Evaluation of a programme to support foundation-phase teachers to facilitate literacy

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ABSTRACT

Learners who do not develop adequate listening and language skills during their early years are at risk of academic failure and early drop-out. Future learning problems may be prevented by supporting these children in the foundation phase to overcome their developmental delays. A continued professional development (CPD) programme was developed to support foundation-phase teachers to facilitate literacy. The theoretical basis for the workshop material was the articulation between an auditory processing model, a language processing model, and literacy.

The focus of this article is on the qualitative findings obtained from the literacy component of a more comprehensive CPD programme that covered several topics. The research was conducted as action research cycles across two contexts (a semi-rural and an urban-township context) and included 96 participants. This article explores how the teachers implemented the strategies to facilitate literacy in their classrooms and the benefits obtained from it. Data were collected by means of questionnaires, self-reflections and focus groups, as well as a research diary and field notes.

The results revealed that the strategies trained were implemented in the classrooms and were valued by the participants. Those who participated in critical reflection felt that they had developed competence and professional growth. Challenges identified included the language used in the support provided, which had an impact on phonological awareness training, and the use of terminology. The importance of collaboration was emphasised. The participants gained in the sense that they learnt how to implement the assessment standards in the curriculum, and learners benefited from the new strategies as they could all participate in the activities. The research confirmed the value of teacher support in the facilitation of literacy, which highlights the role of speech-language therapists working in school contexts.

Keywords: teacher support, listening, auditory processing, phonological awareness, qualitative research, speech-language pathologists

Background

This study developed a continued professional development (CPD) programme for foundation-phase teachers to facilitate and promote emergent literacy skills. The first author acted as programme facilitator, and will be referred to as such throughout the article. The CPD programme was based on the principles of adult learning (Knowles, Holgotn, & Swanson, 1998) and whole-brain learning (Herrmann, 1996), to accommodate all learning preferences.

The relationship between auditory processing and language processing

Information processing is a complex process (Hamman & Squire, 1996, 1997 in Owens, 2004) that involves sensory input on many levels, which in turn is integrated and regulated by meta-cognition. It requires selective attention, inhibition, and the co-ordination of stimuli and concepts. The facilitation of literacy skills in this study is based on a three-level model that aligns a model for central auditory processing (Bellis, 2003) with a language processing model (Richards, 2004), which is then articulated with literacy. Figure 1 was created to illustrate the link between Bellis's model for central auditory processing and how Richards described the language processing model, and the learning outcomes for literacy (Revised National Curriculum Statement (RNCS)) (Department of Education, 2002).

In Figure 1, the first level of the central auditory processing model refers to how the sound signal is being received through the ear (Bellis, 2002), which corresponds with the first level in the language processing model, described by Richards (2004) as 'listening skills'. Listening is an active process that involves an awareness and localisation of sounds, as well as the behaviour (characteristics) of a good listener (Bellis, 2003). The acquisition of such skills is an important first step in the processing of auditory input and also the first step in acquiring phonological awareness. Learners need to learn the art of listening actively, attentively and analytically in order to learn (Adams, Foorman, Lundberg, & Beeler, 1998).

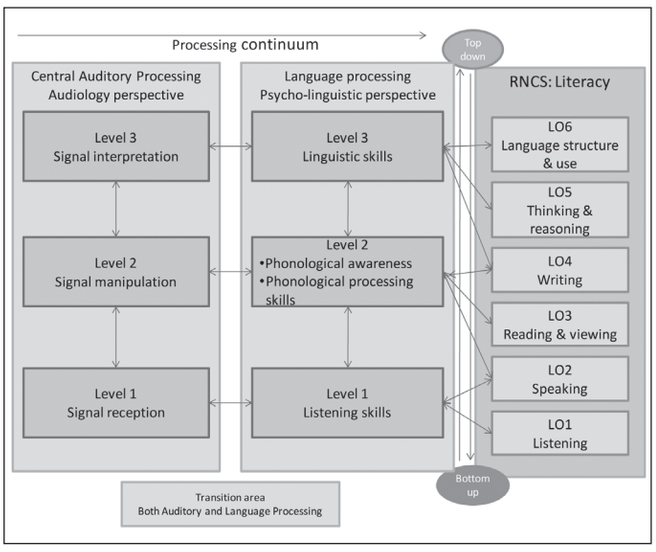

Fig. 1. The relationship between the three-levels of central auditory processing (Bellis, 2003) with language processing (Richards, 2004) and Literacy Outcomes (Department of Education, 2002).

