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Reading Literacy within a Teacher Preparation Programme: What we Know and What we Should Know

Abstract

Various South African and international studies indicate that the preparation of teachers to teach reading is inconsistent across universities worldwide. Teacher preparation programmes lack rigorous research-based findings as the grounding for their programme design. Recommendations of some studies point to the fact that evidence-based research should be incorporated to address this inconsistency. There is a need for a comprehensive curriculum to guide pre-service teachers toward a coherent knowledge base for the effective teaching of reading, as many teachers do not have an understanding of what to teach. The study on which we report analysed a teacher preparation programme with the aim of identifying which reading literacy components (that are embedded in knowledge of language structure) are included in the programme. The results show that the reading literacy components are included haphazardly within the teacher preparation programme and there is no evidence-based research included in the curriculum of the pre-service teachers.

Keywords: Teacher preparation, phonemic awareness, phonics, fluency, vocabulary, comprehension, reading literacy component

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Introduction

The teaching of reading is an especially critical element of elementary education. In the 21st century, it is not enough to be able simply to read and write, even young children must master new and changing literacy's that come with advances in science, technology and culture. The dramatically transformed array of media in schools, the workplace, and other walks of life demands unprecedented levels of reading proficiency (Smith, Milulecky, Kibby, Dreher & Dole, 2000). If students are to read at a higher level, the teaching of reading must change accordingly.

"In 2001 and 2004, the Department of Education (DoE) conducted two national systemic evaluations to establish literacy and numeracy levels in primary schools. These surveys showed shockingly low levels of reading ability across the country. Large numbers of our children simply do not read" (DoE, 2008a, p. 4). This was confirmed by the results of the 2011 Annual National Assessments conducted by the department of basic education (DoBE). 19 470 Grade 3 learners in 827 schools countrywide were tested, these tests revealed that South Africa's children scored a mere 35 per cent average in the literacy test (DoBE, 2010, p. 18).

According to the International Reading Association (IRA) (2003a, pp. 1-2), "teachers should be well prepared to implement research-based programs and practices, and they must have the knowledge and skills to use professional judgement when those programs and practices are not working for particular children." According to Moats (1999), a chasm exists between classroom instructional practices and the research knowledge-base on reading development. Part of the responsibility for this divide falls on teacher preparation programmes, many of which, for a variety of reasons, have failed to prepare their teacher candidates adequately to teach reading. Pandor (2008, p. 45) notes that "we recognise, however, that teachers still struggle to translate the curriculum into good classroom practice. Teachers need support to implement the curriculum." The South African department of education (2009) appointed a panel of experts to investigate the nature of the challenges and problems experienced in the implementation of the National Curriculum Statement (NCS). One factor, which became apparent, was that "certainty and specificity about what to teach and how to teach it will help to restore confidence and stability in the system" (DoE, 2009, p. 61). From this it might be possible to deduce that teachers do not know what to teach or even how to teach it. The new Curriculum and Assessment Policy Statement (CAPS) (DoBE, 2011) explicitly states that teachers should focus on the five components of reading. However, pre-service teacher preparation programmes should not be preparing teachers to teach the current curriculum, but should be focussing on preparing teachers to teach children to read. In order to do this, teacher preparation programmes need to provide pre-service foundation phase teachers with a rigorous language discipline knowledge base.

The key to ensuring that all children reach their potential in learning to read, rests with formal training and experiences that teachers receive in assessing individual differences and in the delivery of direct and informed instruction. Lyon (2002, p. 7)

suggests that teacher preparation is the key to teaching children to read. The quality of the teacher is consistently found to be an important predictor of student achievement (Goldhaber, 2002; Rockoff, 2004).

In 1997, the National Reading Panel (NRP) was convened by United States (US) governmental agencies and Congress to "assess the status of research-based knowledge, including the effectiveness of various approaches to teaching children to read" (NRP, 2000, p.1). This panel concluded that research findings support the inclusion of five components in the teaching of reading: 1) explicit, 2) systematic teaching of phonemic awareness and phonics, 3) guided oral reading to improve fluency, 4) direct and indirect vocabulary building, and 5) exposure to a variety of reading comprehension strategies. Although the National Reading Panel was criticised for its choice of methodology, the aim of the report was to provide an unbiased and careful review of the research findings so that schools and teachers would be able to depend on trustworthy and accurate information on how to improve reading achievement. The NRP did not differentiate between learning English as home language versus as an additional language. The results indicated that the five components are necessary to teach children to read. In 2006, the National Council on Teacher Quality (NCTQ) used these five categories to evaluate a random sample of American teacher preparation programmes at the undergraduate and graduate levels. The NCTQ's findings are evident from the title of the report on this study: What Education Schools Aren't Teaching about Reading and What Elementary Teachers Aren't Learning (Walsh, Glaser & Wilcox, 2006). The NCTQ found that of the 72 schools of education it surveyed, only 15% were educating pre-service teachers about the five essential components of reading instruction as defined by the NRP and supported by the DoE in their publications of Teaching Reading in the Early Grades: A Teachers handbook, and The National Reading Strategy.

