Phonemic Awareness Strategies Used in Teaching English Language Literacy Skills to Grade Three Pupils in Public Primary Schools in Embu County, Kenya

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Abstract: Studies have shown that among the factors that influence acquisition of literacy in a second language (L2) is learners’ phonemic awareness (Adams, 1990). This study investigated the phonemic awareness strategies used in teaching English language literacy to Grade Three pupils in public primary schools in Embu County Kenya. The study found out that Grade Three teacher showed inadequate knowledge and skills in using phonemic awareness strategies and approaches in teaching phonemic awareness. The study concludes that equipping Grade Three teachers and other lower grades teachers with phonemic awareness strategies is essential in developing alphabetic principle and orthographic mapping which are key facets in reading and writing. This study will equip primary school teachers in the Early Years Education (EYE) tier of the Competence Based Curriculum (CBC) with linguistic approaches and strategies much needed for successful instruction in English language literacy.

Keywords: Letter-Sound Correspondence, Sight Words, Orthography, Decoding

1. INTRODUCTION

Phonemic awareness refers to the specific ability to focus on and manipulate individual sounds (phonemes) in spoken words and falls under phonological awareness which is under a broader area of metalinguistic awareness (Chapman, 2003). Phonological skills that are acquired at early stages of a child’s life positively influence the development of language literacy at later stages of life. Such skills help learners decode written words thus enhancing fluency in reading and writing. Proponents of phonological awareness have developed a series of activities that help children enhance their phonemic awareness. Hawken et al. (2005) noted that playing with sounds, reading, reciting words or rhythms, sound practice using sounds and using sound for word construction are some of the activities that can be used to help children acquire phonological awareness. According to Ehri, (1995) the development of phonological skills is progressive and begins with basic skills as one move to intricate skills. The orderly manner in which the learning activities should be arranged demands that children would first master segmented syllables, then rhymes before reading initial sounds and then final sounds. Children Phonemic awareness can be taught and measured indirectly through observation and game-like task Yopp (1988).

The 2019 Monitoring Learners Progress (MLP) assessment conducted nationally in Kenya by the Kenya National Examination Council (KNEC) at Grade Three to test the basic acquisition and proficiency in listening and speaking, reading and writing skills revealed that the pupils performed dismally in all the four English language skills with those meeting expectation in each of the four English language skills critical to literacy being rated below 36% (see table 1). This raises concerns on the level of influence phonemic awareness has on acquisition of English language literacy in Embu County and consequently motivates the researchers to conduct this study. This study therefore investigates the phonemic awareness strategies used in teaching English language literacy to Grade Three pupils in public primary schools in Embu county Kenya. The 2019 MLP assessment is shown in table 1:
Table 1. National Performance of 2019 MLP Grade 3 in English Language Tasks

<table>
<thead>
<tr>
<th>Task</th>
<th>Listening and Speaking</th>
<th>Reading Aloud</th>
<th>Reading Comprehension and Language Structures</th>
<th>Writing Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exceeding</td>
<td>350,488</td>
<td>353,226</td>
<td>213,801</td>
<td>170,304</td>
</tr>
<tr>
<td>Expectation</td>
<td>29,14%</td>
<td>29,37%</td>
<td>17,78%</td>
<td>14,16%</td>
</tr>
<tr>
<td>Meeting</td>
<td>431,117</td>
<td>380,995</td>
<td>397,198</td>
<td>392,071</td>
</tr>
<tr>
<td>Expectation</td>
<td>35,85%</td>
<td>31,68%</td>
<td>33,03%</td>
<td>32,60%</td>
</tr>
<tr>
<td>Approaching</td>
<td>312,976</td>
<td>304,327</td>
<td>310,947</td>
<td>371,553</td>
</tr>
<tr>
<td>Expectation</td>
<td>26,02%</td>
<td>25,30%</td>
<td>25,85%</td>
<td>30,89%</td>
</tr>
<tr>
<td>Below</td>
<td>108,074</td>
<td>164,245</td>
<td>280,715</td>
<td>268,714</td>
</tr>
<tr>
<td>Expectation</td>
<td>8.99%</td>
<td>13.66%</td>
<td>23.34%</td>
<td>22.34%</td>
</tr>
<tr>
<td>Total</td>
<td>1,202,655</td>
<td>1,202,793</td>
<td>1,202,661</td>
<td>1,202,642</td>
</tr>
</tbody>
</table>

Source: KNEC 2019 Grade 3 MLP National Assessments.