The second level in the auditory processing model refers to the 'signal manipulation' level, which in turn corresponds with the 'perception of speech' (Gillon, 2002) in the language processing model. This level includes both phonological awareness and phonemic processing. Phonological awareness is critical to the ability to analyse (segment) speech units and to synthesise (blend) speech sounds into words, which makes it a strong predictor of success in reading and writing (Goldsworthy, 1998; Muter & Diethelm, 2001). Poor phonological awareness in turn negatively affects the acquisition of reading and spelling, so phonological awareness is viewed as the strongest predictor for academic success (Ehri, Nunes, Willows, Schuster, & Yaghoub-Z., 2001). Learners need to develop phonological awareness skills to an age-appropriate level at school entry. Many learners from low socio-economic schools (SES) have not developed adequate phonological awareness skills on entering school (Nancollis, Lawrie, & Dodd, 2005). This may be attributed to limited or no prior literacy experiences at home. It is often found that such learners have limited access to structured preschool education. Learners who are unable to read by the end of grade 1 tend to lag behind and may develop learning problems.

On the third level of the auditory processing model (Figure 1), the auditory signal is interpreted through higher cognitive functions, and relates to how meaning is extracted from the auditory input. Richards (2004) considers the focus on this level to be more on linguistic skills than on auditory skills. Such a view supports the notion that these two processes are closely related. Bellis (2003: 95) is of the opinion that, '… it is not easy to separate acoustic and phonemic processing from one another or from higher-order linguistic influences'. To facilitate literacy development in the classroom, each of the three levels of language processing (Richards, 2004) has a different effect on literacy learning (Figure 1).

The relationship between the three-level model and the national curriculum

The national curriculum (NC) specifies 'listening' as the first learning outcome (LO1) for 'literacy' in the foundation phase (grades R - 3). LO1 is a stepping stone for acquiring phonological awareness skills, which is integral to the development of emergent literacy skills.

Because the development of oral language is a prerequisite for the development of reading and writing (Justice, Meier, & Walpole, 2005), this aspect is addressed in learning outcome 2 (LO2) of the RNCS, (referred to as 'speaking') (Figure 1). Language skills include the visual modality (Johnson & Roseman, 2003), which is addressed in learning outcome 3 (LO3) (referred to as 'reading and viewing'), as well as learning outcome 4 (LO4) (referred to as 'writing'), where the focus turns towards acquiring more formal literacy skills. Foundation-phase learners are also introduced to 'thinking and reasoning' in learning outcome (LO5) and 'language structure and use' in learning outcome 6 (LO6). The last four LOs correspond with the third level of the three-level language model, which is described as 'linguistic skills'. The workshops provided in this CPD programme addressed each of the learning outcomes for literacy in the RNCS, which again corresponds with the three levels of the model for language processing shown in Figure 1.

A CPD programme for foundation phase for the facilitation of literacy

The content of this specific CPD programme was developed in collaboration with the Gauteng Department of Education (provincial and district levels), and had to correlate with the RNCS. The programme was considered a joint effort between the programme facilitator and the district facilitators. The other learning outcomes were addressed in the CPD programme as a whole, but this article focuses on the section that targeted the facilitation of 'listening' as a stepping stone for the development of phonological awareness and phonic awareness (refer to levels 1 and 2 in Figure 1), as such skills are required for literacy.

The CPD programme consisted of three components: a training component, supported by practical and mentoring components (Wium, Louw, & Eloff, 2010). The training component in turn consisted of a series of workshops that were repeated in two contexts over a period of 2 years. The workshops (refer to Appendix A) provided the participants with strategies and activities to facilitate literacy.

The approach followed in the CPD programme was based on adult learning theories and made use of facilitative strategies for learning, e.g. action learning strategies (Kemmis & McTaggart, 2005), co-operative learning (Department of Education, 2002; Killen, 2007) and peer learning. Experiential learning (Kolb, 1984) opportunities allowed participants to practise the strategies through role play in the workshops and thereafter to implement it in their classrooms. Such support allowed the participants to first observe the strategies before they were required to apply them, and then allowed them the opportunity to reflect on the process by completing self-reflection sheets for their portfolios.

Method

Aim of the research

The aims of the article are to explore how the participants implemented the strategies to facilitate literacy in their classrooms, and to describe the benefits of the support provided.

Study design

This study was part of a more comprehensive study using programme evaluation as research design (Creswell & Plano Clark, 2007). The research made use of two action research cycles across two contexts (semi-rural and urban townships), and made use of qualitative methods of inquiry.

