

Influence of Letter Sound Correspondence on Performance of English Reading in Early Childhood

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Abstract

Letter sound correspondence is the relationship between sounds (phonemes) and letters (graphemes). These connections between the sounds in words and the letters that are used to represent those sounds are referred to as letter sound correspondence. The effect of letter sound correspondence on performance of English reading is highlighted on basis of phonemic awareness and phonological awareness. The objective of this mixed method study was to examine the influence of learners' ability to correspond letters to their correct sounds on performance of English reading in Grade One. The geographical locale of the study was Keiyo Sub County. Stratified and random sampling techniques were used to select the 26 schools and 78 teachers. Fifty two (52) pupils of Grade One were selected (a boy and a girl) using simple random sampling and assessed. The instruments used were questionnaire for ECDE and Grade One teachers and an EGRA checklist for Grade One learner. Data was analyzed quantitatively and qualitatively. The research results rejected the null hypothesis which stated that there exists no significant relationship between a learner's ability to correspond letters with their correct sound and performance of English reading in Grade One. This was interpreted to mean that pupils need to be taught letter sound correspondences as it will improve their ability to read English. Given the importance of letter sounds in learning to read, this study recommends that preschool teachers be adequately prepared in phonemic and phonological awareness for sustainable development.

Key words: Letter Sound Correspondence, Phonemic Awareness, Phonological Awareness, Preschool

INTRODUCTION

According to Ehri (2003) Letter sound correspondence is the relationship between sounds (phonemes) and letters (graphemes). These connections between the sounds in words and the letters that are used to represent those sounds are referred to as letter sound correspondence. As demonstrated by Scott and Ehri (1990), there exists a relationship between letter name and letter sound because children become capable of forming letter sound correspondence when they learn letters well enough to take advantage of the phonetic cues the letters provide. Learners who acquire and apply their alphabetic principle will reap long term benefits in reading acquisition. Studies which track eye movement during reading revealed that skilled readers attend to almost every word in a sentence and process the individual letters that each word comprises (Levin, 2002). Letter sound correspondence guides learners towards understanding word spelling with ease. They are then able to decode (sound out) and encode (assign meaning) to the word as phonemes are handled with distinction. This paper focuses on the letter sound correspondence in terms of phonemic awareness and phonological awareness.

Phonemic Awareness

A phoneme is the smallest unit of sound in a language that holds meaning. Almost all words are made up of a number of phonemes blended together. Phonemic awareness involves an understanding of the ways that sounds function in words (Ehri, 2010). The ability to tell the difference between the individual sounds (phonemes) is called phonemic awareness. When beginning school, phonemic awareness is a predictor of success in reading instruction (The Reading Panel, 2000). According to Light et al (2008) alphabet instruction should start by teaching the sounds of letters not their names. Knowing the names of letters is not necessary to read and write. Knowledge of letter names can interfere with success of decoding. For example the learner looks at a word and thinks of the names of letters instead of sounds. Early Childhood curriculum needs to outline the order of teaching the alphabetic phases: the letter name, letter shape and letter sound.

As Adams (1990) claims in agreement, teaching learners' letter-sound correspondence is meaningful when learners have a solid visual familiarity with the individual letters and if they understand that sound paired with letters are what make up words. These sounds may seem complex and notoriously rule-breaking, but with learners understanding, there will be correct letter-sound correspondence. Presenting to the learners paired up letters in order of upper and lowercase respectively will increase visual familiarity of letters with same sound.

