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SYSTEMATIC REVIEWS OF
**RESEARCH
IN BASIC
EDUCATION**
IN SOUTH AFRICA

CHAPTER 10

Systematic literature review of literacy and reading in South Africa

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Abstract

This chapter reports on a critical literature review of scholarship in literacy and reading in South Africa from 2010 to 2020 that draws on critical discourse analysis. Key issues, trends, and criticisms in the field are discussed. A three-staged methodology has been utilised; which starts with searching educational databases to locate literature focused on Literacy and Reading scholarship. Each article and data is then categorised. The second stage was the development of schemata to interpret the complexity of issues related to research design. The third stage involves the examination of literacy-focused empirical studies and theoretical papers in scholarly journals to reveal trends in the questions that researchers find interesting enough to pursue, the theories they find useful, and the kinds of interactions that capture their attention. The findings demonstrate that Literacy and Reading scholarship has been conducted in many areas of literacy studies, including policy, academic writing, the preparation of literacy teachers, professional development, textbook content, curricular design, assessment, and bilingual education. The review also found evidence of impact and identifies directions for future scholarship.

Introduction

The goal of this chapter is to provide a review of literature in Literacy and Reading in South Africa. This review is concerned with the capacity to find, understand, critically appraise, share and act on evidence based on research conducted in the country.

Methodology

The methods that were used to identify literature were to firstly scope the literature for studies related to Literacy and Reading and then proceed to do a Google and Google Scholar search on the desktop. Two categories of literature were sought, one on Literacy research and the other on Reading research done nationally. In most cases the literature is categorised into particular ideas and organised in chronological order starting with the earliest dates possible. It includes consideration of the nature and status of research literacy and knowledge

mobilisation; where the research was conducted; the questions surrounding each research; the concepts and practices of finding, understanding, sharing and acting on research; developments in education research philosophies and communicating and presenting research reviews; the rise of evidence-based policy and practice; the questions of the review; the research methodologies in the area; what we know from the research; what we don't quite know in the areas of focus and major implications for the future. It draws on the expertise of researchers in the field of Literacy and Reading research.

To establish a reliable evidence base for recommendations, my approach to the literature review was that of a scoping review. Scoping studies comprehensively review available literature to 'map' critical ideas within a topic guided by one or more general research questions (Levac, Colquhoun & O'Brien, 2010). This methodology is especially useful in researching complex topics. Researchers can undertake a scoping study to examine the extent, range, and nature of research activity, determine the value of undertaking a full systematic review, summarise and disseminate research findings, or identify gaps in the existing literature (Arksey & O'Malley's, 2005). Scoping studies may be particularly relevant to disciplines with emerging evidence, such as the research in South Africa around Literacy and Reading in which the paucity of randomised controlled trials and research in critical areas make it difficult for researchers to undertake systematic reviews. In these situations, scoping studies are ideal because researchers can incorporate a range of study designs in both published and grey literature, address questions beyond those related to intervention effectiveness, and generate findings that can complement the findings of existing research (Arksey & O'Malley's, 2005).

There were some stakeholder consultations as this was an important strategy to begin the search with, to improve the quality and uptake of the review and to enhance the study results. This review followed Arksey and O'Malley's (2005) five stages: identifying research questions; identifying relevant studies; study selection; charting the data; and collating, summarising and reporting results. In this review most of the studies used predominantly qualitative data, but used some quantitative data to show findings and results.

The review was driven by the following general questions:

1. What literature exists around Literacy and Reading in South Africa?
2. What is literature around Literacy and Reading informing us about?
3. What are the gaps in Literacy and Reading research and what are the implications for future research?

These questions broadly capture the research, the issues and challenges facing research and some attempt to address these issues in South Africa. To ensure that the review followed the five stages, I scoped the literature searching for studies related to Literacy and Reading and then proceeded to screen the studies. I then

described and mapped an outline of each study and thereafter evaluated each study in a descriptive frame. Studies were selected on their appropriateness to the topic and questions. The selected studies were then synthesised and gaps identified. This was then followed by a set of implications and conclusions.

Affordances and constraints of the review

Scoping studies offer some affordances and constraints of gathering evidence. I found that scoping study research questions is broad in nature as the focus is on summarising breadth of evidence. Arksey and O'Malley (2005) acknowledge the need to maintain a broad scope to research questions. However, I found that my research questions, although broad, lacked the direction, clarity, and focus needed to inform subsequent stages of the research process, such as identifying studies and making decisions about study inclusion. The broad research question should have included a clearly articulated scope of inquiry (Levac et al, 2010).

