of the reading resources most often used and the multimedia resources employed when teaching reading:

- **Traditional reading resource:** story book and a book corner are most commonly used. Children's periodicals and a book trolley were suggested as least utilised traditional reading resources.
- **Technological resources:** Table 5 indicates that technological resources are not used to the same extent as traditional reading resources. Frequencies of the various options listed vary between three and nine – which were low compared to the employment of traditional reading resources.

Table 5: Frequency distributions on current status of learning barriers in SA schools sampled frequency distributions of teacher perception on resources required to teach reading skills

Question 12: Traditional resources needed to teach reading skills					**Question 12: Multi-media resources required**				
	f_i	$\%_i$	Cum f_i	Cum %		f_i	$\%_i$	Cum f_i	Cum %
Story books	31	11.92	31	11.92	Multimedia to enhance reading	7	16.67	7	16.67
Picture, words	29	11.15	60	23.07	Read software: read, view	3	7.14	10	23.81
Internet reading material	20	7.69	80	30.76	Computer: letter recognition	5	11.90	15	35.71
Indigenous stories	13	5.00	93	35.76	PAINT programme: paint stories	4	9.52	19	45.23
Book trolley	6	2.31	99	38.07	Educ DVD: enhance read, listen	7	16.67	26	61.90
Self-made picture books	14	5.38	113	43.45	Electronic books: listening	7	16.67	33	78.57
Book basket	19	7.31	132	50.76	Computer: recognise picture	9	21.43	42	100.00
Other	16	6.15	148	56.91					
Books with tapes	10	3.85	158	60.76					
Child periodicals	9	3.46	167	64.22					
Children's books	18	6.92	185	71.14					
Picture books	18	6.92	203	78.06					
School library	19	7.32	222	85.37					
Book corner	24	9.24	246	94.60					
Flip charts	14	5.38	260	100.00					

f_i: the frequency / number of times a specific option was selected for any variable
$\%_i$: the frequency-percentage per cell of options selected for a particular attribute
cum: the cumulative percentage and frequencies of responses to the questionnaire statements reported on in this table

DISCUSSION

In the Government Gazette (Vol 597, part 1 of 2) of 13 March 2015, the Draft National Early Childhood Development Policy of Southern Africa considers universal availability, equitable access to quality ECD services for all children from conception until formal school, that is Grade R. However, recent research and findings in this article paints a bleak picture of the status of ECD services currently. Of concern is that 76.06% of the participant teachers' highest qualification is a Grade 10 certificate. This is consonant with other findings in South Africa, for example, Atmore (2013: 157) refers to a study conducted in the Western Cape where it was found that only 35% of practitioners working with infants and toddlers had any form of ECD qualification and that only 47% of practitioners working with the older children had any form of ECD qualification. Despite the specific requirements regarding the number and qualifications for staff working in ECD programmes as specified by the Children's Act Guide for ECD Practitioners (2011: 45), the above data is dismal when comparing it to what is expected, namely: The National Certificate in Early Childhood Development (NQF level 1-6), OR an appropriate ECD qualification OR a minimum of three years' experience in the implementation of ECD programmes. It is essential that the staff should have the appropriate knowledge of ECD and display skills such as being able to identify and report on the progress of children's developmental needs; and to develop stimulating activities to enhance emotional, cognitive, spiritual, physical and social development.

To exacerbate the problem, only a small proportion of teachers in this study were speakers of the home languages of their learners, such as Sepedi, isiZulu and siSwati (this was a small-scale study and the purposive sampling may have skewed the outcomes). Another concern is that within an average Grade R class size of 29 learners, nine languages were used by learners compared to five tuition languages, which indicates that not all learners are taught in their home language. In Gauteng where this study was conducted, all the South African languages are spoken and mixed, and several school-going children also speak foreign languages. To compound the problem, the majority of parents choose to have their children educated in English instead of their home language which can affect the child's identity formation and undermines the status of African languages. The solution offered is to invest simultaneously in bilingual education, that is, learners learning an African language in addition to the Language of Learning and Teaching (LoLT) (Janks & Makalela 2013: 11-12).