Participants

The data collected for this article were obtained from the main study. In its effort to redress past inequalities, the Gauteng Department of Education (GDE) identified 24 low socio-economic schools (SES) in the Tshwane region to participate in this project; 12 schools were from a semi-rural area, and 12 from an urban/densely populated area (including township schools and schools in informal settlements).

Stratified sampling was used to select the sample (McMillan & Schumacher, 2006), as each school that accepted the invitation to participate in the programme identified 1 teacher in each grade level of the foundation phase (e.g. grades R, 1, 2 and 3), so 4 teachers from each school enrolled for the programme, provided their participation was voluntary. There were 12 teachers representing each grade level in the foundation phase (grades R - 3) included in the programme, totalling 96. At the time of the research it was estimated that there are about 3 - 4 classes in each grade level of each school, and therefore the selection of one participant from each grade level in each school represented approximately 25% of the total number of foundation-phase teachers in these selected schools. As only one primary trainer was available to conduct the workshops, groups of 48 participants per context were regarded as manageable, and were sufficient to allow for possible attrition later in the programme.

In the larger study each group of four teachers in each school was encouraged to select a representative to attend the focus group meeting, which implies that these participants have already met the selection criteria for the original sample (nested design) (Leech & Onwuegbuzie, 2005). The focus groups consisted of 12 participants in each context (1 from each school), considered an adequate size for a focus group and a representative sample (25%) of the entire group that was trained. It also allowed for attrition (Leedy & Ormrod, 2010). Focus groups were voluntary; in some instances more than one participant from each school attended the meeting, and in other cases none attended. The programme facilitator also acted as moderator in the focus groups, whereas the district facilitators acted as assistant moderators in both the contexts of the research.

The district facilitators were required by the GDE to assist the programme facilitator, and were partners in the project. Both district facilitators were Northern Sotho speaking and familiar with research

methods as they were both enrolled for master's degrees at that time. With the exception of two participants, all were female.

The sample was fairly homogeneous in terms of contexts, grade levels represented and the teachers' experience in teaching, but not in terms of qualification, and therefore is considered as a realistic cross-section of the population (Leedy & Ormrod, 2005). The participants' qualifications and prior learning may have been an advantage for some and a disadvantage for others, as the pace of training could have been too fast for some while adequate for others.

Questionnaire and self-reflection data were collected from 96 participants, whereas focus group data were contributed by 24 participants across the two contexts. In these specific contexts the most prominent language used as language of learning and teaching (LoLT) was Northern Sotho (62%), followed by English (24%), SeTswana (8%) and isiZulu (6%). All participants were part of the larger study and therefore were required to be appointed in full-time teaching positions in the foundation phase at schools in the targeted contexts. They also had to be willing to use English during the contact sessions, as it is the language used by the GDE in all communication with and support of teachers. English is also the language used as medium of instruction at all institutions of higher education. This aspect was explained in the initial invitation letter to the schools, and also in the briefing meeting, so that participants could make informed decisions on whether they wanted to participate in the programme. Participants who declined were not included. It was also emphasised that the teachers had to participate of their own free will and not as a result of coercion by their superiors.

Data collection

Qualitative data were collected from a variety of sources. All the participants from the main study attended the specific workshop to facilitate emergent literacy, and each of the 96 participants was expected to complete questionnaires after the workshops and to engage in self-reflection following a period of implementation of the strategies learnt in their classrooms. The original purpose of the questionnaires was mainly to collect quantitative data and therefore included only a limited number of open-ended questions, as they take longer to complete and therefore could be a cause of non-response (McMillan & Schumacher, 2010). Such open-ended questions provided the opportunity for additional comments or recommendations, which was explanatory.

All participants (n=96) were required to implement the strategies to facilitate literacy in their classroom following the workshops and to complete portfolio assignments for assessment. As part of the portfolio assignment they were required to engage in self-reflection (using reflection sheets) at the conclusion of the implementation period. Such self-reflection is an inherent part of outcomes-based education (OBE) (Killen, 2007), and is known to facilitate deep learning. It was also a useful tool to monitor the implementation of the strategies.

The two focus groups (each with 12 participants) were conducted 4 - 6 weeks after the workshops and were used to evaluate the workshop in terms of the participants' perceived benefits, and to obtain feedback on their experiences in implementing the strategies. A focus-group schedule was used to guide the discussions.

Diary entries were made by the programme facilitator throughout the entire programme, without following any particular pattern. Entries were made whenever the programme took a specific turn, or after a specific event took place, or when the researcher felt the need to reflect on specific issues. The aim of the research diary was to document the research process and to reflect on issues arising. It also provided insight regarding the system, and factors that could affect the outcomes of the programme. These entries were used to share ideas with experts and colleagues, and therefore elicited meta-reflection.