Teaching reading is a job for an expert. Contrary to the popular belief that learning to read is natural and easy, learning to read is a complex linguistic achievement. For many children, it requires effort and incremental skill development. Moreover, teaching reading requires considerable knowledge and skill, acquired over several years through focused study and supervised practice (Moats, 1999, p. 11). According to Moats (1999, p. 6), comprehensive redesign of teacher preparation programmes is possible, but it must begin with a definition of the knowledge and skills necessary for effective practice and demonstration of how these are best learned. New teachers require much more extensive, demanding and content driven training if discoveries from the reading sciences are to inform classroom practice (Moats, 1999; Walsh et al., 2006).

Reading Literacy in Teacher Preparation Programmes

Snow, Burns & Griffin (1998, p. 279) note that pre-service teacher education is intended to develop teacher expertise for teaching reading and preventing reading difficulties, but it encounters many obstacles. Teacher preparation programmes often

cannot meet the challenge in preparing teachers for highly complex and increasingly diverse learning contexts; the challenge of keeping abreast of current developments in research and practice; the complexity of the knowledge base; the difficulty of learning many of the skills required to enact the knowledge base; as well as work with children who experience learning difficulties.

According to the IRA (2003b, p. 1), there is a growing consensus in the United States that putting a quality teacher in every classroom is the key to addressing the challenges of literacy learning in schools. They found that effective teaching makes a difference in student learning. Teachers – not instructional methods or the materials – are crucial to promoting student learning. The IRA (2003b, p. 1) mentions that researchers agree that effective teachers of reading are knowledgeable, strategic, adaptive, responsive and reflective.

In South Africa, the National Teacher Education Audit of 1996 concluded that the quality of teacher education was generally poor, inefficient and not very cost-effective (Hofmeyer & Hall, 1996, p. 41). Similarly, a review of eight Higher Education Institutions (HEIs) offering foundation phase teacher training programmes indicated wide variation in the programme goals espoused, and the design of the programmes focusing on literacy teaching (Zimmerman, Howie & Long, 2008, p. 45). According to the DoBE and the department of higher education and training (DHET) (2011, p. 15), the quality and the relevance of the teacher preparation programmes offered by HEIs, vary widely. In the *Integrated Strategic Planning Framework for Teacher Education and Development in South Africa, 2011–2025,* (DoBE & DHET, 2011, p. 3), it is stated that universities have the responsibility for ensuring that the programmes being offered are of high quality and lead to meaningful development for teachers.

While the content within teacher preparation programmes seems to be questionable, teachers still need to fulfil their task of teaching our children to read. Teachers need to have sufficient knowledge of all the elements that pertain to this task. According to the DoE (2008b, p. 12), teachers responsible for teaching foundation phase learners must have knowledge of the five components of reading, namely; phonemic awareness, word recognition, vocabulary, fluency and comprehension. In 1997, the US governmental agencies and Congress convened the NRP to assess the status of research-based knowledge as well as the effectiveness of various approaches to teaching children to read (NRP, 2000). Like the South African DoE, this panel found that research findings support the inclusion of the five components in the teaching of reading. Phonemic awareness, phonics, fluency, vocabulary and reading comprehension should all form an integral part of foundation phase teacher preparation programmes.

Knowledge required for teaching reading

According to Moats (2009a, p. 387), teachers feel unprepared for addressing the instructional needs of learners with language, reading and writing problems. Moats (2009a, p. 387) argues that teachers often have a minimal understanding of how

students learn to read and write, or why many students experience difficulty with the most fundamental task of schooling. Lyon & Weiser's (2009) research reveals that teachers lack basic understanding of many concepts that relate directly to teaching beginning and struggling readers. Moats (2009a, p. 387) explains that teachers are unaware of or misinformed about the elements of language that they are expected to teach. This can be alleviated if new teachers are given extensive, demanding and content-driven training (Moats, 1999, p.13).

According to Moats, Carreker, Davis, Meisel, Spear-Swerling & Wilson (2010, p. 1), teaching reading requires specialised knowledge about language, how children learn and acquire literacy skills and a variety of instructional strategies. To ensure that teachers are trained to teach reading, changes are needed in pre-service teacher preparation and professional development. Policymakers wanting to improve reading instruction may want to consider:

- Maintaining the goal that all children will read at grade level by supporting research-based reading instruction; and
- Aligning teacher preparation and professional development with effective reading principles (Moats, 2001, p. 1).

Moats (2009a, p. 389) argues that progress to true professionalism in reading instruction rests heavily on deep knowledge of content and the skills necessary to teach students who struggle to learn. Teaching reading requires considerable knowledge and skill that are acquired over several years through focused study and supervised practice (Moats, 1999, p. 11). This accumulation of expertise is imperative, as teachers need to instruct most students directly, systematically and explicitly to decipher words in print. The demands on teachers include that of assessing children, as well as tailoring lessons to individual needs. Therefore, teachers need to have the capacity to interpret errors, give corrective feedback, and select examples to illustrate concepts, as well as explain new ideas in several ways (Moats, 1999, p. 11).

Moats (1999:14) established a core curriculum for reading teacher preparation and in-service professional development and its goal is to bring continuity, consistency and comprehensiveness to pre-service teacher education. This particular curriculum is divided into four areas:

- Understanding knowledge of reading psychology and development.
- Understanding knowledge of language structure, which is the content of instruction.
- Applying best practices in all aspects of reading instruction.
- Using validated, reliable, and efficient assessments to inform classroom teaching.