Although the data reflect that 76.47% of the participant teachers perceive themselves as reading-literate and claim to have a positive attitude towards reading, the authors believe that due to social desirability effects they do not read as much as they claim to (as there were not many storybooks in the classrooms and not much storybook reading took place in the classrooms), consequently a culture of reading is not nurtured in their schools. In addition, Hoadley (2012: 199) concluded from prominent research conducted on South African primary schools, that teachers need to be proficient in the language of teaching. Joubert, Ebersöhn, Ferreira, Du Plessis and Moen (2013: 3) state that '... a reading culture signified attitudes, beliefs and behaviours that enable reading in the following systems: learners, teachers, school and community in all the activities associated with reading that enable learners to read on a regular basis, which in turn will deepen such a culture and make it sustainable'.

Despite participant teachers' perceptions of learners' reading readiness being average to good and their reading culture as strong (as daily incidental reading takes place), low literacy levels persist in South African primary schools. This is indicative of teachers' misperception of the state of reading in their classrooms. Their teaching of reading practices are questionable, for example, teachers not being sensitive to the developmental levels of learners, thus teaching reading on one level, as well as the fact that whole class reading are the most common reading activities. Van Staden and Howie (2010: 58) reveal that teachers reported that 'they spend a lot of time reading aloud in class, however, this is not a gauge to learners' levels of understanding of what the teacher is reading, neither do they become independent readers'. Teacher preparation is limited as this reflects in the inadequacies for preparing teachers in the foundation phase.

Pienaar, Barhorst and Twisk (2013: 370, 377) indicate that especially in low socioeconomic status schools, visual-motor integration, visual perception, hand control and motor proficiency is closely related to basic academic skills (mathematics, reading and writing) which are needed in learners' first year of formal schooling, and these skills need to already be developed in the pre-school years. Yet the present research found that, for example, activities to establish laterality were not commonly used. Fine motor skills, such as tracing and drawing pictures, were the most common activities employed. Hugo, Nel and Nel (2013: 143) express concern regarding the neglect of some of the perceptual skills which are then lacking when the child enters formal schooling and consequently experiences difficulties in spelling, reading, writing and maths. Pienaar, Barhorst and Twisk (2013: 377) recommend training, empowering and awareness campaigns for day-care mothers and pre-school teachers in these areas. '... Children who disengage from reading instruction in the early years are more likely to drop out of school'. Many teachers still hang onto oversimplified notions of learning, for example, reading that means sounding out and writing which means filling in worksheets and the belief that some children simply cannot learn (Swart & Nathanson, 2011: 77-78).

In this study, the most common literacy activities used by teachers are asking mainly literal questions about a read aloud story read to learners and asking learners to relate what they have read and children struggling to answer inferential questions. It is important for lessons to be meaningful as young children need to understand the language of instruction which enables them to participate. The CAPS document states that when language is part of writing, it is the main focus of the lesson and writing is then presented as a spelling or language practice activity instead of a meaning-making activity. Teachers do not have control of the content, pace and pedagogy of the lesson and this prescribed pacing does not allow for children's abilities and interests and does not focus on creativity, imagination and innovation (Janks, 2014: 15, 17)

Investment in human and material resources is needed, inter alia small classes; trained teachers in additional language teaching and literacy in additional language across the curriculum; fluent and literate teachers in LoLT; bilingual classroom materials, and TV and radio programmes. A fundamental part of our interconnected world is the World Wide Web by using communication technologies, for example, mobile phones. It was recorded in this study that story books and the book corner were used as traditional reading resources and that the use of children's periodicals and technological resources were limited Janks (2014: 11, 23).

CONCLUSION AND SUGGESTIONS

Atmore (2013: 159-160) explains that the development of basic skills such as reading, writing, numeracy and life skills has been under-emphasised in the early childhood and Foundation Phase (Grade R to Grade 3) levels, which is indicative in the SA Annual National Assessments (Grade 3 and Grade 6). The current research findings also reveal evidence of inadequacies in the teaching and learning of literacy in the Grade R sector.

The position of ECD teachers regarding poor qualifications, limited teaching experiences and resources, lack of print-rich classroom environments and the complex language (LoLT) situation, poses a major challenge to education authorities and the education fraternity at large. To exacerbate the problem, teachers in this study are under a false impression namely that their personal reading skills suffice for the teaching of learners who are already challenged by the mother-tongue/LoLT complexity/contamination and the insistence of their parents to learn in English**.** ECD programmes should inter alia make use of available media and other communications, and these programmes should be delivered in the target group's language and also be sensitive to their language needs and cultural values and norms (Children's Act Guide for ECD Practitioners, 2011: 68).