All the workshop material and measuring instruments/procedures were developed in English, although particular examples were prepared in Northern Sotho for the facilitation of phonological awareness. It was acknowledged from the start that not all participants would be equally proficient in English, and because the programme facilitator had limited proficiency in the indigenous languages, arrangements were made with the district facilitators (each of whom was proficient in at least two African languages) to translate or interpret should the need arise. Participants were encouraged to participate in their language of preference throughout the programme.

Credibility

The credibility of the questionnaires was increased when a language editor reviewed and edited the questions. These questions were also scrutinised by two experts in the professional field, as well as a statistical advisor, to identify any potentially imprecise or ambiguous terms. Pre-testing determined the clarity of instructions as well as questions, and the time for completion.

Focus group schedules were scrutinised by two experts prior to use to determine whether they would elicit the required responses. Such measures increased the likelihood of trustworthiness. The programme facilitator acted as the moderator of the focus groups, and the district facilitators as assistant moderators, and as interpreters and translators when necessary. The district facilitators documented significant quotes and summarised each question discussed on the summary sheet specifically designed for this purpose. At the conclusion of the session, the district facilitators as assistant moderators verbally summarised the responses to questions. Member-checking was done when these summaries were presented to the groups for approval, thereby increasing the trustworthiness of the data (Bloor, Frankland, Thomas, & Robson, 2001). The programme facilitator took field notes to supplement the summary and transcription of the audio recording.

After the participants had departed, the programme facilitator (moderator) and the district facilitator (assistant moderator) met to reflect on the procedures, the participation, and outcomes of the session. They compared notes and confirmed the key ideas. Shortly after the session the programme facilitator further reflected on the focus group by keeping a research diary. However, the fact that the assistant moderators were involved in the study may have biased the results to some extent.

The audio recordings from the focus groups were transcribed verbatim by the course facilitator according to guidelines obtained from the literature (Bloor, *et al.*, 2001). Coding was confirmed by 80% inter- and intra-rater agreement. For reasons of anonymity, speakers were referred to as 'participant 1', 'participant 2', etc. Thick descriptions within the context were created and rich data from several data sources (diary entries, focus groups and open-ended questions) were obtained. It is acknowledged that the close proximity of the programme facilitator and the participants over time could have impacted on the results as the programme facilitator personally conducted the focus groups and transcribed, coded and analysed the data, and may have become subjective.

Data analyses

The responses obtained from open-ended questions in questionnaires, as well as the self-reflections, were listed in Word documents. The focus group sessions were transcribed verbatim and these, together with the self-reflections, diary entries and open-ended questions from questionnaires, were placed in a single hermeneutic unit and qualitatively analysed using content analyses. Units were identified to answer the research questions (Ryan & Bernard, 2000) and were coded with the ATLAS-ti software suite (Thomas Muir Scientific Software Development, 2003-2004), and categorised. The strength of ATLAS-ti is its ability to manage and organise large quantities of textual data. All text (apart from opening statements) was coded, and in turn categorised and grouped as major themes. The software used to analyse the qualitative data enabled the counting of specific codes (enumeration) to indicate the prominence of the various categories and themes. All items coded were categorised as either positive (confirming the research question)

or negative (refute the research question) to provide a judgement in the evaluation of the programme, and were calculated as a percentage.

Results and discussion

The findings were grouped as topics to answer the two research questions which relate to the implementation of strategies in the classroom, and the benefits obtained from the support provided.

Implementation of strategies in the classroom

In response to the question: 'How were the strategies implemented in the classroom?' the following topics emerged.

Confirmation that strategies were applied in classrooms following the training

The data firstly confirmed the implementation of strategies in the classrooms. The results showed that from the 125 items coded, 70% confirmed the implementation of strategies in classrooms. Evidence of strategies being implemented in classrooms was obtained from portfolio assignments. Strategies were implemented in the classrooms by using the LoLT, which was in accordance with the language policy specified for the foundation phase (Department of Education, 2002). Such results show a shift from what was the situation a decade ago, when the majority of teachers in Gauteng were teaching in English (Setati, Adler, Reed, & Bapoo, 2003). Mother-tongue or home-language instruction is considered most effective for learning in the foundation phase (Motshekga, 2010).

However, some participants acknowledged that the portfolio assignment was not a true reflection of their teaching as it was submitted without implementing the strategies.