Adams et al. (1998) describes the seven stages in teaching phonemic awareness, which begins with instruction in listening skills, familiarizing the children with the need to listen actively before other, more advanced, skills are taught. During the second stage, the learners move to the skill of rhyming where they begin to listen to language and find out it has meaning, as well as beginning to find out that the alphabet plays a part in language. The third stage includes introducing the learners to the concept that language is made up of words and sentences. When the children have this base, they are introduced to the fourth stage-listening for syllables. The fourth stage is directing the learners to listen for the initial phoneme in a word, followed by listening for the final phoneme in a word. When all the preceding stages have been mastered, Adams et al. (1998), recommends moving on to the sixth stage, which is dividing words into phonemes using manipulative such as blocks and cubes. The last stage (seventh), According to Adams et al. (1998), is introducing letters and spellings and this leads the learners to transfer the skills they have worked on into reading, and manipulative such as substitute, add and delete sounds in words. Despite the well documented relationship between phonological awareness skills and learning to read and spell words correctly, questions about the best strategies of enhancing phonemic awareness still remains unexplored in Kenyan primary schools (Gathigia and Rutere2016). Writing is defined as the art of scribbling alphabet symbols in order to communicate certain message in print form (Hawken et al., 2005). It comes with the recognition that letters printed together have a meaning. There is a strong relationship between writing and phonemic awareness as well as phonological memory as one must attach a meaning to a symbol that he can recall before replicating it in print. The reciprocal relationship between learning to read and writing to write has been well documented (Clay, 1998; Hill 2015). It’s worth noting that as early writers invent spelling to represent words, they are contending with sound-letter relationships and concepts of print. Similarly, early readers assimilate the structures and features of text as they read and can draw on this knowledge when they compose (Hill, 2015). In helping the early learners compose letters and represent them in print, early learners require the support from a more knowledgeable other who could be the classroom teacher, adult, a parent or peer in visual reproduction of letters as presented in English orthography Vygotsky, (1978). Although researchers have clearly shown how writing skills help develop language literacy, it not clear how L2 acquisition is influenced by such exposure. Secondly, the interference caused by L1 emergent literacy has not been taken into consideration in most studies.

2. Methodology

This study was guided by a research postulation that a sample size of 10% is Representative Gay (1996). Following Gay’s postulation, Embu County public primary schools were 386 and this gave a sample size of 38.6. Teachers were 426 giving a sample size of 42.6. This study selected a population sample of 40 public primary schools and 45 teachers in order to avoid biased findings due to non-representation (Zikmund, Babin, Carr, & Griffin, 2013). The study was guided by Ehri’s (1995) phases of development in learning to read sight words. Ehri (1995) affirmed that certain prerequisite literacy knowledge is significant for readers to form complete linguistic connections. The phases of development in learning to read words by sight presented by Ehri (1995), lays the linguistic basis of decoding or the process of sounding out and blending graphemes into phonemes and this guides the choice of the model as the theoretical framework for this study. The teachers’ role in each of the 4 phases of the model is to identify the most applicable strategy(s) for use with learners in different grades in the EYE tier of CBC.
The study adopted a cross sectional research design. Israel (2013) posits that a cross sectional survey employs descriptive strategies to gather information through interviews, questionnaires or focus group discussions to sampled respondents to obtain necessary data for evaluation of current variables without necessarily controlling them or manipulating the conditions. The study sought to investigate phonemic awareness strategies used by Grade Three teachers without manipulating or controlling the teachers’ school environment hence the choice of the design. Questionnaires which were given to teachers by the researchers were analysed in order to get teachers’ views on phonemic awareness strategies and how they implemented them during literacy instruction in Grade Three. The researchers used Grade Three teachers because they taught pupils English on regular basis and the class was at the apex of the EYE tier where pupils were expected to read accurately and rapidly.