While the strength of scoping studies includes the breadth and depth, or comprehensiveness, of evidence covered in a given field, practical issues related to time, funding, and access to resources often require researchers to consider the balance between feasibility, breadth, and comprehensiveness. This search strategy yielded a vast amount of literature, making it difficult to determine how in-depth to carry out the information synthesis and how in-depth to report due to page constraints. This resulted in a concise deep dive to capture the gist of the research. Although Arksey and O'Malley (2005) identify these concerns and provide some suggestions to support these decisions, I also struggled with the trade-off between breadth and comprehensiveness and feasibility in our scoping studies. As such, I ensured that decisions surrounding feasibility did not compromise my ability to keep to the broad research questions or achieve the goal of the chapter (Levac et al, 2010).

Arksey and O'Malley (2005) provide suggestions to manage the time-consuming process of determining which studies to include in a scoping study. I experienced this stage as more iterative and requiring additional steps as I began the search. Due to the time constraints and working from home with inconsistent access to articles also contributed to these iterative steps. This stage involved extracting data from included studies. Based on my experiences, I was uncertain about the nature and extent of information to extract from the included studies, with the result that I used my own experience in the field to extract research that I thought would be useful to influence future research. It has been criticised for rarely providing methodological detail about how results were achieved and this was one of the constraints for this research (Levac et al, 2010).

Literacy and reading

Learning to read can be a joyful and natural process. In 1908, Huey wrote concerning children who learn to read by themselves: “they grow into it as they learned to talk, with no special instruction or purposed method, and usually such readers are our best and most natural readers” (p. 330). The beginning of literacy and of literacy failure, especially in view of a long history of language learning as a natural process, yet also of continued public anxiety about falling literacy standards, brings into focus the concerns regarding literacy and reading as the search for success goes on.

Holdaway (1979) generates a remarkable congruency and balance between theory and practice, insight and respect for the language learning potential of young children. Anyone who has been following language learning theory and research for the past decade will not be surprised by this theoretical stance on literacy as a developmental, natural process rather than as a skills item-oriented product, nor by his strong emphasis on a language environment which is invitational and emulative rather than prescriptive and instructional. The recurring belief suggested by Holdaway is that “literacy begins with immersion in an environment in which the skill is used in a purposeful, active, and meaningful way” (p. 107).

Literacy and reading theories frameworks

Notwithstanding Holdaway’s view of looking at literacy, the evidence from some studies shows that other theories of literacy and learning have come to the fore and are being used as a theoretical framework by researchers in more recent studies. The social learning perspective is extremely popular among reading researchers. Many current research and classroom practices in literacy instruction are built upon the premise of this perspective, which encompass theories such as the socio-linguistic theory, socio-cultural theories, social constructivism and critical literacy theories amongst others. A large number of scholars in the field of literacy and reading, especially more recent researchers, tend to use the social learning perspective to interpret their data.

The socio-linguistic theory is often seen in studies that examine language in relation to children’s reading development. According to Tracey & Morrow (2006) very often the focus of these studies is on parents’, teachers’ or peers’ language use and its impact on children’s literacy skills.

There is reasonable evidence that researchers use the socio-cultural theory to understand the effects of the broad concept of culture on literacy learning and literacy learning in the community. This perspective is becoming more popular with researchers in South Africa due to the lack of diversity and indigenous and decolonised knowledge to inform literacy learning around the diverse cultural population.

Perry (2012) contends that the socio-cultural perspectives on literacy include various theories focused on the myriad ways in which people use literacy in context, which include a strong emphasis on power relations of which some are literacy as social practice, multiliteracies and critical literacy. According to Perry (2012) these theories also have important differences, and many in the field of literacy do not clearly differentiate among them (Perry, 2012).

The South African literacy and reading landscape

The importance of literacy has become more evident in the last 50 years since the United Nations (UN) declared literacy to be a basic human right along with the right to adequate food, health care and housing. The ability to read and write effectively is a basic right for children and becomes more important as the “knowledge economy” increases (Freire, 1970; World Bank, 2006). In South Africa the characteristic of African education changed from Bantustan and separatist education under the apartheid regime to education in the newly formed democratic South Africa. Education and, more importantly, literacy in the school curriculum began to assume more importance for the majority of African people who moved from education in the home languages or African languages to the use of a second language as media in the new democracy (Mazonde, 2003). In his paper, Mazonde brings to the fore problems associated with using a second language as the main language for learning. The origins of the use of second languages in African education are of course historical, ethnographical and political (Mazonde, 2003).