> *T: 'There is no use to writing. You know writing, for the sake of a due date.' (Line 130, focus group 2(b))*
>
> *A: 'So some of you did the assignment without implementing it in the class. So you feel the assignment is not a true reflection of what is going on in the class? Oh, OK.'*
>
> *T: 'But you … you don't implement that what you have written on the assignment, you just write it to submit it to the lecturer. It is like studying for a degree.' (Line 200, focus group 2)*

Such revelations indicated negative feelings (n=35), and because these individuals were from two specific schools, their attitudes could be school-related. A negative school culture has been identified as one of the reasons for dysfunctional schools (Metcalfe, 2008). The participation in the CPD programme (e.g. implementation of strategies in the classroom as part of a portfolio assignment) depended on the participants' motivation and attitudes, which emphasises the importance of including motivational strategies in future programmes.

Participants' appreciation of the strategies

The information included in the CPD programme for literacy was viewed positively as 73% (n=20) of the items coded as such indicated that the participants appreciated the information and the strategies taught.

> *'I have learnt good ways of improving listening and be able to draw the attention of learners to listen attentively.' (Focus group 3(b))*
>
> *'Those strategies … we can now go on all day and forget about the time.' (Line 50, diary entry 29)*

The facilitation of listening requires teachers to firstly make learners aware of sound and to provide them with positive reinforcement for active attention to sound (Bellis, 2003). Such facilitation of strategies may imply a shift from the didactic approach where learners are instructed to listen, to a whole-body listening approach that focuses on active *attending* in class (Bellis, 2002).

Critical reflection on practices/professional development

Currently reflective thinking in teacher support is emphasised as it facilitates quality teaching and professional development (Cunningham, 2005). The participants reported that the implementation of strategies in their classrooms made them '*think and reflect*' on their practices. As a result of the CPD programme several participants reported a change in their teaching practices. Such reflection on practices is in keeping with the reflective competence required by the 'Norms and Standards for Teachers' (Department of Education, 2000). Reflection on their practices also put teachers in control of their own learning (Bowles, 2004), which is in accordance with adult learning practices and therefore could be related to behaviour changes.

> *'… improve my teaching, help me to reflect back' (Line 97, un-tabled open questions)*
>
> *'It makes you think.' (Line 217, focus group 1)*
>
> *'The workshop made a big difference to me because I could see that I was doing many wrong teaching in my teaching.' (Line 123, un-tabled open questions)*

However, the review of the portfolio assignments revealed that the personal reflection and self-assessments were often omitted. The fact that participants were required to complete the reflections by themselves in written format in the portfolios could have contributed to such omissions. It is also possible that the participants (and district facilitators) had little prior experience of reflective practices (Killen, 2007) and did not know how to apply this technique. Because of the recent introduction of these practices with the implementation of the OBE approach (Killen, 2007), the majority of the participants in this study may not have been trained in reflection and self-assessment. Reflection is the basis for the successful implementation of OBE (Schwahn & Spady, 1998). The participants' inability to reflect on their own practices indicates that they had not yet mastered the basic skills required by an OBE approach. Reflection (from a technical or moral perspective) is an acquired skill that needs to be developed by practice and guidance (Killen, 2007), and therefore this practice needs to be addressed in future programmes.

Challenges in the support provided

Language of delivery in the CPD programme

A limitation of the workshop was that there were insufficient examples of phonological awareness in the different languages. Despite preparing several examples in Northern Sotho, the participants required more impromptu examples in the workshops, and also in the other official African languages. Some of the participants found it difficult to transfer the knowledge learnt in the workshop (in English) to the LoLT used in their classrooms.

Despite having the district facilitators supporting the training, it proved challenging as the programme facilitator was not proficient in an African language and the district facilitators were not familiar with the concepts related to phonological awareness as they had not been pre-trained, and were also not proficient in other African languages. Direct translation of English to the LoLT is often not possible as it does not provide the required results (in many African languages a combination of words would be required to fully translate the meaning of a single English word). The multilingual South African context poses a challenge to speech-language therapists (SLTs) supporting teachers in training phonological awareness as currently less than 3% of SLTs have an African language as L1 (Health Professions Council of South Africa, 2005). A solution would be to have a teacher who is proficient in the LoLT and who has a sound understanding of the underlying phonetic structure of the language as co-presenter of such workshops.

Concept of rhyming in African languages

Rhyming, as it appears in English, is a repetition of the final vowel-consonant cluster (Johnson & Roseman, 2003), (e.g. 'the cat sat on the mat'), and is the first level in the development of phonological

awareness (Gillon, 2007). Several comments (*n*=43) obtained from the data described the facilitation thereof as 'difficult', which implies that it is an unfamiliar concept in African languages (Vermaak, 2006).