Those learners who did not possess sufficient phonemic awareness skills had to rely on memorizing words by sight. As these children entered the next level, the texts they read grew less patterned and predictable and as a result their reading skills began to suffer. These results prove that deficit of phonemic awareness persists over time. If it is not corrected, it will continue to affect reading performance in middle and high school and even into adulthood (Fawcett and Nicolson, 1995). Phonemic awareness begins developing during the early years of formal schooling as children interact with each letter and with various letter combinations. In relation to these a learner is to acquaint with phonemic awareness before putting this knowledge into print. This study sought to establish the ability of learners to correspond letters with the correct sound so as to indicate phonemic awareness. Phonemic awareness is to be emphasized in ECDE to ensure that pupils are prepared for phonological activities

Phonological Awareness

Phonological awareness is the ability to recognize that words are made up of a variety of sound units. As a child develops phonological awareness, he or she not only comes to understand that words can be segmented into larger sounds 'chunks' known as syllables and each syllable begins with a sound (onset) and ends with another sound (rhyme). Phonological awareness provides the basis for phonics. Phonics is the understanding that sounds and print letters are connected in the act of reading. A child's phonological awareness is determined by the ability to apply several skills; recognizing and using rhymes, breaking words into syllables, blending phonemes into syllables and words, identifying the beginning and end of sounds in a syllable and seeing smaller words in larger words like *cat* in *catalogue* (Ehri, 2010). Letter sounds are introduced in association with letter names which provide valuable cues towards appropriate sound. When learners grasp sound,

reading becomes easier as each word is broken down into individual letter sounds by a learner.

Children without proper phonological awareness skills must memorize words. Phonological awareness, particularly the skills of segmenting words into phonemes can help children learn to spell. When learners understand that sounds and letters are related in a predictable way, they can connect the sounds to letters as they spell new words (Put Reading First, 2003). The understanding of letter sound correspondence is a prerequisite to effective word identification and a primary difference between strong and poor readers is their ability to use letter-sound correspondence to identify words. Going by this, it was important to find out if there were learners who memorize words instead of exhibiting the ability to spell words; sound the letters making up a word. Phonological awareness helps children to understand the relationship between spoken and written language, letter-sound knowledge is the key to applying this understanding to read and spell words. Poorly developed knowledge of letter-sound correspondences has been found to be the most common cause of reading difficulty (Groff, 2014). Mastery of letter-sound correspondences is essential for the accurate and efficient recognition of many words because skill in the application of letter-sound knowledge leads children to develop rapid and accurate decoding of phonically regular words (Goswami and Bryant, 2010). It is important to note that knowledge of letter sounds offer clues to sounding the words. Therefore it is necessary to ensure learners are taught letter sounds and after memorization, introduction of letter shapes and finally letter names may come in. Phonological awareness is a prerequisite towards successful reading.

Phonological awareness is defined as the ability to discriminate and manipulate the sound structure of language while phonemic awareness is the understanding of a sound, such as the initial sound of a word. Pupils struggling with knowledge of letter names, letter sounds, and phonemic awareness may have difficulty learning reading and writing skills (Adams, 1990). Learning to read English words, depends on the ability to analyze sounds in words, therefore teachers should provide opportunities for children in ECDE to discriminate words using phonological cues. As children become consciously aware of the sound properties of words their ability to manipulate smaller units of sound develops (Clay, 2001). Bradley and Bryant, (1978), suggested that difficulties in phonological awareness were the foundation of reading problems and reports that a deficit in phonological awareness contributed to the reading difficulties experienced by otherwise normally developing school age children. Phonological awareness will be acquired effectively only if pre-reading skills emphasize letter-sound-correspondence activities. This will enable children to distinguish letter sounds through rhymes and alliteration. Teachers need to distinguish between phonemic awareness and phonological awareness so as to offer constructive instruction for word processing to be made easier to young learners. Each of these skills, when integrated in meaningful activity, has an important role to play in children's literacy development.