Since as Moats (1999, p. 14) states that knowledge of language structure is the content of instruction, other components, such as assessment and literature, are not ignored and form part of a core curriculum for reading teacher preparation and in-service

professional development. This study focused on investigating the inclusion of specialised knowledge related to the five essential components of reading instruction, which seems to be essential in teacher preparation programmes that focus on preparing foundation phase teachers.

Knowledge required for teaching phonemic awareness

The IRA (1998:3) defines phonemic awareness as "an understanding about the smallest units of sound that make up the speech stream: phonemes[1]". In other words, phonemic awareness is the ability to hear, identify and manipulate the individual sounds (phonemes) in spoken words. Armbruster *et al.* (2001, p. 1) emphasise the fact that children who have phonemic awareness skills are most likely to have an easier time learning to read and spell than other children who have few or none of these skills. The NRP (2000) conducted studies which have identified that phonemic awareness and letter knowledge are predictors of how well children will learn to read and this indicates the importance of teaching phonemic awareness to children.

Moats *et al*. (2010, p. 20) state that phonological awareness, print concepts and knowledge of letter sounds are foundational to literacy. Teachers who understand how to teach these skills effectively can prevent problems associated with reading. It is imperative that pre-service teachers must learn phonology in order to teach phonemic awareness.

Moats *et al.* (2010, pp. 19-20) stipulate that the phonology[2] as a component of reading should be covered as follows:

1. Know the progression of the development of phonological skills.
2. Identify the differences among phonological manipulations.
3. Understand the principles of phonological skill instruction (brief, multisensory, conceptual and auditory-verbal).
4. Understand the reciprocal relationships among phonological processing, reading, spelling and vocabulary.

Phonological awareness instruction aims to support children's ability to blend and segment phonemes that are associated with graphemes. Phonological awareness instruction also involves more than the manipulation of sub-word units, accurate identification of, and the discrimination of, confusable phonemes and words is important for reading and spelling, because if a student confuses *rich* with *ridge*, the teacher can provide explicit feedback regarding the voiceless /ch/ and voiced /j/ - consonants that are otherwise indistinguishable in manner of articulation (Moats, 2009b, p. 385). Teachers who enact phonemic awareness instruction should understand that letters and sounds are separate entities. Teachers should also

1 Phonemes are the smallest parts of sound in a spoken word (Armbruster *et al.*, 2001, p. 1).

2 Phonology refers to the speech sound system within language structure (Wren, 2000, p. 27).

understand the difference between a phoneme and a grapheme, and should be able to differentiate between the two during instruction (Snow, Griffin & Burns, 2005, p. 74).

In order for pre-service teachers to acquire knowledge about the process developing phonological skills they need to have knowledge of activities that promote this development. Snow *et al*. (2005, p. 75) state that reading teachers should have a working knowledge of the phonological system, which includes the ability to articulate, identify, count and manipulate phonemes. Moats *et al.* (2010, p. 19) state that the awareness of speech sounds in reading, spelling and vocabulary would help develop pre-service teachers' knowledge about the reciprocal relationships in phonological processing. Thus, if teachers can teach children to manipulate phonemes by using letters and focus on only one or two types of phoneme manipulation, as opposed to several types, they are equipping students to become phonemically aware (Armbruster *et al.*, 2001, p. 5-6). If teachers have knowledge of phonological manipulations they will be able to instruct, teach and help students acquire phonemic awareness effectively. The activities used to teach phonemic awareness include: phoneme isolation, phoneme identity, phoneme categorisation, phoneme blending, phoneme segmentation, phoneme deletion, phoneme addition and phoneme substitution (Moats *et al.*, 2010, p. 19; Armbruster *et al.*, 2001, pp. 4-5).

Knowledge required for teaching phonics

According to Smartt & Reschly (2007, p. 4), phonics involves the understanding that there are single speech sounds (phonemes) represented by each letter or letter combination, as well as the ability to form correspondences between letters and sounds, and to recognize spelling patterns. Villaume & Brabham (2003, p. 479) state that phonics has a predefined role in that it helps children to learn and use the alphabetic principle[3], while will help them recognise familiar words as well as decode new words. Furthermore, Villaume & Brabham (2003, p. 479) reiterate that students who understand this principle know that the sounds of spoken words are mapped onto written words in systematic ways. As students develop understanding of this principle, they become adept at using letter-sound correspondences to figure out unrecognised words.

However, the ability to read unfamiliar words (decoding) is aided by applying knowledge of phonics (Moats *et al.*, 2010, pp. 21-22). Moats & Foorman (2003) state that phonics instruction in English requires that the teacher lead students through multilayered, complex and variable spelling correspondences at the sound, syllable and morpheme[4] (orthography[5] and etymology[6]) level. Because the reason for this

3 Alphabetic principle refers to the understanding that there are systematic and predictable relationships between written letters and spoken sounds (Armbruster *et al.*, 2001: 11).

4 A morpheme is the smallest meaningful unit of speech, therefore a single word may contain more than one morpheme (for example: the word *smallest* has two morphemes namely *"small"* and *"est"* and each part has meaning. Thus, morphology refers to the meaning of word parts (Wren, 2000: 31).

5 Orthography refers to the aspect of language concerned with letters and their sequences in words (Snow *et al.*, 2005:18).

