

Effectiveness of Structured Reading Programme (SRP) to teach Vowel Sounds in English Language through Expository Method

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ABSTRACT

The research assumes that improving one's phonemic awareness, alphabetic awareness, and word study/decoding skills can help one recognise words more easily. The main objective of Structured Reading Programme (SRP) was to give pupils practical phonemic awareness and word study skills. The strata of the study were constructed using a sample of 70 lower primary school students belonging to class I and II. A pre-test measure, a treatment (SRP), and a post-test were all included in the researcher's quasi experiment, one-group, pre-test-post-test design. There was a statistically significant difference between the pre-test mean score and the post-test mean score, according to the results. Inferential statistics revealed that teaching vowel sounds through exposition was beneficial among Lower elementary children.

Keywords: Exposition method, diphthongs, teaching vowel, Phonemic Isolation, Phonemic Segmentation, Phonemic Blending, Phonemic Segmentation

Introduction

For non-native students who are taught to read and write in English, it is a foreign language. In state syllabus schools, children learn English stories, essays, poems, letters, dramas, and grammar. However, Systematic Phonics Instruction is not used to teach children English speech sounds. These pupils are not exposed to speaking English at home at an early age; they are not exposed to perfect English pronunciation even at school with their teachers and peers. Even while Received Pronunciation from British does not have to be followed literally, pupils must be able to pronounce words correctly and speak in the manner of English native speakers in order to communicate effectively.

Expository Method is the method used by the researcher to deliver Structured Reading Programme. It is a deductive learning method in which students deduce the articulation of

phonemic sounds from the materials organised to allow for thinking through parallels and stories; pictures, demonstrations, and sing-alongs rather than discovering them for themselves.

1.1 Objective of the study

To study the relationship between phonemic awareness and word recognition after implementing the Structured Reading Programme (SRP).

1.2 Null Hypothesis

H1: There is no difference in phonemic awareness score of class I and II students before and after implementing Structured Reading Programme (SRP).

H2: There is no difference in word recognition score of class I and II students before and after implementing Structured Reading Programme (SRP).

II Review of Literature

Related review of sounds of English language and vowel sounds, phonemic awareness, word recognition and the exposition teaching strategy are discussed below.

2.1 Sounds of English Language

In words, a letter can have numerous sounds, such as the letter “c,” which is pronounced /s/ in the word “city” and /k/ in the word “cut.” Similarly, two or more letters together can produce a single sound, such as “sh” in the word “sheep”, “ck” in the word “flock”, and “tch” in the word “patch”. Similarly, a vowel sound can be made by several spellings and different vowel sounds can be formed by the same spelling, such as the vowel sound / i: /, which can be formed by “ea”, “ee”, “ie”, “ei”, and so on (Schwartz and Sparks, 2019).

2.2 Phonemic Awareness

Phonemic awareness is the ability to pay attention to the sound structure of words, to divide and manipulate sounds. Children learn the sounds and their combinations in their languages, forming phonological representations for real words (Goswami, 2016).

2.3 Word Recognition

Word recognition is the act of seeing a word and recognizing its pronunciation immediately and without any conscious effort. It requires phonological awareness, word study /decoding abilities for automatic word recognition which is a pre requisite for fluency in reading in students. Text comprehension relies heavily on the capacity to sound out and recognise words. rather than memorise (Mohanraj, 2023).

2.4 Exposition Strategy

Sation (2009) opined that explicit instruction helps

learners develop a better understanding of the articulatory positions, vowel qualities, and vowel distinctions in English. It can be implemented through structured lessons, targeted exercises and feedback from teachers or pronunciation coaches. This gives students plenty of listening practise and trains children’s ears to distinguish between similar vowel sounds, which can be difficult for non-native speakers. Contextual cues in vocabulary instruction are widely recognised as an effective language learning approach (Behera, 2024). The audio-visual aids help students better understand how vowel sounds are produced, combine sounds into words and ‘map’ words into long term sight vocabulary (Mulia, 2022).

III Methodology

3.1 Selection of Area

A school in selected area (Kanayannur and Kochi Taluk) of Ernakulam AEO was chosen for study.

3.2 Selection of Sample

A quasi-experimental design with one group pre-test and post-test was adopted, with 70 students from classes I and II (35 each), and no control group.

3.3. Selection of Tools

3.3.1 Ekwall and Shanker Reading Inventory

The Ekwall and Shanker Reading Inventory (ESRI, 2014) tests phonemic awareness abilities such as rhyme production, rhyme recognition, initial sound recognition, phoneme blending, and phoneme segmentation. The word recognition battery comprised both sight words and words that is decodable with word study skills.