During the researchers' observations of literacy lessons it became apparent that ingrained, rigid teaching methods such as chorus teaching, repetition, and completion of worksheets are the order of the day. The implication is that the development of vital skills such as gross-motor, fine-motor and perceptual skills which are prerequisite skills for the development of inter alia literacy development are neglected. In addition, the lack of print-rich classroom environments and limited resources are contributing factors to the dire literacy situation in ECD classrooms. Zuze and Reddy (2014: 106) found that access to library materials showed that human and material resources contribute to better reading results among primary school learners in South Africa.

In the light of the current literacy development situation in Grade R, the researchers pose a serious call to education authorities in South Africa to acknowledge the invaluable contribution that quality literacy teaching in the early years prior to Grade one makes. This means investing in the upgrading of teacher qualifications by means of short courses, workshops, learnerships, mentoring by experienced teachers, twinning with reputable ECD centres/schools, ECD departments at universities and collaboration with NGOs and other organisations. The teacher training courses should include important theories of child development and learning (including language and ESL theories) to marry theory and practice and to be acquainted with evidence-based research in the field of literacy teaching and learning. It is also important that teachers have a sound knowledge and use of the LoLT and know how learners acquire reading and spelling skills, inculcating phonemic awareness, phonics, decoding and the like**.** The authors concur with Atmore's (2013: 159-160) statement that it is essential to train teachers on a range of topics such as 'teaching practice, child development, financial management, fundraising, human resource management and guidance on report-writing and registering with the provincial Departments of Social Development'.

A deep and profound understanding of Early Childhood Development pedagogy and its implementation by well-trained teachers guided by knowledgeable managers and leaders could

potentially obviate the current risks associated with insufficient pedagogical content knowledge, inability to access the curriculum, incorrect and ineffective delivery of literacy pedagogy and general confusion around the CAPS guidelines, which seems to result in fractured delivery of instruction in literacy skills at classroom level and an inability to make effective pedagogical decisions.

ACKNOWLEDGEMENTS

The authors would like to acknowledge Dr OA Asikhia (post-doctoral fellow) and Dr S Mokiwa for assisting in the collection of a portion of the data.

REFERENCES

ATKINSON, D. 2011. Introduction: Cognitivism and second language acquisition. In: *Alternative approaches to second language acquisition.* Eds. D Atkinson (pg i-190). London: Routledge.

ATKINSON, D. 2011. A sociocognitive approach to second language acquisition. In: *Alternative approaches to second language acquisition.* Eds. D Atkinson (pg i-190). London: Routledge.

ATMORE, E. 2013. Early childhood development in South Africa – progress since the end of apartheid. *International Journal of Early Years Education,* 21(2-3): 152-162.

CHEN, W & Y GAO. 2015 (unpublished). Early child reading in China: theory and practice.

CHILDREN'S ACT GUIDE FOR ECD PRACTITIONERS. 2011. Children's Institute, University of Cape Town and Little Elephant Training Centre for Early Education (LETCEE). University of Cape Town.

CRESWELL, JW. 2007. *Qualitative Inquiry & Research Design: Choosing Among Five Approaches.* London: Sage.

DEPARTMENT OF BASIC EDUCATION. 2011. *Curriculum and Assessment Policy Statement (CAPS) – Foundation Phase Home Language Grades R-3.* Pretoria: Government Press.

DE VOS, AS, H STRYDOM, CB FOUCHE & CSL DELPORT. 2011. *Research at Grass Roots.* Pretoria: Van Schaik.

FLAVELL, JH. 1979. Metacognition and cognitive monitoring: a new area of cognitive-developmental inquiry. American Psychologist, 34, 906-911.

GAINS, P & B GRAHAM. 2011. Making space for expressive and creative writing in African primary schools: a two-site action research study in Kenya and South Africa. *Reading and Writing,* 2(1): 77-94.

HAPPO, I & JF MÄÄttÄ. 2011. Expertise of Early Childhood Educators. *International Education Studies,* 4(3): 91-99.

HOADLEY, U. 2012. What do we know about teaching and learning in South African primary schools? *Education as Change,* 16(2): 187-202.

HOADLEY, U. 2013. Building strong foundations: improving the quality of early education. *South African Child Guage.* University of Cape Town: p 72-77.