Research Approach

According to Uwezo Kenya Report (2011) one out of five children in grade four cannot read a simple grade two paragraph. This was found out to have affected mostly the semi arid areas in Kenya. The Keiyo Sub County being a semi arid area makes it susceptible to challenges like rampant absenteeism. This is due to learners' interest in activities like herding which limit class attendance. Basing on this, the study sought to investigate the relationship between letter sound correspondence and performance of English reading in Grade One in Keiyo Sub County, Elgeyo Marakwet County. The study adopted mixed method approach so as to gain a comprehensive understanding of the influence of letter sound correspondence on performance of English reading. Questionnaire and Early Grade Reading Assessment tool were used to collect both qualitative and quantitative data. Stratified and random sampling techniques were used to select 26 schools and 78 teachers. Fifty two (52) pupils of Grade One were selected (a boy and girl) using simple random sampling. The EGRA tool was used to test a learner's ability to sound out letters presented in lowercase. To analyze results, descriptive and inferential research modes were applied to determine if there existed a relationship between letter sound correspondence and performance of English reading in grade one.

RESULTS AND DISCUSSIONS

The null hypothesis stated that there is no significant relationship between a learner's ability to correspond letters with their correct sound and performance of English reading in Grade One. To be able to test this hypothesis, it was necessary to obtain responses from teachers. Teachers' opinion regarding learner's ability to correspond letters with their correct sound were rated using a 5 point likert scale. Specifically, the teachers were asked to respond to a series of statements regarding learner's ability to correspond letters with their correct sound. These responses were then analyzed in terms of the extent to which they agreed with them, and so tapping into their cognitive and affective components of their knowledge on the learner's ability to correspond letters with their correct sound. The findings are as illustrated in Table 1

Table 1: Learner's ability to correspond letters with their correct sound*Key: SD= Strongly Disagree; D=Disagree; UD =Undecided; A=Agree; SA=Strongly Agree; F=Frequency.*

Statement		F	SD	D	UD	A	SA	Total	Mean
1.	Learners transiting to class one	F	2	13	0	34	29	78	3.96
	have high ability of corresponding letters with their sounds	%	2.6	16.7	0	43.6	37.1	100	79.2
2.	Teaching words that sound the same eases pupils' ability to read letters with their correct sounds	F	2	10	0	44	22	78	3.95
		%	2.6	12.8	0	56.4	28.2	100	79.0
3.	I use flash cards to help learners correspond the sounds of words	F	1	1	0	33	43	78	4.48
		%	1.3	1.3	0	42.3	55.1	100	89.6
4.	Availability of letter charts in my class has enhanced pupils ability to read letters with their sounds correctly	F	2	2	3	29	42	78	4.37
		%	2.6	2.6	3.8	56.4	53.8	100	87.4
5.	Pupils' in my class have the ability to correspond letters with names of animals, plants or objects	F	3	14	3	44	14	78	3.67
		%	3.8	17.9	3.8	56.4	17.9	100	73.4
6.	Learners enjoy variation of teaching methods enhancing their ability to correspond letters to their sounds	F	2	2	2	39	33	78	4.26
		%	2.6	2.6	2.6	50	42.3	100	85.2

These findings imply that majority of the teachers (89.6%) use flash cards to help learners correspond the sounds of words. Most teachers (87.4%) agreed with the statement that availability of letter charts in their classes had enhanced pupil's ability to read letters with their sounds correctly while 85.2% agreed that learners enjoy variation of teaching methods enhancing their ability to correspond letters to their sounds. Notably, 79.2% agreed that learners transiting to class one had high ability of corresponding letters with their sounds while 79% supported the statement that teaching words that sound the same eases pupils' ability to read letters with their correct sounds. Further 73.4% agreed to the statement that pupils in their class had the ability to correspond letters with names of animals, plants or objects. This study concurs with a study by Light et al, (2008) who explain that a high level of phonemic awareness makes learning to read easier and more successful.