6 Etymology refers to the origins and relations among words (Snow *et al.*, 2005:18).

is that reading and spelling requires the student to analyse words by syllable and/or morpheme. The recognition of prefixes, suffixes, roots, and parts of compounds, and the recognition of the morphological structure of words to which inflections have been added, facilitates word recognition, access to word meaning and recall for spelling (Moats, 2009b, p. 385).

According to Moats (2009b, p. 385), phonics and spelling instruction requires the teacher to know and explain a multi-layered orthographic system. English orthography represents sounds, syllable patterns, and meaningful word parts (morphemes), as well as the language from which a word originated. Phonic decoding, if properly taught, includes much more than a letter-sound correspondence for each letter of the alphabet.

Moreover, teachers who enact phonics instruction must be able to appreciate and explain the morphemic structure of words. Therefore, Cunningham, Zibulski & Callahan (2009, p. 491) suggest that teachers must have knowledge of the grapheme and phoneme conventions, as well as have knowledge of the basic information about morphemes and morphological processes and how they connect to spelling (Snow *et al.*, 2005, p. 81). Furthermore, spelling and reading build and rely on the same mental representation of a word and knowledge of the spelling of a word aids reading fluency (Snow *et al.*, 2005, p. 86).

Knowledge required for teaching fluency

According to Moats *et al*. (2010, p. 24), fluency is "the ability to read a text accurately and quickly." Rasinski, Reutzel, Chard & Linan-Thompson (2011, p. 287) define fluency as a characteristic of reading that occurs when readers' cognitive and linguistic systems are developed so that they can read with accuracy to allow for the understanding of texts and reflecting its prosodic features.

According to Snow *et al*. (2005, p. 109-110), fluency depends on a readers' knowledge about the topic, vocabulary, as well as the readers control over cognitive and other processes applied in reading. These processes are integrated within language structure. Phonology, morphology, orthography, semantics, syntax and pragmatics are the aspects of language that tie into fluency. The development of fluency rests within the integration of the instruction of phonemic awareness, phonics, vocabulary and reading comprehension.

Teachers need to have knowledge of the above-mentioned in order to place students in appropriate groups and assign appropriate texts for reading instruction so that fluency can develop among readers as it is a predictor of reading competence (Moats *et al*., 2010, p. 24).

Knowledge required for teaching vocabulary

Armbruster *et al.* (2001, p. 29) define vocabulary as the words we must know to communicate effectively. Smartt & Reschly (2007, p. 4) state that vocabulary is a

function of the ability to recognise and understand individual words in reading and to use them correctly.

The NRP (2000, p. 4-15) states that vocabulary occupies an important position in learning to read. As a learner begins to read, reading vocabulary encountered in texts is mapped onto the oral vocabulary the learner possesses. The reader is taught to translate unfamiliar words in print into speech, with the expectation that the speech forms will be easier to comprehend.

Moats (2009b, p. 385) states that phonology also plays a role in vocabulary acquisition as knowledge of phonology will enable a teacher to be sure that students pronounce words accurately, and may break them into syllables or morphemes. Moats & Foorman (2003, p. 24) state that the instruction of vocabulary requires an understanding of semantic[7] organisation and the relationships among word structure (morphology), grammatical rule and meaning (etymology and orthography). The knowledge of words is multifaceted, as it ranges from the partial recognition of a meaning of a word to deep knowledge, as well as the ability to use the word effectively in speech and writing (Moats *et al.*, 2010, p. 27). Moats *et al.* (2010, p. 28) state that the explicit, systematic teaching of word meanings and indirect methods of instruction, such as those involving inferring meanings of words from sentence context or from word parts (for example, root words and affixes), is essential for vocabulary instruction. Thus, teachers need to know how to develop students' vocabulary knowledge, as well as understand the importance of wide exposure to words both orally and through reading.

Knowledge required for teaching comprehension

The RAND Reading Study Group (2002) defines comprehension as the process of simultaneously extracting and constructing meaning through interaction and involvement with written language. Duke & Carlisle (2011, p. 199) define comprehension as the act of constructing meaning with oral or written texts, and state that meaning does not reside in the oral or written text, the reader creates and adjusts a mental representation of the meaning of the text. This, however, is done using various interacting entities, such as the text, its author, the reader and the content. Duke & Carlisle (2011, p. 200) note that in reading these factors work together to build meaning as the reader accesses the meaning of words in the text, processes the syntax of the sentences, relates the sentences to one another to build coherence and then relates the larger pieces of text to build a holistic coherence.

Due to the complex nature of comprehension, Moats & Foorman (2003, p. 24) state that comprehension instruction requires the teacher to know and explicate linguistic concepts, such as text organisation, genre, inter- and intra-sentential references,

7 Semantics refers to the understanding of meaning of individual words and sentences and the meaning relations between them (Wren, 2000:27).

figurative and idiomatic language (pragmatics[8]) and sentence structure (syntax)[9]. Furthermore, Moats *et al.* (2010, p. 30) state that reading comprehension also depends on factors, such as background knowledge and knowledge of text structure (syntax).

Evidence-based research points to the fact that aspects within language structure should form the bedrock of reading literacy training so that pre-service teachers can be equipped to teach phonemic awareness, phonics, fluency, vocabulary and reading comprehension. Table 2.1 below illustrates how the aspects of language structure form the disciplinary knowledge base which should be incorporated into literacy modules so that pre-service teachers can teach the reading literacy components.