The study was guided by Ehri’s phases of reading model. Ehri (1995) outlines four phases of reading development in learning to read sight words as indicated in figure 1:

![Figure1. A Diagrammatic Representation of Ehri’s (1995) Phases of Reading.](image)

According to Ehri (1995), letter sound connections are not involved during the alphabetic phase as early readers read sight words by establishing connections between selected visual attributes of words, their pronunciations and their phonological storage in memory children who are yet to start schooling formally are in this phase. Pre-alphabetic phase readers read by remembering visual cues accompanying print of items they find in their environment according to Ehri, readers in this phase have easier time reading the word where salient cues were provided linking letters to sounds this represents PPI and PP2 pupils. In order to move a pre-alphabetic reader to partial alphabetic, Byrne and Fielding-Barnsley (1989, 1990) recommend that learners be given training to segment and describe the sounds they hear, shared sounds in words, segmentation of beginning sounds in pronunciations of words and how to identify letters starting with beginning sounds in words. During the full alphabetic phase, beginners remember how to read sight words by forming complete connections between letters seen in the written forms of words and phonemes detected in their pronunciations spellings become amalgamated or bonded to pronunciations of words in memory for example in learning to read ‘spoon,’ full phase readers would recognize how the 5 letters correspond to 4 phonemes in the word, including how ‘OO’ symbolizes /u/. Full alphabetic readers’ representations are sufficiently complete to distinguish easily among similarly spelt words children in grade 1 and 2 are covered in this phase. The difference in the tendency to confuse similarly spelt words was apparent in comparing partial and full alphabetic reader’s performances.

This enables full phase readers to fully connect spellings to the knowledge on pronunciations in remembering how to read sight words and this makes it perhaps the most important phase in reading development as the greatest advantage to word reading occurs in full alphabetic phase because most linguistic connections occur during this phase. During the consolidated alphabetic phase, letter patterns that recur across different words become consolidated. Repeated experience in reading a letter sequence that symbolizes the same phoneme blend across different words and yields a consolidated unit. Consolidation allows readers to operate with multi-letter units that may be morphemes, syllables, or sub syllabic units such as onset and onset and rimes. Grade 3 pupils are expected to be covered in this phase. Whereas full phase-readers would need to form 4 separate connections linking (‘CH’, ‘E’, ‘S’, ‘T’) to the phonemes /tʃ/, /e/, /s/, /t/, respectively, consolidated readers would connect ‘CH’ and ‘EST’ linked to /tʃ/ and /eʃt/. If a reader knew units such as ‘EST’, ‘TION’, ‘IN’ and ‘ENG’ as consolidated units, the task of learning longer sights words such as ‘question’ and ‘interesting’ would be easier for learners. The teachers’ role in each of the phase of reading is to identify the most appropriate strategy(s) to use in teaching pupils reading.

3. DISCUSSION

Grade Three teachers opined that there was a need to explicitly include phonemic awareness in literacy activities in a playful context. Further, this was in line with the findings that phonemic awareness activities should be playful and engaging, interactive and social, and should stimulate curiosity and experimentation with language(Yopp &Yopp,2000, p.132). Games activities used by Grade Three teachers included: thumbs up/ thumbs down game-like activity where learners upon
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correctly discriminating sounds, blending sounds, sounding out and sound segmentation activities were given ‘thumbs up’ for correct responses or ‘thumbs down’ for the wrong responses. Grade Three teachers did indicate that the pupils also used the thumbs up/down game on phonemic awareness activities with their fellow pupils on their own during interactions. Other game like activities such as ‘guess that word’ where the teachers listed the items or pictures of a target word or words and then mentioned the phonemes of the words in a snail-like manner (dragged the phonemes slowly) and then required the pupils to read the whole word(s) before the teacher finished reading them as quickly as possible. This activity helped the pupils identify individual sounds that make up words. Some teachers used ‘mastery bags’ game activity where letter cut outs either from papers or plastics were put in a box or a bag and then the pupils were required to get the words out of the bag/box and write real words of their own or nonsense words. This trained the pupils on sound discrimination and word formation aspects in phonemic awareness.

Some teachers used ‘clapping it out’ game activity where they required the pupils to clap the number of sounds and syllables in words. This activity helped in syllable awareness and improved on sound segmentation skills. In ‘make some noise’ game activity, teachers used different items found in school such as ‘pens’, ‘plates’, ‘cups’, ‘eating fork’ and ‘a glass of water’ to test sound listening skills. Pupils were required to close their eyes (no peeking) and describe the source of the sounds they heard. Every time they responded, they were required to do so in full sentences for example pupils would respond ‘the sound I heard was a plate falling’. The activity would train and prepare the pupils to listen and identify various sounds in English phonemic awareness. Some Grade Three teachers used “can you touch your” game in teaching English language phonemic awareness to Grade Three pupils where the pupils were expected to touch different parts of their bodies and then count and name the letters and phonemes for the parts they touched. For example, when they touched their ‘head’, ‘chin’ and ‘leg’, they would get the letters and the phonemes, saying, I touched my ‘head’ the word has four letters ‘h-e-a-d’ and three phonemes ‘h-ae-d’. Similarly, the word ‘chin’ has four letters ‘c-h-i-n’ and three phonemes ‘ch-i-n’. In the same manner, the word ‘leg’ has three letters ‘l-e-g’ and three phonemes ‘l-e-g’.