The new national language-in-education policy of South Africa mandates the use of English as the medium of instruction (MoI) for all students from Grade 4 onwards. Despite an ongoing debate about the benefits of mother-tongue education on student success, and the unintended outcome of excessive mother-tongue code-switching in classes where English is deemed a barrier to learning, the reality is that for the majority of secondary school students, English is the default MoI even in classes where, for an overwhelming majority of students and educators, English is a second, third or even foreign language. To some extent, this offers an explanation for the poor English literacy development of a large majority of secondary school students in South Africa. A consequence of this reality is that unequal opportunities for learning are presented to these students, which also results in unequal learning outcomes. In such cases, an inability to develop more advanced English academic literacy skills becomes an indicator for academic marginalisation, exclusion and alienation at secondary school level and later at tertiary level. Mazonde’s (2003) literature reveals the difficulties African learners face in understanding the basic concepts when taught in a foreign language – especially a language, which is not used in their home environment. It also shows how culture comes up strongly to present a barrier for African students when they

are forced to learn in a foreign language which is based on values and metaphors different from theirs (Mazonde, 2003). He strongly emphasises pedagogical supply of teachers and the lack of educators to firstly converse in the language of instruction, and secondly, the lack of training to teach a foreign language.

Twenty-five years later, after achieving democracy, there is significant transformation in the South African education system but inequalities in the provision of literacy in education to all its citizens remain a conundrum. This has become evident in a number of assessment results – a fact captured by a number of researchers in South Africa. Literacy research has become increasingly important since the results of a series of post-democratic, national and international literacy evaluations and reports. It has become evident that there are continuing low levels of literacy proficiency in South African primary schools during the post-democratic period (Fleisch, 2008; Howie, Venter, Van Staden, Zimmerman, Long, Scherman and Archer, 2007; Howie, Van Staden, Tshele, Dowse and Zimmerman, 2012; Howie, Combrinck, Roux, Tshele, Mokoena, Palance, 2017; Taylor, 2013; Spaul, 2013; 2016). These evaluations found that the majority of Grade 3 children were reading below grade level and that 95% of Grade 5 learners read with exceptionally low levels of comprehension compared with other participating countries and that 78% of Grade 4 children cannot read for meaning (Howie et al., 2007; 2012; 2016). These findings have led to the belief that South Africa has a literacy crisis where learners could not access learning because of their literacy levels. Various researchers (Fleisch, 2009; Spaul, 2013; Taylor, 2013) in education in South Africa consider education to be in ‘crisis’. A number of International tests such as the SACMEQ 111 (2013), TIMSS (2015) and PIRLS (2016) provide a picture of the crisis. The PIRLS (2016) report indicates that the biggest developmental challenge facing South Africa is the large number of children who do not learn to read for meaning in the early years of school (Motilal & Fleisch, 2020).

In fact, over the past decade, Motilal and Fleisch (2020) in their article state that there has been a growing recognition that a substantial proportion of South African school children perform one or more years below acceptable levels of achievement, particularly in key subjects such as English First Additional Language and Mathematics (as cited in the NEEDU report, 2014; Spaul, 2013; Taylor, 2014). Spaul (2015) argues convincingly that school children who are academically behind in the Foundation Phase are likely to fall further and further behind their peers as they progress through the school system. According to him this is clearly not a conventional ‘remedial’ problem, in which a small number of individuals in a class have specific learning barriers or challenges. The learning deficits are systemic, often affecting almost all the learners in the majority of disadvantaged schools (Spaul, 2015).

The United Nations Educational, Scientific and Cultural Organization (UNESCO) on the other hand listed South Africa as having a literacy rate of

93% but beyond the mechanical ability to identify words, the picture is much bleaker. According to their research released by the University of Pretoria eight out of ten Grade 4 pupils “still cannot read at an appropriate level” (PIRLS, 2016). In a statement Combrinck (2017) states that learners are expected to understand the language of learning well enough to read and understand study textbooks and other written material. However, a switch to English as the medium of instruction in Grade 4 for all learners exacerbates the problem. Learners are expected to move from Learning to Read to Reading to Learn in this crucial transition from Foundation Phase to Intermediate Phase in the South African system of education. Thus the question arises as to what is going wrong despite the many curriculum changes and the various attempts to change the situation through a number of intervention programmes. What is literature pointing to as being the gap that cannot address this so-called “crisis”?

Causal factors of literacy and reading challenges

There is evidence in a research conducted by Mudzielwana (2011) on the Causal Factors of Low Level Reading Standards in the Foundation Phase among Primary School Learners in South Africa indicating that there are some key factors affecting the low level of reading ability among learners and provides possible intervention strategies to address them. The study recognises that education experts and academics alike agree that the ability to read is necessary for effective communication, solving of practical life problems, and critical for the wellbeing of an individual. The study empirically investigated, evaluated and understood the factors responsible for low level of reading standards in the Foundation Phase among South African primary school learners. The study utilised a combination of theoretical frameworks and qualitative techniques to explore teachers’ perception and understanding of causal factors related to low level of reading standards. The findings of the study showed that there were a number of factors that contributed to the low level of reading standards amongst the learners. These include, among others, the implementation of the National Curriculum Statement (NCS), Foundations for Learning Campaign (FFLC), inappropriate use of methodology in the teaching of reading, multi-grade teaching approach and multilingualism. The study pointed out some intervention strategies that teachers suggested for the improvement of reading amongst the learners (Mudzielwana, 2011).