Table 2.1: *The disciplinary knowledge base required to teach the reading literacy components*

Aspect of language structure	Reading literacy component
Phonology	Phonemic awareness
Phonology Morphology Etymology Orthography	Phonics
Morphology Etymology Orthography Semantics	Vocabulary
Syntax Pragmatics	Reading comprehension
Fluency is tied to all of the aspects of language structure and the integration of the instruction of phonology, morphology, etymology, orthography, semantics, syntax and pragmatics will develop fluency.	Fluency

While delivering instruction in all the necessary instructional components, the interdependence of these components should be recognised, as students, who gain phonological skills, are more likely to improve in vocabulary, and as students, who use phonic word attack skills proficiently, are more likely to improve their spelling and writing (Moats, 2009b, p. 386). Teachers who realise these interdependencies may be more likely to tie instructional components to one another.

A review of national and international literature indicates that teachers need specific knowledge and skills to teach reading. One consistent finding from the literature consulted is that phonemic awareness, phonics, fluency, vocabulary and reading comprehension are components which form the foundation of reading

8 Pragmatics is a branch of linguistics which focuses on the use of language in social contexts (Snow *et al*., 2005:18).

9 Syntax refers to the understanding of how words can be combined to form sentences (text structure) (Wren, 2000:52).

instruction. Teachers need to have sufficient knowledge and skills to be able to teach these components. The knowledge and skills needed by teachers to teach the reading literacy components is manifested within the knowledge of language structure, as indicated by evidence-based research. Teachers need to have knowledge of phonology, morphology, etymology, orthography, pragmatics, semantics and syntax as these aspects form the disciplinary knowledge base (as illustrated in Table 2.1) for teaching the reading literacy components. This disciplinary knowledge base is also supported by Snow *et al.* (2005, p. 111) who state that if teachers possess this disciplinary knowledge base, they will be able to instruct phonemic awareness, phonics, reading fluency, vocabulary and reading comprehension.

Research Methodology

Research design

A qualitative research design was chosen for this study as the methodology allowed for data to be collected answering the research question, namely; "What reading literacy components should be addressed within a B Ed Foundation Phase programme?" A case study was used for this research. This descriptive and interpretive study took place within a bounded context. It focused on one teacher preparation programme. Yin (2003, p. 1) supports this when he states that "case studies are the preferred strategy when 'how' or 'why' questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real life context." This approach was best described by Stake (1994, p. 242) who wrote, "qualitative case study is characterized by the main researcher spending substantial time on site, personally in contact with activities and operations of the case, reflecting, revising meanings of what is going on."

Participants

According to Creswell (2007, p. 74) purposeful sampling shows different perspectives on the problem. For this reason, it is imperative that persons partaking in the study are knowledgeable about the topic and can be a source where information can be obtained. This particular study focused on a foundation phase teacher preparation programme, namely the Baccalaureus Educationist (B Ed) (Foundation Phase) degree. It is offered over four years and trains students to teach from grade R to grade 3. The participants included in the study were the literacy lecturers (English, Afrikaans and Setswana) who work in the foundation phase subject group of this programme (n = 5).

Data collection methods

According to Nieuwenhuis (2007, p. 75), "[a] key strength of the case study method is the use of multiple sources and techniques in the data gathering process." It is up to the researcher to choose evidence as well as determine the techniques that will be used to collect the data. The data collection methods chosen for this research

provide rich data specifically focused on the research questions. Data collection methods included individual interviews, direct observation and the collection and examination of documents (e.g., study guides, reading compendiums, assignments, and examination papers).

Interviews

The research procedure utilised in this study was that of interviews with people who work in the foundation phase subject group within a teacher preparation programme. In this study interviews were used to generate perspectives and experiences on reading literacy components and how it is taught within a teacher preparation programme. According to Seidman (1993, p. 3) the purpose of interviewing is not to get answers to questions, nor to test hypotheses, and not to evaluate, but at the root of in-depth interviewing is an interest in understanding the experience of other people and the meaning they make of their experiences. Merriam informs us that interviews are necessary when behaviour cannot be observed (Merriam, 2009, p. 88). Qualitative studies usually employ unstructured or semi-structured interviews. Unstructured interviews are usually conducted without utilizing any of the researcher's prior information, experience or opinions in a particular area (Greef, 2011, pp. 347-348). However, in this study, semi-structured interviews were utilized. They were organized around areas of particular interest, while allowing considerable flexibility in scope and depth.

Observations

According to Given (2008, p. 573), observation is one of the oldest and most fundamental data collection methods, as it involves collecting impressions of the world using all of one's senses. It should be done in a systematic and purposeful way to learn about a phenomenon of interest. An observation schedule was compiled to guide the observation process. Given (2008, p. 576) characterises an observation schedule as a form prepared prior to data collection that delineates the behaviour and situational features to be observed and recorded during observation. The categories incorporated on the observation schedule were derived from the purpose of the research and from what is known about the reading literacy components within teacher preparation programmes.