HUGO, AJ, NM NEL & M NEL. 2013. *Perceptual skills* In: Learner Support in a Diverse Classroom. Eds. Nel N, M Nel & A Hugo. Van Schaik: Pretoria.

HOWIE, SJ, E VENTER, S VAN STADEN, L ZIMMERMAN, C LONG, & V SCHERMAN. 2008. *Progress in International Reading Literacy Study 2006, Summary report. South African children's reading literacy achievement*. Centre for Evaluation and Assessment, University of Pretoria.

HOWIE S, S VAN STADEN, M TSHELE, C DOWSE & L ZIMMERMAN. 2012. *PIRLS 2011: South African children's reading literacy achievement Summary Report*. Pretoria: University of Pretoria.

JANKS, H & L MAKALELA. 2013. Engaging a visionary: Horizons of the (im)possible. *Education as Change.* 17(2): 219-228.

JANKS, H. 2014. Globalisation, diversity and education: a South African perspective. *The Educational Forum,* 78: 8-25.

JOUBERT, I, L EBERSÖHN, R FERREIRA, L DU PLESSIS & M MOEN. 2013. Establishing a Reading Culture in a Rural Secondary School: A Literacy Intervention with Teachers. *Journal Asian and African Studies,* 0(0): 1-14.

OSBORNE, J. 2008. *Best Practices in Qualitative Methods: 8 Mixed Methods Research in the Social Sciences Sage Research Methods Online.* University of South Africa: SAGE.

PIENAAR, AE, R BARHORST & JWR TWISK. 2013. Relationship between academic performance, SES school type and perceptual-motor skills in first grade South African learners: NW-CHILD study. *CHILD: care, health and development,* 40(3): 370-378.

PRINSLOO, M & P STEIN. 2004. What's inside the box? Children's early encounters with literacy in South African classrooms. *Perspectives in education*, 22(2): 67-82.

SWART, M & R NATHANSON. 2011. An individualised literacy intervention for low progress readers and writers in the Foundation Phase. *Per Linguam,* 27(2): 64-83.

VAN STADEN, S & S HOWIE. 2010. South African teacher profiles and emerging teacher factors: The picture painted by PIRLS 2006. *Reading and Writing,* 1(1): 47-60.

WILLIG, C & S STAINTON-ROGERS. 2008. *The SAGE Handbook of Qualitative Research in Psychology.* University of South Africa: SAGE Publications, Inc.

ZHU, J & J ZHANG. 2008. Contemporary trends and developments in early childhood education in China. *Early years,* 28(2): 173-182.

ZUZE, L & V REDDY. 2014. School resources and the gender reading literacy gap in South African schools. *International Journal of Educational Development,* 36: 100-107.

BIOGRAPHICAL NOTES

Norma Margaret Nel is a Professor Emeritus, Research Fellow and NRF rated researcher at the University of South Africa. She holds a DED. She supervises Masters and Doctoral students as well as a Post-Doctoral fellow. She is actively involved in research related to education on a national and international level. Email: tnelnm@unisa.ac.za

Soezin Krog is a Senior Lecturer in the Department of Early Childhood Education at Unisa. She holds a D Ed degree and supervises Masters and Doctoral students. Her research interest include, amongst others, early childhood education, physical education, sports coaching and sports psychology. Soezin is also an Educational Psychologist registered with the HPCSA. Email: krogs@unisa.ac.za

Kesh Mohangi is an associate professor in the Department of Psychology of Education at Unisa. Her research interests include, amongst others, learning and learning support, developmental psychology as well as well-being in schools. Kesh is also an Educational Psychologist registered with the HPCSA. Email : mohank@unisa.ac.za

Hélène Müller is a statistician in the College of Graduate Studies at Unisa and provides statistical support to academic staff and post graduate students. She recently completed her doctoral studies on factors that affect research output productivity (publications, post graduate degree-completion) and have authored/ co-authored 34 publications. E-mail: mulleh@unisa.ac.za

Oluyemi Adetunji Stephens holds a Ph.D in Counselling Psychology with specialisation in Remedial and Reformation Counselling. He was a Post Doctoral Fellow at the University of South Africa between 2014 and 2016. His area of research interest include using education and positive life skills as a tool for rehabilitation. E mail:stephensoluyemi@gmail.com