Boakye (2015) highlights in a research into the social dimension of reading literacy development in South Africa – ‘Bridging inequalities among the various language groups’ – that different communities, such as language groups and different socio-economic status (SES) families, widely acknowledge the practice of literacy in different ways. Certain language communities of low SES observe literacy interactions differently from the traditional “schooled literacy”, which

may influence learners' reading literacy. However, this link between language communities, SES and reading literacy has not been extensively researched, especially in the South African context where there are 11 official languages and wide socio-economic disparities. The research examined students' social literacy in relation to their reading literacy levels, and revealed that the literacy gap between indigenous South African language (ISAL) speakers, a number of whom are from low SES families, and speakers of English and Afrikaans is further widened at the tertiary level due to the mismatch between the social literacy practices of the different language groups and the education system that operates in the country. Recommendations are made on how educators could employ strategies such as social relevance and culturally sensitive teaching to bridge the academic literacy gap among the language groups (Boayke, 2015).

Agreeing with Mudzielwana's (2011) research and identifying other challenges to literacy and reading is a research by Nel, Mohagi, Krog and Stephens (2016) on Pre-school literacy teaching in Early Childhood Education (ECD) inclusive classrooms which is crucial in preparing learners for the transition to formal literacy teaching and learning. Their research describes a collaborative exploratory research project between a university in South Africa and one in China, in order to gain an overview of early literacy teaching and learning in the two countries. In the case of South Africa, the focus was on Grade R literacy teaching and learning. Teacher participants in three rural schools, three township schools and four inner-city schools in Mpumalanga and Gauteng were purposively selected. Data were gathered by means of open-ended questions in a questionnaire, individual interviews with Heads of Departments (HODs) and classroom observations. The research identifies persistent challenges such as limited resources, low socio-economic conditions and English as the language of learning and teaching (LoLT). Other barriers to learning were highlighted together with inadequate teaching strategies used to implement the Curriculum Assessment Policy Statement (CAPS) (Nel et al., 2016).

Reading as oral performance

In an article by Rule and Land (2017) it is argued that we have lost the plot in South African reading Education and to find the plot we need to move beyond the predominant mode of reading as oral performance, where the emphasis is "accuracy and pronunciation" rather than "reading as comprehension of meaning in text" (2017, p 1.) They indicate that reading research in South Africa has been mainly conducted in schools where it is mainly concerned with oratorical approaches to reading and should move beyond that to higher education institutions where reading is fundamental to learning. Their research, using a case study approach, was conducted in a learning community comprising a school and an Adult Basic

Education and Training Centre. They suggest that “developing the way in which teachers understand the teaching of reading and transforming the teaching practices of those who teach as they were taught in the education system of the apartheid era are key to improving the teaching of reading” (Rule & Land, 2017, p. 1) In a study conducted by Taylor (2014) he states that a common finding in school-based research is that teachers simply do not have knowledge of effective reading pedagogies and as a result cannot teach reading effectively in spite of their efforts to do so (Taylor, 2014). Motilal and Fleisch (2020) agree with this as they found in their research that despite using the EGRS triple cocktail programme that is provided, teachers find it difficult to implement lesson plans and reading strategies in a well-informed and engaging way.

Literacy as a social practice

Another research of ‘Children Engagement with Literacy: A study of Literacy Practices at a multilingual classroom in Cape Town by Prosper (2016) reports on the early literacy activities which children engage with at school to develop multi-competences. It draws on an understanding of literacy as a social practice given the intricacies related to a particular literacy event. In this paper literacy is understood beyond reading and writing ability in order to widen the scope for early literacy learners to explore with literacy. The data was collected through ethnographic case study design from a grade three class using observation and document analysis. The class teacher became a resource as she used linguistic competence in English, Afrikaans and isiXhosa to teach literacy in different situations. The data shows that language should be seen as a resource for teaching and learning literacy instead of seeing it as a problem and barrier to the learning process. Home language can be an instrument through which children develop cognitive skills for learning. The paper concludes that, despite the efforts to support learners to become multi-literate, teachers’ competence in different languages is necessary to facilitate the acquisition of multilingual skills (Prosper, 2016).

Role of the family in literacy and reading development

The role of the parent in enhancing literacy and reading development is another critical component to the success of literacy in the country. A number of international studies (Hill, 2012) point to the importance of parental involvement in the education of the literate child. Parents’ involvement with their children’s education usually depends on their social, cultural and linguistic capital (Bourdieu, 1986). It is imperative that differentiated parent outreach strategies are included in literacy and reading plans depending on the context and the community. A few small-scale studies were concentrated around this issue.