> *'It was difficult for me, the rhyming. Like, we don't have so many rhymes like they have in English. So it was difficult with the LoLT, to get like rhymes, to find rhymes. Like we associate to do that. To get songs and rhymes. That was difficult for me.' (Line 205, focus group 1).*

These preliminary data call for critical consideration of facilitating rhyming as the first step in phonological awareness training in certain African languages, e.g. Northern Sotho, SeTswana and IsiZulu. If rhyming does not occur commonly in these African languages, then there is no point in training it as the concept cannot be explained to learners. Further research is needed to determine the nature of rhyming in such languages. The question also arises whether this aspect should be facilitated in English additional language (EAL) classrooms.

Examples obtained from portfolio assignments showed that the participants were more familiar with the concept of alliteration, which is repetition of a word beginning or ending with the same sound (e.g. 'tloka, tlela'), with onset being the initial phoneme (Johnson & Roseman, 2003). The purpose of facilitating alliteration is similar to that of rhyming, in that it familiarises the ear to repetitive patterns of sound (at the beginning of words). Would it then not be more suitable to focus on onset-rime in these African languages, as it is possible that the same benefits can be derived as for rhyming? This matter should be further researched.

Teachers' unfamiliarity with new terminology

The use of new terminology was, however, not generalised during the training as became evident when 64% (*n*=14) of the items were coded as 'inability to recall the information'.

> *P: 'Yeah, I think I benefited from it, because when I was trying this clapping method … so that the learners were enjoying it. They clapped two times, and then they clapped three times.'*
>
> *A.M: Yes – that was segmentation. Yes … you will learn the terminology for these things soon … but I understand what you are saying. It was one of the strategies we did.' (Line 96, focus group 2).*

The above example indicates an awareness of specific concepts, which is the lowest level of acquiring new knowledge and thus regarded as 'shallow learning'. Such participants did not necessarily understand the information provided in the workshops, or know how to apply it. In several instances confusion in terminology was noted in the self-reflection in the portfolios, e.g. the term '*auditory discrimination*' was used interchangeably with the term *'rhyming*', as were *'identification*' and *'auditory memory*'. This lack of understanding of these concepts became apparent early in the programme presented in the rural context. When the programme was repeated in an urban context the term 'auditory discrimination' was specifically emphasised and explained as: '... the difference between the sounds ...' which appeared to be more effective, as no such confusion was noted again. Sufficient repetition and explanation of new vocabulary is required in workshops, as discipline-specific terminology used by SLTs is unfamiliar to teachers. In a collaborative approach to providing teacher support it is necessary for SLTs and teachers to share their knowledge in order to come to a new understanding of such vocabulary in relation to the RNCS. Multidisciplinary collaboration should therefore be addressed in teacher preparation.

Benefits of the programme

Participants learnt to address assessment standards

The results showed that the participants had previously omitted assessment standards in the curriculum because they did not know how to apply these. The participants believed that they had benefited from the training because they had learnt to address assessment standards in the RNCS which they were unable to do before.

> *'You know you helped us a lot. We used to skip most of the things.' (Line 284, focus group 1)*

Strategies specified by the RNCS to facilitate literacy, such as 'riddles' (used to facilitate auditory memory) and segmentation and blending activities, were particularly popular and were singled out by some participants as being successful and useful.

> *'Yes, in mother tongue I like the riddles, we also have the songs.' (Line 214, focus group 1)*

Certain elements of phonological awareness were reportedly easy to teach in the LoLT, specifically the segmentation of words as syllables and sounds, as well as the identification of the initial and final sounds of words.

> *'… they specifically singled out "riddles" and "segmentation and blending activities" as being very effective and it seemed as if they have all implemented these strategies.' (Diary entry 14)*

Many of the participants reported that they had previously omitted phonological awareness training from their curriculum because they did not understand the rationale thereof and did not know how to address it (even though it is specified in the RNCS). Adult learners learn more effectively when information is relevant to their needs and can be applied to their contexts (Bowles, 2004). The participants were therefore more receptive to learn the new strategies, because as adult learners they were motivated to learn when they could understand the relevance of the learning objectives and activities for their own work (Bowles, 2004).