Documents

According to Glesne (1999, p. 58), "[d]ocuments corroborate your observations and interviews and thus make your findings more trustworthy. Beyond corroboration, they may raise questions about your hunches and thereby shape new directions for observations and interviews." The following documents (i.e., syllabi, textbook(s), reading compendiums, course outline, course hand-outs, examination papers and assignments) were analysed in this study. Nieuwenhuis (2007, p. 82) makes us aware that when one uses documents as a data collection technique you will focus on written communications that shed light on a particular phenomenon you are investigating.

Methods of analysis

Data analysis is multifaceted. Analysis includes organizing data, generating categories and themes, coding data, and interpretation. Data analysis is the process by which a researcher draws out "meaning" from the collected data. Drawing out meaning involves summarising; interpreting, comparing and categorising what the participants in the study have said (Merriam, 2001). Wellington & Szczerbinski (2007, p. 101) state that qualitative data analysis can be messy and complicated, as it involves taking in the data, digesting it, taking it apart and then putting it back together. Creswell's (2008, p. 244-245) steps to analysing qualitative data were followed in this study. These steps included:

1. The researcher collecting the data.
2. The data is prepared for analysis, which involved transcriptions and field notes.
3. The researcher reads through the data to obtain a general sense of the materials and coding is done afterwards.
4. Whilst coding the data the researcher should remember to code the rest for themes to be used in the research as well as code for the description to be used in the research.

Whilst following Creswell's steps to data analysis, a method of content analysis was used to arrive at the categories emanating from the data in light of the research questions. According to Grbich (2007, p. 112), content analysis is a systematic coding and categorising approach that can be used to explore large amounts of textual information in order to ascertain the trends and patterns of words used, their frequency, their relationships and the structures and discourses of communication. Given (2008, p. 120) defines content analysis as the intellectual process of categorizing qualitative textual data into clusters of similar entities, or conceptual categories, to identify consistent patterns and relationships between variables or themes.

Results

The results are presented according to the aspect focussed on in the research question, namely "What reading literacy components should be addressed within a B Ed foundation phase programme?"

The foundation phase students are required to take four literacy modules (LITH 113, 223, 313 and 423 for the English students) in the B Ed programme; one module

each year. The module outcomes and an outline of the content of LITH 113 indicate a focus on listening[10], speaking[11] and language structure and use[12].

> "Demonstrate facilitation skills of methods, procedures and techniques relating to the teaching of Listening, Speaking, as well as Language Structure and Use; and
>
> Demonstrate problem solving skills by means of planning and presenting lessons during the teaching of Listening, Speaking, as well as Language Structure and Use"

The language structure and use of the study unit does not address aspects, such as phonology, morphology, syntax or semantics, but focuses on sounds and words and the teaching of spelling. It is clear that the focus of the module is on the National Curriculum Statement (NCS) as opposed to an in depth knowledge of language structure and language development as suggested by the literature. The module outcomes of LITH 223 focus on thinking and reasoning[13], as well as the development of written communication[14]. In the third year of study, the LITH 313 module addresses perceptual development and reading readiness. LITH 423 focuses on reading and viewing[15], which is another outcome of the learning area "languages", within the NCS. It is evident that the modules focus on the specific requirements of the NCS. This is an example of teaching to a curriculum, which can have negative implications for effective teacher preparation. If a new curriculum is implemented, as in 2012 (Curriculum and Assessment Policy Statement), the teacher would be prepared for the previous curriculum and not how to effectively teach children to read.

The literacy home language modules are presented in Afrikaans, English and Setswana from the first year through to the fourth year. The study guides indicate that the Afrikaans content is merely translated into English and Setswana and not revised for English and Setswana mother tongue. The uniqueness of language structure is not taken into consideration.

In the LITH 113 module, only three study unit outcomes refer to some of the reading literacy components. In study unit 4, the students are required to compare assessment standards from grades 0-3 by referring to the use of sounds and vocabulary. As from 2012, with the implementation of the CAPS curriculum, this will no longer be relevant for teachers. Students are also required to measure the learners' literacy milestones of Grades 1, 2 and 3 with regard to phonics, by explaining the most important differences and focusing on progression. In addition, students should be able to demonstrate and

10 Listening is learning outcome 1 of the Languages curriculum in the Revised National Curriculum Statement (Department of Education, 2002:11).

11 Speaking is learning outcome 2 of the Languages curriculum in the Revised National Curriculum Statement (Department of Education, 2002:11).

12 Language structure and use is learning outcome 6 of the Languages curriculum in the Revised National Curriculum Statement (Department of Education, 2002:12).

13 Thinking and reasoning is learning outcome 5 of the Languages curriculum in the Revised National Curriculum Statement (Department of Education, 2002:12).

14 Reading and viewing is learning outcome 3 of the Languages curriculum in the Revised National Curriculum Statement (Department of Education, 2002:11).

15 Writing is learning outcome 4 of the Languages curriculum in the Revised National Curriculum Statement (Department of Education, 2002:11).

discuss phonological awareness, phonemic awareness, the alphabetical principle and working knowledge of sounds. An analysis of the content given in the study guide, as well as the material prescribed for the particular section, indicates that the lecturers present the content in a "once over lightly" fashion. Students have to read definitions and be able to distinguish between the concepts. The reason why phonemic awareness is relevant to the process or what the relationship is between phonemic awareness, decoding and oral reading fluency is not addressed in the prescribed content. This knowledge is essential for teachers in order to determine with what aspects children are experiencing problems and how this could affect other areas. In addition, it affects choices of activities and targeted interventions. In study unit 2.3 of LITH 113, vocabulary is addressed in detail within a prescribed article. However, this article is used to teach students how to study and interpret academic articles so the content was not used explicitly for the teaching of vocabulary. Study unit 4.1 and 4.2 in LITH 113 touches on the definitions of phonemic awareness and phonics as these reading literacy components are used to help the students glean knowledge of the teaching of phonics.