Overett and Donald (2011) conducted one such study on parental involvement in 'Paired reading strategies and the effects of a parent involvement programme in a disadvantaged community in South Africa' (Overett & Donald, 2011). This study was conducted in an educationally disadvantaged South African community where the effectiveness of a paired reading parent involvement programme, which stressed interaction around reading as a means of mediating meaning, was evaluated. The research aimed to evaluate whether reading accuracy, comprehension and attitude were promoted through involving parents and other family members as mediators in a process of paired reading. Further, it aimed to elucidate interactive ecosystemic effects across family, school and community levels. Two complete grade four classes (29 and 32 children respectively) served as comparison groups (average age: 9 years 7 months). The methods used were to test the significance of the improvement in reading accuracy and comprehension (Neale Analysis of Reading Ability: Neale, 1966) and attitude (Elementary Reading Attitude Survey: McKenna & Kear, 1990) for the experimental group relative to the control, where one-tailed *t*-tests for independent samples on the respective pre-test/post-test difference scores were applied. The results showed that statistically significant improvements in reading accuracy and comprehension, as well as reading attitude and involvement, were demonstrated. A broad ecosystemic analysis suggested that positive relationships between children and significant others in the family were nurtured and other children in the family were benefiting. Interactions between family and school, and school and the local community library, were also enhanced. The study emphasised the importance of developing mediation insights and skills in parent involvement programmes, and the place of ecosystemic analysis in understanding the social dynamics involved in such programmes.

Aitchison and Land conducted studies in 2005 and 2011 on 'Family Literacy, Bringing literacy home', which placed emphasis on the importance of bringing literacy into the family environment. Learning families with school children and adults reading at home confirms the importance of family reading activities. It is evident that where children learnt and read together with parents in the home environment, the children found reading more enjoyable and performed better at reading in school.

Another research in 2016 conducted by Le Roux and Gertruida looked into the role of family literacy programmes to support emergent literacy in young learners. The collaboration between the parents and the school has a powerful influence on a child's literacy development. The research showed that home-school partnerships to support young learners' emergent literacy development are weak in South Africa. Research into family literacy in South Africa is particularly important due to many socio-economic factors impacting negatively on family life and on children's literacy development. The South African education system lacks a dedicated policy for the promotion of family literacy. Against this background

the study investigated the role of family literacy programmes in supporting emergent literacy among young children. A literature study on family literacy and family-school-community partnerships to support literacy framed an empirical inquiry following an interpretivist approach, using an action research design and qualitative techniques of data collection. The research used the Wordworks Home-School Partnerships programme for implementation and the programme was modified through the design and inclusion of a children's component. A multicultural independent primary school situated in Pretoria, South Africa was selected through a combination of purposeful and convenience sampling. A small-scale study employing the school principal, four Foundation Phase teachers and seven families including nine children, participated in the study. Criteria for family inclusion were that the participating families should have at least one child enrolled in Grade R and at least one parent should agree to attend the full six-week duration of the modified Wordworks School-Family Partnerships programme. Data was gathered during parallel sessions from parents, children and teacher-facilitators through multiple techniques: observation, interviews, feedback sessions, artefacts and journals. Data was analysed according to qualitative principles and the findings were presented in a narrative format substantiated by verbatim quotations. Key findings indicated a greater sense of community among the families and the teachers, improved quality of parent-child interactions; parents' improved knowledge of emergent literacy skills and improved confidence in supporting their children with early literacy development. The medium-term impact of the programme includes benefits for the whole school, the teaching staff, parent body and children. Based on the findings of the literature study and the implementation of the family literacy programme through action research, recommendations were made to improve school-family partnerships with a view to supporting emergent literacy development among young learners (Le Roux, Sarlina Gertruida, 2016).

Reading ability and academic performance

When it comes to reading, Motilal & Fleisch (2020) in their research claim that reading is critical for primary school learners. The ability to decode texts and read with meaning is a critical skill for learners to navigate learning. Literacy and reading provides learners with the ability to understand what teachers are teaching; develop conceptual understanding; and to adapt to different teaching approaches and reading materials (Motilal & Fleisch, 2020). Researching what works and what does not in a reading programme is another important area that requires much input. A number of different components of Literacy and Language referred to as the "Big Five" by Snow (1991) which comprise of: Background Knowledge; Oral Language and Vocabulary; Book Knowledge and Print Concepts; Alphabet Knowledge and Early Writing; and Phonological Awareness, can be researched

to provide expert knowledge in these critical areas. Snow (1991) states that considerable research now suggests that, in addition to the phonemic awareness skills which support early decoding, skilled reading also requires more general oral language competencies, particularly those involving the use of decontextualised language.