Phonological awareness (in particular phonemic awareness) is facilitated in the context of literacy activities (LO2, LO3 and LO4). Phonological awareness training in English (Bernthal, Bankson, & Flipsen, 2009) follows a developmental sequence, of which rhyming is the first step in the English language (e.g. in nursery rhymes and songs, discrimination and production, e.g. 'the c<u>at</u> s<u>at</u> on the m<u>at</u>'). This is followed by onset-rime, when the initial consonant changes the meaning and phonograms, e.g. 'h-and', 's-and', 'l-and', 'st-and', etc. Alliteration is repetition of a word beginning or ending with the same sound (e.g. 'Bana ba sekholo'). The next step is segmentation (auditory analyses), which is the ability to separate sentences as words; compound words, syllables, and also phonemes (e.g. b-u-s). Segmentation of sounds consists of isolating initial, final, medial sounds (e.g. which sound is at the beginning/end or in the middle of 'hat'?). It also comprises deletion of parts (e.g. say dustbin, say again without the 'dust' part). The most advanced levels are sound substitution (e.g. say 'hat', say it again but change the 'h' to 'm' = mat), and sound blending where sounds/components are connected in one meaningful utterance (e.g. ae-ro-plane = aeroplane, or sun + flower = sunflower). As mentioned previously, such skills require advanced knowledge of the sound system of the language, and therefore should ideally be facilitated by a teacher/facilitator who is proficient in the LoLT.

The facilitation of phonological awareness skills in the foundation-phase curriculum is a preventative strategy that enhances literacy development. It is of particular importance to learners from low SES, as they are at risk of experiencing difficulties in developing literacy skills (Nancollis, *et al.*, 2005). Poor development of phonological awareness may lead to difficulty in reading and spelling (Rvachew, Chiang, & Evans, 2007). Reading and spelling problems can be prevented if phonological awareness is facilitated in the foundation phase, which justifies the inclusion of such information in teacher support programmes.

Benefits for learners

Participants in both contexts were exposed to information regarding phonological awareness and its role in facilitating literacy for the first time, and were excited about the effect the strategies had on their learners.

T1: '... you know, we teachers have never done stories, songs and rhymes in class. We thought all of that in the RNCS – it was for nothing. I feel our children ... their minds were caged in. We have since opened the screws, and the children came flying out like ... birds!' (Line 45, diary entry 16, focus group 1).

The current study reported perceived gains made by learners, but these findings were subjective. Research to determine the impact of programmes on learners' performance is limited (Khoza, 2007).

Recommendations for teacher support programmes

Phonological awareness should be presented by facilitators who are proficient in the LoLT as the concepts cannot be translated directly as, for example, vocabulary. The support of teachers in the facilitation of phonological awareness in workshops firstly requires in-depth knowledge of the sound system of the LoLT in order to generate language-specific examples. A clear understanding of the sound system of a language will allow programme facilitators to determine whether rhyming features in that language, and to plan an alternative means of facilitating where necessary. District facilitators who are proficient in African languages should be included in such workshops as co-presenters to facilitate phonological awareness skills. Alternatively teachers who are proficient in the various African languages should be pre-trained as co-presenters of such skills.

From the results obtained in this study it is proposed that research be conducted to determine whether alliteration rather than rhyming should be facilitated in schools where the LoLT is an indigenous language. Should research confirm this notion, it will infer a slight adaptation of the assessment criteria in the RNCS. It is important for SLTs working in education contexts to acknowledge the uniqueness of the local language and culture (Sowden, 2007). Such sensitivity contributes to a better understanding of the specific dynamics embedded in the context, which may be attributed, at least in part, to the fact that South Africa is a country characterised by considerable linguistic and cultural diversity. Support programmes for teachers therefore cannot be generic in nature, but should be designed with consideration of the specific language and culture of the context. Although such considerations may be time-consuming, they will be worthwhile to improve the performance of learners.

SLTs have specific roles to play in education contexts. Firstly, they have a preventive role, to provide preschool and foundation-phase teachers with support in the acquisition of literacy skills. Secondly, they have to play a consultative and collaborative role in both district and school-based support teams to facilitate literacy and numeracy by providing training, mentoring, monitoring and consultation. It is recommended that district facilitators/teachers who are proficient in the LoLT be included in the preparation of the workshop material, and also be pre-trained by the SLT as co-presenters in such workshops. Such measures build capacity and contribute to more effective collaboration.

Finally, it is important that such collaborative programmes be carefully documented as knowledge about their impact on learners' performances is limited (Khoza, 2007). The effect of CPD programmes for teachers on learners' performance needs further investigation.