In study unit 2 of LITH 313, students should be able to define phonological awareness and evaluate the effectiveness thereof in terms of emergent literacy as well as to be able to analyse the relationship between insufficient oral vocabulary and behavioural problems. However, no link is made between oral vocabulary, fluency and reading comprehension.

In study unit 1 of LITH 423, students should be able to analyse, evaluate and apply the principles of a balanced reading approach, as well as create opportunities for the facilitation of the instruction of high-frequency words, vocabulary, phonemic awareness, phonics, reading fluency and reading comprehension in a balanced reading approach. The focus of this study unit is on approaches to teaching reading; the reading literacy components are thus not the focus of the module. This content within the study unit seems very comprehensive for one unit. This may indicate a lack of understanding or knowledge of evidence-based research on the part of the developers of the module as they do not realise how complex reading actually is. Study unit 3 demands that students should be able to analyse, evaluate, plan and demonstrate applicable learning exercises according to suitable teaching strategies to realise the progress of the foundation phase learner's reading capacity. Furthermore, students are also required to analyse theoretical knowledge of the conceptualisation of reading comprehension instruction in the foundation phase. Reading comprehension forms a small part of the work covered in the reading compendium pertaining to this section of the work. Reading comprehension is covered under the heading of "Continued Reading Instruction in Practice" within the study guide and the reading compendium. The five reading literacy components are mentioned throughout the documents analysed, but the explicit teaching of these is absent.

During the interviews it became clear that the reading literacy components are covered to a minimal extent. One lecturer stated that:

> "The reading literacy components are covered but I don't think enough, we mention them in every year group but by the end of the third year they (the students) cannot tell you the difference between them."

The fact that the reading literacy components are simply mentioned, as acknowledged by the lecturer, could indicate that the lecturers do not value the explicit teaching of the reading literacy components or that they are very focused on only teaching to the curriculum. However, it could also be an indication that the lecturers do not think that in depth knowledge of language structure is required to teach the components. Another possible explanation is that it could indicate that lecturers themselves have not kept abreast with evidence-based research conducted about literacy.

Another lecturer said:

> "They are done. I know the phonic awareness is done well but fluency and other components are not, they are just done in passing, not really in depth."

As indicated in Appendix B, it is evident that the reading literacy components are merely mentioned within the literacy modules. A specific focus on reading literacy components was not included in the planning of these modules. According to the literature studied, these aspects should form the backbone of a teacher preparation programme that aims to prepare quality literacy teachers. The five (5) components are mentioned within the content that is spread over the four (4) years. An analysis of the interviews support what the documents revealed, namely that the reading literacy components are included within the course content but they stop at a definition that is required and are consequently done in passing with the students.

Another lecturer stated:

> "They are not really covered, what is covered well and even the assessment thereof is phonic awareness in the activities. When it comes to fluency, vocabulary and comprehension they are not covered well. The students know what the components of reading are, but how to teach it and what is involved in it, and what it means to be fluent, what activities can the children do, how can it be assessed, what can I do in class, that's not there it's done in passing, not in depth."

The interviews substantiate the findings of the documents. One lecturer stated that phonemic awareness is covered as follows:

> "I think like a definition and what it is. They learn that it is sounds and that words are made up of various sounds and also that there is a correspondence between a letter and the sound but it stops at a definition."

One lecturer indicated that phonics and the content pertaining to it are covered as follows:

> "Phonics is also sounds of letters, alphabet, vowels and consonants. So they learn what it is how to use them as well as their use in words and sentences."

Another lecturer stated:

> "They can't see the difference between phonics and phonemic awareness; they find it difficult to distinguish between the two. It is mentioned but it's not mentioned in depth. I know that if I ask the student off hand what phonemic awareness and phonics is, they won't be able to tell me the difference between the two, but they need to do it and apply it."

One lecturer said that fluency is covered within the literacy modules as follows:

> "They also just learn what it is but they never get that chance just to practice fluency and I think it's a common problem among some of the students as well, they can't read fluently themselves."

Another lecturer indicated:

> "I saw that it is included, I gave them some practical examples when we spoke about fluency, you know you can have a little television have the child read as if he is a news reporter and that you can tape them on a tape recorder and I think that some of these practical things they find quite useful."

From these interviews it is clear that the lecturers tend to equip students with strategies and skills specifically to enhance teaching in the classroom as opposed to exposing them to evidence-based research, or broadening their knowledge base about the reading literacy components, which is necessary for the teaching of reading.

During the interviews, lecturers were of the opinion that vocabulary is covered sufficiently, one lecturer said:

> "They learn the basic concept that you have to teach vocabulary first, see that it links to their background to their pre-knowledge, relates to their interests and that a teacher should teach the vocabulary explicitly, you know having the children on the carpet making sure they understand all the words, writing it, making a word hospital where words are taught and even if it a bilingual class you can have the Afrikaans and the English words."