Through the open ended questions, it was established that majority of teachers identified English words which are learnt by phonic method thus by sight. Learners easily read them as they bear alliterative and rhyming sounds. The words therefore have a familiar sound that helps learners read other new words. This finding is in agreement with Adams, (1990) who asserts that teachers begin by children hearing rhymes and alliteration. Learners then need to be able to hear and discriminate different beginning, middle and ending sounds in words. Activities that reinforce these skills can be taught common word families which will assist learners in using these patterns to identify unknown words. The ability to hear, see and use rhymes as a reliable clue for reading new words and spelling words that sound alike offers learners a powerful insight into how English spelling works. Mastery of letter-sound correspondences is essential for the accurate and efficient recognition of many words because skill in the application of letter-sound knowledge leads children to develop rapid and accurate decoding of phonically regular words (Goswami and Bryant, 2010). The recall and application of letter-sound knowledge to decode words, enables children to concentrate on text comprehension.

Phonics instruction aims at helping children to be able to state the rules governing letter sound relationships. This is to get across the alphabetic principle; that there is a relationship between sounds and letters. Use of phonics then is a system of instruction used to teach children the connection between letters and sounds (Snow et al, 1998). Letter sound knowledge, as compared to letter names, is more relevant and useful to encode and decode words.

Pupils were tested using the Early Grade Reading assessment tool basing on the objectives of the study. Particularly the researcher sought to test learner's ability to correspond letters with their sounds in relation to performance of English reading in Grade One. The findings were as shown in Table 2;

Table 2: Recognition of letter sounds

Letter	Correct		Incorrect	
	Frequency	%	Frequency	%
m	33	63.46	19	36.54
n	22	42.31	30	57.69
r	25	48.08	27	51.92
p	11	21.15	41	78.85
t	18	34.61	34	65.38

As shown in Table 2, it was established that 33 (63.46%) of pupils gave the correct letter sound corresponding to letter m. Further 19(36.54%) did not manage to recognize the letter sound /m/. As shown, 22(42.31%) recognized sound /n/ whereas 30(57.69%) did not sound it. It was realized that 25(48.08%) of pupil respondents could give the correct sound to letter r. However, 27(51.92%) did not recognize sound /r/. Further 11(21.15%) recognized sound /p/ whereas 41(78.85%) did not manage to recognize the sound. It was established that 18(34.61%) were able to recognize sound /t/ whereas 34(65.38%) did not manage to identify the sound of letter. From the pupils test it is established that learners find sound /m/ more familiar than sound /p/. Phonological awareness helps children to understand the relationship between spoken and written language, letter-sound knowledge is the key to applying this understanding to read and spell words. This finding is in agreement with Groff, (2014) who says that poorly developed knowledge of letter-sound correspondences has been found to be the most common cause of reading difficulty.

Hypothesis Testing using Multiple Regression

The research hypothesis was tested using the significance level of coefficients to ascertain the influence of letter sound correspondence on performance of English reading in Grade One. The research hypothesis stated; there exists no significant relationship between a learner's ability to correspond letters with their correct sound and performance of English reading in Grade One.

The research results rejected the null hypothesis which stated that there exists no significant relationship between a learner's ability to correspond letters with their correct sound and performance of English reading in Grade One. The results indicated that there was a strong significant relationship ($p= 0.000$) between a learner's ability to correspond letters with their correct sound and performance of English reading in Grade One. This was interpreted to mean that pupils need to be taught letter sound correspondences as it will improve their ability to read English.

CONCLUSION AND RECOMMENDATION

Based on the findings, the following conclusions and recommendations were made; 1. There is a significant relationship between a learner's ability to correspond letters of the alphabet with the correct sound and performance of English reading. This implies that it is important to start formal schooling by teaching letter sounds before introducing letter names and letter shapes. In view of the study finding, this study proposes to the Kenya Institute of Curriculum Development (KICD) through the Ministry of Education (M o E) that, pupils should be introduced to letter sounds

as soon as they join preschool since this is a Reading Readiness skill that is a critical underpinning to Performance of English Reading.

2. Pre- school teachers to ensure that they give the right model of letter sounds to learners. Basing on this, the study recommends that the government through the ministry of education to provide computer programs that clearly gives a uniform sound system to all letters of the alphabet.

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