Conclusion

The finding that the strategies trained through this specific CPD programme were mostly implemented in the LoLT is in accordance with the language policy (Department of Education, 2002) for foundation-phase teaching and learning. Such results show a shift from the situation a decade ago, despite the guidelines provided by the language policy at that time. The fact that the language policy is currently adhered to implies that progress has been made in the implementation of education policies, and that it is possible to change how teachers implement policy. The Department of Education has been effective in breaking down stereotyping and prejudices that existed with regard to English being considered by teachers and parents as superior to the local languages. In accordance with the language policy it is currently accepted throughout all levels (ranging through national, provincial, district and school levels) that mother-tongue or home-language instruction is considered as most effective for learning in the foundation phase (Motshekga, 2010).

It is disturbing to note that participants previously omitted phonological awareness because they did not understand this concept and did not have skills and strategies to teach it. This could have impacted on their learners' development of literacy (Justice & Kaderavek, 2004). The support provided to the teachers in this study was considered effective as they felt that they could implement the strategies in their classrooms. Such results also confirm that collaboration with district officials is important to achieve success, but that pre-training is required for optimal assistance in workshops.

Within a collaborative approach to teacher support, it is essential to establish positive and constructive relationships among SLTs, teachers and district facilitators, as this contributes to the success of adult learning experiences (Galusha, 1998). It is therefore also essential that the education system supports SLTs in the execution of their tasks (Law, 2002: 2, in O'Toole & Kirkpatrick, 2007). With regard to the SLT's role in supporting learners in the acquisition of literacy (Department of Education, 2001), it is imperative that teachers and SLTs work as a team, because as a team they can achieve so much more than when attempting anything on their own.

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Appendix A. Content of the workshops to facilitate emergent literacy

Facilitating listening skills

The participants in this study were provided with sufficient information to understand the rationale for facilitating listening skills, but also received strategies and opportunities to develop hands-on skills which allowed them to effectively facilitate listening skills. The participants were made to understand that in order for them to create an optimal listening environment in their classroom, may require of them to make some acoustic and teacher-based environmental modifications (Bellis, 2003). The programme made participants aware of how to minimise interfering factors (Goldsworthy, 1998) and how to facilitate listening behaviour that facilitates auditory attention (e.g. whole-body listening strategies) (Bellis, 2003). Furthermore, the workshops included strategies and activities to facilitate auditory tasks, e.g. auditory discrimination, memory, sequencing, figure-ground and perception of speech, which are required for language development, but also for phonological processing skills.

Facilitating phonological processing

Several teachers in the current education system feel unsure about the facilitation of phonological awareness and have a need for support. Less than 5% of the teachers in Lessing and De Wit's (2008) study in Mpumalanga and Limpopo provinces reported that they had confidence in teaching the sub-skills for literacy acquisition. This may be attributed to the fact that the role of phonological awareness in the development of literacy only became fully known in the early 1990s and therefore was not included in the professional training of teachers until much later. The facilitation of emergent literacy skills have been included in this CPD programme because of its relevance to literacy learning, but also to address a need of teachers who had not been trained in this aspect before.

The CPD programme addressed the skills required to develop phonological awareness, e.g. rhyming, alliteration, segmentation, sound blending, and sound manipulation (Gillon, 2002, 2007; Goldsworthy, 1998). Facilitation of phonological awareness starts with rhyming songs and nursery rhymes, and then proceeds to make the learners aware of words in a sentence (e.g. I-sit-on-a-chair), followed by awareness of syllables (e.g. but-ter-fly). Lastly, the focus is on the awareness of sounds (phonemes) which ultimately results in blending and segmenting individual phonemes (e.g. j-u-m-p; c-a-t, rhi-no-ce-ros) (Bernthal*, et al.*, 2009).

In addition, skills such as auditory closure, auditory association, and phonemic analysis linked to phoneme identification, grapheme-phoneme identification, and grapheme-phoneme correspondence were also included (Richards, 2004). The workshop activities included demonstrations and practice of the identification of initial sounds, end-sounds, the segmentation of sentences into words, words into syllables, and individual sounds. Blending of syllables and sounds, as well as sound manipulation was also addressed.

Although the inclusion of songs and rhymes in the facilitation of literacy is a good start towards the development of phonological awareness, the traditional actions that accompany these activities are intended to facilitate the meanings of words and not necessarily to focus on the sound structure of the language. Participants were made aware that it is necessary to import different strategies into their classroom practices, e.g. waving hands when rhymes are heard, clapping hands/stomping feet when alliteration patterns are recognised, clapping the syllables in peers' names, and slowly stretching of arms when syllables are blended to form words.