The above interview seems to indicate that the lecturers are teaching the students as if they are teaching children in a school classroom. This could be because most of the lecturers interviewed taught in schools for more than 20 years. One lecturer said that comprehension is addressed within the literacy modules as follows:

> "They learn about it but not enough is done on reading comprehension, if you ask the students about reading comprehension they will say just ask them questions but they don't know of other strategies to use to initiate comprehension, I think we can be a lot more creative when we teach learners to comprehend, there are a lot of things you can do but we have to get past the thing of just asking a few questions and getting it answered, there is also indirect text, the meaning behind text, things like that."

The lecturer indicated that the students don't have sufficient knowledge of comprehension as students assume comprehension is asking questions about the text. However, as indicated in the document analysis the students aren't given sufficient in depth content to broaden their knowledge of the component, and this could be why the students associate the asking of questions with comprehension, as they have no other frame of reference.

The interviews support and confirm the findings of the document analysis which notes that the reading literacy components do "surface" within the literacy modules. However, the modules do not include the evidence-based research to teach reading literacy nor does it require students to apply, reflect or display an understanding of the content required to teach reading literacy.

Observations were conducted to see what reading literacy components were taught in the LITH modules. In one class the lecturer started by announcing the

topic and the learning outcomes for the session were displayed on the power point presentation. The lecture revised the definitions of phonological awareness, phonemic awareness and phonics with the students and then the students had to complete a group activity about the topic. Furthermore, after the revision of the terms there was no in depth discussion of the topic, there was no critical engagement with the elements of the reading literacy components either. Moreover, there was no focus on phonology or aspects related to language structure. No emphasis was placed on the fact that phonological awareness, concepts of print and knowledge of letter sounds are foundational to literacy. Some students confused the components like phonemic awareness, phonological awareness and phonics. It was clear that the students could not differentiate between phonemic awareness and phonics, and lecturers did not or could not seem to correct them.

An analysis of the observations indicates that the students were not able to identify the reading literacy components if it was described. However, they are implicitly aware of the reading literacy skills but cannot attach names to it or define them. This could be because the lecturer is inclined to teach to the curriculum and does not realise the value of the reading literacy components within reading instruction; or because there is no indication of the in depth content knowledge of phonics or phonemic awareness within the curriculum of the teacher preparation programme.

In another class scenario the students were asked to summarise the article by Rasinski & Mraz (2008), which addresses fluency. There were no clear guidelines given to the students on what the summary had to cover, the summaries were then peer assessed according to criteria given to the students by the lecturer. However, the content knowledge of the article was not addressed by the lecturer, which confirms the lack of in depth knowledge coverage of the reading literacy components. The summaries were collected and the marks allocated for the summaries, contributed to the participation marks of the students.

The observation analysis indicates that students cannot accurately define and identify the reading literacy components. There is great confusion amongst students about what they should know regarding the reading literacy components. The possibility that the lecturers lack in depth knowledge of the reading literacy components should also not be ignored. Even though the interviews and documents state that the reading literacy components are included in the modules, but stop at a definition is confirmed by the observations as the students' confusion and inaccurate description of the reading literacy components point to this. Regardless of whether the module outcomes of LITH 423 indicate that students should be able to analyse, evaluate and apply the principles of a balanced reading approach, as well as create opportunities for the facilitation of the instruction of the reading literacy components, the observation analysis indicates that this is done superficially as definitions of the reading literacy components were simply just given and no in depth content knowledge was addressed regarding the reading literacy components.

After an in depth document, interview and observation analysis it can be concluded that the current content of the LITH modules were devised around the National

Curriculum Statement and does not explicitly include the reading literacy components. Furthermore, there is no evidence of the disciplinary knowledge base required to teach reading. It was found that snippets of the reading literacy components do appear within the literacy modules but evidence-based research of this is not included

Conclusion

It can be concluded that the five reading literacy components suggested by international literature and required by the DoBE as essential for the teaching of reading is included haphazardly in the literacy modules of the B Ed foundation phase teacher preparation programme. The modules were devised around the NCS and the five reading literacy components are touched on in a "once over lightly" fashion within this curriculum. There is no indication that evidence-based research was consulted in the development of these modules. Therefore, pre-service teachers within this teacher preparation programme do not receive explicit instruction of the reading literacy components as suggested by the National Reading Panel (2000) and the department of education (2008b).

A disciplinary knowledge base exists for the teaching of the reading literacy components; this knowledge base is embedded within language structure. The modules analysed do not reflect any inclusion of aspects related to language structure. The implication of the results of this study will affect stakeholders such as the foundation phase teacher preparation programme analysed as well as other higher education institutions' who offer foundation phase teacher preparation programmes. The foundation phase teacher preparation programme analysed would have to consider revisiting the content of their literacy modules. A process of re-curriculation and redevelopment should be considered so that the literacy modules include the disciplinary knowledge base for reading teachers. The findings of this study support the literature base requiring teachers to be equipped with a disciplinary knowledge base to teach reading. Furthermore, teachers should be provided with a rigorous, research-based curriculum which will enable them to become expert reading literacy teachers who will be well prepared to implement research-based programmes and practices.

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