Early literacy development occurs as children become increasingly proficient in cognitive processes that support skilled reading. Prominent among these skills is the development of phonological knowledge. Early reading is characterised by a process through which spoken language is mapped onto phonological sounds that are associated with alphabetic characters and assembled together into words. This is where neuroscience and the application of the brain and cognitive ability to the promotion of literacy development and prevention of reading disability begin to play a critical role. Much research is required in terms of neuroscience to understand how the development of literacy skills and reading ability involves understanding how the brain becomes proficient in early acquisition skills, phonological processing, decoding, the development of neuroanatomy of reading, comprehension and reading disabilities. Research is scant in these areas while research on the brain science has advanced.

Pretorius's (2008) research titled 'Reading ability and academic performance in South Africa: Are we fiddling while Rome is burning?' reports on two studies which investigated the relationship between reading skill and academic performance at undergraduate level. The findings showed clear and consistent differences in reading ability between the different academic groups, with reading skills improving the higher the academic group. The findings indicate that many additional language (AL) students have serious reading comprehension problems, which means that they have ineffective and limited access to the rich sources of declarative knowledge provided by print-based materials in the learning context. Reading is important in the learning context not only because it affords readers independent access to information in an increasingly information-driven society, but more importantly because it is a powerful learning tool, a means of constructing meaning and acquiring new knowledge. If developing countries aim to produce independent learners, then serious attention will need to be given to improving the reading skills of students and to creating a culture of reading. Reading is not simply an additional tool that students need at tertiary level – it constitutes the very process whereby learning occurs (Pretorius, 2008).

In another research by Pretorius and Klapwijk (2016) called 'Reading Comprehension in South African schools: Are teachers Getting it, and getting it right?' They contend that much research exists about South African learners' low literacy and numeracy levels and about poorly performing schools. By contrast, there are far fewer detailed descriptions of instructional practices and what teachers are actually doing in their classrooms, and far less evidence exists of in-depth

research attempts to understand in what way and why teachers may experience problems with the teaching of reading literacy, particularly reading comprehension. Their article aimed to contribute to narrowing that gap by reviewing recent South African research on classroom comprehension instruction and obtaining information from teachers about how they perceive themselves as readers, what their teaching context is, what they claim to be doing about reading in their classrooms, and to match these responses with Annual National Assessment (ANA) results at their schools. Data were obtained through a quantitative questionnaire from 159 teachers at 30 schools across three provinces. The results show that many teachers are not themselves immersed in rich reading practices; many teachers claim to be doing more than is reflected in their schools' literacy results, and in general teachers don't seem to have a clear understanding of reading concepts, reading development and reading methodology (Pretorius & Klapwijk, 2016).

More of this type of research on instructional practices and using qualitative research is coming to the fore in recent years.

Another research by Pretorius and Spaull (2016) is called 'Exploring relationships between oral reading fluency and reading comprehension amongst English second-language readers in South Africa'. In their article they state that most analyses of oral reading fluency (ORF) are based on first-language (L1) reading, and the norms that have been developed in English are based on first-language reading data. This is problematic for developing countries where many children are learning in English as a second language. The aim of this study was to model the relationship between English reading fluency and comprehension among rural English-second-language learners (ESL) in South Africa. They used data collected in 2013 by the National Education and Evaluation Development Unit in South Africa. This survey tested 4 697 Grade 5 students from 214 schools across rural areas in South Africa. A sub-sample of 1 772 students was selected for an Oral Reading Fluency (ORF) test. For these students there exist data on both reading comprehension and reading fluency. Although a number of studies have analysed the relationship between fluency and comprehension, none have been conducted on a large-scale for ESL learners in a developing country such as South Africa. The present research contributes to the literature by analysing the size, significance and uniformity of this relationship for ESL learners in South Africa. Preliminary findings indicate a threshold at 70 words-read-correct-per-minute, which is lower than the typically used threshold of 90 words-read-correct-per-minute of English first-language (Pretorius & Spaull, 2016).

To this end the Department of Education has implemented several interventions to combat the Literacy and Reading challenges. Gauteng Primary Literacy and Mathematics Strategy [GPLMS] in Gauteng, Early Grade Reading Study [EGRS] 1 in the North West province, EGRS 11 in Mpumalanga, National

Education and Collaboration Trust (NECT) and Primary School Reading Improvement Programme [PSRIP]) are programmes initiated in an attempt to improve learner outcomes related to Literacy and Reading. South Africa has introduced multiple small- and large-scale intervention programmes to alleviate the huge reading deficit “crisis” and produced important research in this area. The Early Grade Reading Study initiative is one of these programmes, which is a large-scale intervention to improve basic learning and reading skills among second-language learners in primary school in South Africa. It has evolved considerably over the past 10 years since its inception.