Some Teachers used ‘I spy’ game activity to teach English phonemic awareness to grade three pupils. The activity required pupils to look for items in the classroom, on a poster or on a jigsaw as a prop and instead of using the initial phoneme in order to find the word, they were asked to segment the whole word for example a pupil might say “I spy with my little eyes a c-o-a-t” (segmented the whole word) the pupil then locates the coat.

The study found out that the teachers did not use more than one game like activity in giving phonemic awareness instruction and majority stuck on the use of thumbs up/down game. This disadvantaged the learners in terms of opening their minds and horizons on phonemic awareness.

Resources for use with pupils in English phonemic awareness programmes such as coloured blocks, letters plastic cut outs, manila papers, electronic devices such as tablets and felt pens were also reported to be inadequate by Grade Three teachers. It was however found that Grade Three teachers appreciated the use of games in teaching phonemic awareness to their pupils.

Grade Three teachers identified a number of strategies which they used in teaching phonemic awareness such as: Phoneme segmentation which is the ability to break words down into individual sounds. Phoneme segmentation is essential in developing reading and spelling skills. This is particularly so because in order to write children must break the word into its component sounds and select the letters that represent these sounds. The study found out that segmentation tasks such as counting sounds or phonemes in a word, identification of syllables so as to be able to read longer words and the identification of the onset and the vocalic or syllabic consonant in words had not been done adequately as only 9 (20%) teachers identified this strategy and gave adequate activities on its classroom implementation.

Phoneme manipulation is changing individual phonemes in words in order to discriminate sounds and acquire word formation competence. Grade Three teachers discussed the phoneme manipulation strategies they used for teaching phonemic awareness such as switching out the initial sound to make a whole new word for example pupils were asked to switch the first sound in ‘sat’ /s/ with /f/ and then
they read the new word formed ie ‘fat’. Similarly the teacher would mention a word and then give pupils directions on whether to change the initial, medial or final phonemes and read the new word aloud for example. In the word ‘rake’ pupils change the /l/ to /l/ at word initial to form the new word ‘lake’. In the word ‘cot’ pupils change the sound /o/ to /o/ at word medial position to form the new word ‘cat’ and in the word ‘past’ pupils would change /t/ to /s/ at word final position to form the new word ‘pass’. Grade Three teachers also wrote that one of the strategies they used to teach phoneme substitution to their pupils was addition of phonemes where teachers required the learners to add sounds in specific places in words inorder to form new words. For example pupils were given the word sake’ and were required to add sound /n/ after /s/ pupils are then required to read the new word they have formed that is ‘snake’. The study found out that only 10 (22.2%) teachers identified phoneme manipulation skills as a strategy to enhance phonemic awareness in Grade Three although there were many Grade Three pupils who had serious challenges in word formation, reading and writing. The activities teachers wrote as the ones they used for word manipulation for teaching Grade Three pupils were also found to be inadequate.

Teachers wrote that phoneme deletion was a strategy they used to teach Grade Three pupils phoneme substitution where pupils were guided to delete some sounds in words and then read and repeat the words formed after such deletion. For example the teacher would tell pupils that in the word ‘looks’ if we took away /s/ we will be left with the new word ‘look’. Then pupils are given other words such as ‘them’ and they are guided to delete /m/ leaving the word ‘the’. Teachers also identified blending of phonemes as an effective strategy of enhancing phonemic awareness instruction for Grade Three pupils. Phoneme blending is a practice in which phonemes in spoken and written language are blended. Grade Three teachers who were interviewed noted that the ability to orally blend words may involve the blending of syllables, the blending of the onset and rime and lastly, the blending o phoneme with another phoneme in a playful environment. This is consonance with Yopp’s (1992) postulation that phonemic awareness tasks need to be conducted while focusing on playful or game-like strategies.