Emanating from the EGRS are several papers including a research article by Fleisch, Pather and Motilal (2017) which was a qualitative study that concentrated on instructional practices and was titled ‘The patterns and prevalence of monosyllabic three-letter-word spelling errors made by South African English First Additional Language learners’. The growing evidence of systematic underachievement of South African primary school learners in reading in English as the first additional language promoted this research. There is a small but growing literature that provides insights – that is, causes, patterns and prevalence – of this phenomenon. Through a secondary analysis of a spelling component of a literacy test that was administered as an end-line assessment for a randomised control trial, this research provided new evidence for and insight into the patterns and prevalence of English language spelling errors made by Grade 4 second-language learners. The study specifically coded errors on four monosyllabic three-letter words for 2 500 Grade 4 learners tested individually at the end of the second term in 2014. Three distinct linguistic error patterns were identified. The most frequent error patterns involved the incorrect use of the vowel grapheme. For example, bed was spelled ‘bad’. The second pattern related to common errors associated with the transfer of linguistic, orthographic patterns from the first language (isiZulu). The final pattern suggests that between 6% and 8% of learners were struggling to make the basic phoneme–grapheme connection. This pattern, however, would need to be confirmed with oral interviews. The implications of these error patterns are discussed.

Nkomo’s (2018) research covered another view of the research on Literacy and Reading. She looked at Grade 3 learners’ imagined identities as readers revealed through their drawings which resonates with Olshansky’s book on the use of multimodalities in the teaching of Literacy. There has been limited attention towards the affective aspect in literacy development; yet, reading attitude, an affective component, is a significant element within literacy instruction. This makes a compelling case for investigating Grade 3 learners’ attitudes towards reading. In this study, a situational analysis was conducted as Phase 1 of the research process before implementing a responsive reading programme at a primary school in Grahamstown, South Africa. In an effort to explore Grade 3

learners' attitudes, experiences and perspectives about reading, the study adopted the use of drawings, which is a child-centred approach. Learners were required to draw their perspectives or experiences about reading. In analysing the drawings, a range of semiotic theorists were integrated. Findings of the study indicate that by using drawings as a methodological tool, learners were able to provide detailed insights about their daily experiences with reading, attitudes towards reading and their varied individual views about reading. Such information gathered was vital for future consideration when implementing a responsive and extensive reading programme (Nkomo, 2018).

Reading and teacher education in South Africa

Bharuthram's (2012) study claims that over the past two decades much has been written in the literature about the importance of reading and the importance of teaching students reading strategies to improve their reading comprehension. Reading is one of the most important academic tasks encountered and required by students. In higher education, students are exposed to a number of texts, readings and textbooks that require independent reading. At this level they are expected to comprehend what they read so that they can analyse, critique, evaluate and synthesise information from various sources. However, according to this study, many students entering higher education are not adequately prepared to meet these challenges. What is important to note is that this article highlights the importance of teaching students reading strategies across the curriculum in order to improve their reading comprehension, thereby enhancing their chances of academic success not only in school but also at tertiary level. The implications of this research for policy makers and academics in higher education institutions are outlined and some suggestions are made (Bharuthram, 2012).

According to Henning (2016) there was a notable increase in research articles in the early years of schooling, more especially on the teaching of initial reading and of mathematics. In the first issue of the 2011 *South African Journal of Childhood Education*, most of the articles, according to Henning (2016) focused on language and reading. The Strengthening of Foundation Phase Teacher Education Programme helped to produce more much-needed submissions to journals dealing with Literacy and Reading issues. This notable increase can be attributed to articles coming from university specialists in language and reading and one of the suggestions that came out of most of the publications was the need for more research on the teaching of literacy and mathematics. Following on this came the Primary School Teacher Education project (PrimTed) which is another intervention by the Department of Education to increase research and produce much-needed knowledge regarding Literacy, Language and Reading.

It was during these consultations about teacher education for reading instruction that Henning came to the conclusion that literacy education research may be stymied by its bifocal nature: (1) young children first learn *to* read and (2) then progress to read *for* learning. This seems to be a simplistic and linear distinction of reading and Henning (2016) states that it separates reading competence into periods of mechanical skills and reading for understanding as a main ingredient of learning. The learning of the graphological/graphemic bytes of reading is already oriented to comprehension and the current separation may be a false dichotomy. Understanding, or comprehension, means that a reader is able to construct some meaning derived from her sound awareness (including prosody) (Halliday, 2013). Snow, Griffin and Burns (2005, 9) said, simply, that '(r)eading is, at its basis, about language and about thinking'.

Summary of findings

This scoping review provided a synthesis of literature from researchers based primarily in higher institutions but research was also carried out in schools, higher education institutions and home settings. Although many descriptive papers were included in this scoping review, they were important to include, as the topic was relatively broad. It is necessary to expand our understanding of what constitutes evidence; and what knowledge and value is contributed by colloquial evidence (Culyer & Lomas, 2006). However, the acceptance of colloquial evidence presents other challenges – what papers should be excluded, how to extract data from them and then analyse the results?

E-research has been described as the use of advanced information and communication technology (ICT) such as broadband communication networks, software and infrastructure services that enable secure connections and interoperability, information data management and collaboration tools to support research activities (Allan, 2009). Technology has tremendous potential to assist complex research endeavours especially when researchers are geographically distributed, span many disciplines (Sagotsky et al., 2008) and are hampered by certain restrictions such as a lockdown due to COVID-19. According to Allan (2009) Virtual Research Environments (VREs) can help researchers conduct and manage the complexity of research activities through the provision of a secure and trustworthy infrastructure to support large- and small-scale teams (Allan, 2009).

South Africa's classrooms in both schools and higher education institutions are increasingly diverse with the majority of students coming from a second-language background and diverse contexts into the educational scenario requiring sophisticated language and literacy knowledge and skills both in the educational institutions and their place of employment. This chapter captures the main points, which are critical to the goal of the study and captures succinctly the nature and

status of research and knowledge mobilisation. It was concerned with the capacity to find, understand, critically appraise, share and act on evidence and to identify essential gaps in research that are important for further studies and to produce critical knowledge required that would help to improve the teaching of Literacy and Reading in South Africa.

It considered research in both Literacy and Reading in respect of the South African landscape, causal factors to literacy and reading challenges, reading as an oral performance, literacy as a social practice, the role of family in literacy and reading development, reading ability and academic performance, and reading and teacher education where research is situated.

Gaps in literature and implications for future research

In the light of the above research studies that were reviewed it is recognisable that there are several implications for students, educators and researchers who work in Literacy and Reading in South Africa. It gives a semblance of research in the country around topics that are researched but it also shows where gaps exists. Related studies are based on similar topics.

In a recent literature review conducted by Biesman-Simons, Dixon, Pretorius, & Reed (2020) on 'Pitfalls and possibilities in literacy research: A review of South African literacy studies, 2004–2018' the authors evaluated literature from two annotated bibliographies. They used examples of 70 quantitative and qualitative studies and critically analysed these studies. Their findings showed that weaknesses were evident in the research reviewed and suggested greater consideration is needed to lay sound methodological foundations for quality literacy research. According to them three methodological issues underlying local literacy research that require greater attention are research design, selection and use of literature and research rigour. According to them high-quality research examples are referenced but, for ethical reasons, examples of what they consider to be flawed research are described generally. In their article they offer guidelines for addressing these pitfalls that, in their view, contribute to research of limited quality (Biesman-Simons et al., 2020).

Given the challenges in Literacy and Reading, extensive research is required to expound on the link between language communities, SES, reading literacy, writing literacy, digital literacies and multimodal literacies, especially in the South African context where there are 11 official languages and wide socio-economic disparities. Another gap that exists is the mismatch between the social literacy practices of the different language groups and the education system that operates in the country. Thus drastic measures need to be taken at all levels to improve the overall literacy and reading levels of all South African learners and hence inevitably of students entering higher education institutions. Robust and rigorous research is

needed to enhance the production of knowledge in all of these spheres of Literacy and Reading.

The advances in cognitive neuroscience and brain development in reading and the importance of executive function for early reading development and education require much more research to ascertain how the brain works with Literacy and Reading development. Because executive function and its associated brain developments parallel reading acquisition, work in executive function has profound implications for fostering the successful development of reading skills, including pre-reading skills, word reading, and reading comprehension. Instruction and strategies that help children learn to manage the multiple features of spoken and printed language will help ensure that children develop the reading-specific executive functions that will enable them to manage the complexities of reading processes throughout their lives.

Teaching pedagogies lack ideas on what works and what does not with a result that research in knowledge, skills, methodologies and strategies are required. Future research should attempt to understand in what way and why teachers may experience problems with the teaching of reading literacy, particularly reading comprehension. To this end, different activities, both interactive and cooperative, and instructional strategies require particular research in varying contexts.

Another area of literacy is the effect digital literacies increasingly have on the promotion and teaching of literacy skills and reading. Given the era of the pandemic and COVID-19 lockdown provides researchers with an opportunity to research how literacy and reading can be promoted using Online Platforms and the Funds of Knowledge available in the home and children's immediate environment.

Conclusion

Drawing on a variety of articles indicated that many of the studies conducted are small-scale studies, which predominate research in literacy in South Africa. This chapter is not intended as a comprehensive guide, but can be useful to teachers, supervisors, postgraduate students and early career researchers currently undertaking, or planning to undertake, literacy research and writing for publication in Literacy and Reading.

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