The study found out that 10 (22.2%) teachers identified Blending as one strategy that can be used in teaching Grade Three pupils phonemic awareness. Blending as a phonemic awareness strategy is key to literacy because of its link between reading and writing. The tasks teachers used for the implementation of the strategy in class were also found to be largely inadequate. Phoneme isolation is the ability to recognise the separate phonemes in words. Grade Three teachers identified phoneme isolation as an effective strategy of enhancing phonemic awareness. Phoneme isolation is the ability to recognise the separate phonemes in words. The study found out 8 (17.8%) teachers had identified phoneme isolation as a strategy that they used to teach phonemic awareness to Grade Three pupils. The researcher noted that majority of the Grade three pupils had carried on their inadequate knowledge on phoneme isolation from the previous Grades leading to the pupils’ dismal performance in literacy. Oddity tasks were identified by some teachers as a strategy they used to teach phonemic awareness. In oddity tests pupils are required to identify which words differ when presented with a set of three or four words. In oddity tests, pupils may be given words with common sounds except one which has a common sound. For example in the words ‘pin’, ‘win’, ‘sit’ and ‘fin’ the odd one out is ‘sit’ because the final consonant ‘t’ was distinctive, in the set of words ‘lot’, ‘cot’, ‘pot’ and ‘hat’, the odd one out is ‘hat’ because of the middle vowel sound /a/ in the word ‘hat’ and in the set of words ‘ham’, ‘tap’, ‘had’ and ‘hat’ the odd one out was ‘tap’ which had a different initial consonant /t/ from the rest.

Oddity tests could also be used to teach children phonemic aspects such as counting the correct number of letters and phonemes in given sets of the words with success. For example the word ‘pitch’ has one more letter than ‘rich’ even though both contain the same number of phonemes. Sometimes oddity tests may help learners recognise that words that rhyme are put into categories. This may include categories of words such as ‘cat’, ‘hat’ and ‘mat’ which share a common sound. Such categories may play an important role in the process of reading. Writing the word ‘cat’ will help them write the word ‘cot’ such that when given the words ‘cat’, ‘cot’ ‘hat’ and ‘mat’ they will be able to recognise the odd word out is ‘cot’ as the other three rhyme this concept will be important in literacy. The study found out that 8 (17.8%) teachers identified oddity tests as an effective strategy.
of teaching English language phonemic awareness at Grade Three in public primary schools. However written oddity tasks ment to enhance phonemic awareness were inadequate and in most cases lacking completely among the phonemic strategies used by Grade Three teachers. A few Grade Three teachers identified minimal pairs as one of the strategy they used to implement literacy instructions in their classes such as using letters ‘c’ and ‘t’ in differentiating the words ‘cube’ and ‘tube’. The study found out that only 2 (4.4%) Grade Three teachers used minimal pairs as a way of implementing English language phonemic awareness in their literacy classes. It is the finding of the study that minimal pairs were inadequately used and ignored in teaching Grade Three phonemic awareness despite their recommendation by Grade Three English literacy curriculum design.

4. Conclusion

The study concludes that phonemic awareness strategies are essential in developing alphabetic principle and orthographic mapping which are key facets in reading and writing among pupils in Grade Three and other Early Years Education (EYE) Grades. According to Shapiro (2011), if a learner cannot identify initial sounds or blend sounds together they are unlikely to develop later reading skills. Further, the study concludes that the use of the traditional direct instruction method by teachers when teaching English language literacy should be discouraged but instead scaffolding explicit phonemic awareness strategies should be encouraged to ensure pupils experiencing difficulties in reading and writing achieve success. Secondly, the study concludes that phonemic awareness strategies namely; phoneme blending, phoneme segmentation, phoneme manipulation (phoneme substitution, phoneme addition, and phoneme deletion), phoneme isolation, use of oddity tasks and use of minimal pairs are essential in enhancing English language literacy. Thirdly, the study concludes that implementation of the phonemic awareness strategies faces the challenge of inadequate resources for use by pupils and teachers in public primary schools and Fourthly, continuous engagement in Tusome literacy programme that equips and trains lower primary teachers and curriculum support officer (CSO) on literacy methodologies in public primary schools is crucial in addressing the challenges arising from low English language literacy.

References


Israel, G. (2013). Determining Sample Size. Institute of Food and Agricultural Sciences (IFAS), University of Florida, PEOD-6, 1-5.


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