3.3.2 Structured Reading Programme an Expository approach

Researcher as a teacher conceptualised the Structured Reading Programme and implemented the phonemic awareness modules and taught the vowel sounds in English Language through Exposition Strategy. The long and short sounds of vowels and their combinations were shown in worksheets and taught through activities using visual tactile strategies like clap and punch and

Phonemic Script with visual imagery. Audio simulations were introduced as cost-effective simulations (particularly digital simulations) are used to teach students throughout the world to enhance their language acquisition (Tandon, 2017). Structured Reading Programme rules for long and short vowel sounds with examples are displayed in Table 1 and 2.

Table 1: Table depicting vowel sounds (Monothongs)

S: No	sounds	Spellings	Words
1.	/ɪ/	i, y, ui	ship, city, build
2.	/i:/	e, ee, ea, ey, ie	she, bee, team, key, field,
3.	/e/	e, ea	pen, bread
4.	/æ/	a	man, jam
5.	/ʌ/	u, ou	cup, country
6.	/ə/	a, er, or, our	ago, father, doctor, colour
7.	/ɜ:/	ir, ur, wor	bird, burn, word
8.	/ɑ:/	a, al,	as, after, calf, last
9.	/ɒ/	o, ou	hot, clock
10.	/ɔ:/	or, au, aw,	for, cause, raw
11.	/ʊ/	u, ould	put, could, would
12.	/u:/	oo, ue, ew	moon, blue, chew

Table 2: Table depicting vowel sounds (Diphthongs)

S: No	sounds	Spellings	Words
1.	/eɪ/	ai, ay, a-e	wait, day, space
2.	/aɪ/	ie, y, uy, igh	die, by, buy, high
3.	/ɔɪ/	oi, oy, awi	soil, toy, drawing
4.	/əʊ/	o, oa, ow, ou	poke, boat, blow, soul
5.	/aʊ/	ou, ow	out, about, cow
6.	/ɪə/	ear, eer, ier	dear, sheer, fierce
7.	/eə/	air, are, ear	fair, care, share, bear
8.	/ʊə/	oor, our	moon, tour

3.4 Teaching Vowel Sounds in English Language using Structured Reading Programme

In this research, the variable of the study, phonemic awareness was taught using the following phonemic awareness activities:

Phonemic Isolation: This activity required students' recognizing individual sounds in words presented to them. Example for the word 'fan' sounds heard are /f/ /æ/ /n/ as in man (Visual imagery given in Phonemic Chart).

Phonemic Identification: When students are presented with words with common sounds like in cube, tube /cju:b/, /tju:b/, they are required to recognize the common long vowel sound /u/ with /y/. This activity was important while distinguish 2 long vowel sounds of 'u' which are /u:/ as in flute and /ju:/as in cube.

Phonemic Segmentation: In Phonemic segmentation, the students were trained to break a word into its sounds by pronouncing it. This activity required children to identify the sounds in the word 'tin' which are /t//i//n/.

Phonemic Blending: In Phonemic blending, the children are required to listen to a sequence of sounds in a word carefully and then combine them together to form a recognizable word. For the word 'pray' sequence of sounds like /pr//ei//y/ should be combined to form the recognizable word 'pray'.

Phonemic Substitution: In this activity of Phonemic Substitution, the students first are expected to recognize the place of the sound which needs to be substituted. For example, to replace the first sound in 'ten' with /p/. Once they master substituting the beginning sound, the activity can be used to replace the middle sounds in words with the aid of visual imagery given in

the Phonemic Chart.

3.5 Validity of the Tool

3.5.1 Ekwall and Shanker Inventory (ESRI)

Ekwall and Shanker Inventory (2014) is a set of standardized test instruments designed for the assessment of individual students' reading abilities such as alphabetic awareness, phonemic awareness, word recognition, fluency (Phonics skills) in reading text and comprehension passage.

3.5.2 Structured Reading Programme (SRP)

The construct and content validity of phonemic and word study modules of the Structured Reading Programme were finalised by linguistic specialist teaching in a Kerala school. Cronbach's alpha coefficient was used to evaluate the tool's reliability.

3.6 Collection and Analysis of Data

Pre-test score of phonemic awareness and word recognition tests using the Ekwall and Shankar Inventory were taken in the beginning of the academic year post pandemic before implementing Structured Reading Programme. To determine whether the conceptualised Structured Reading Programme modules were effective at the end of the applied intervention programme, both the test groups (class I and II) were subjected to post-test measures. The data was analysed using Statistical Package for Social Sciences (SPSS).

3.7 Interpretation of Data

3.7.1 Descriptive statistics of phonemic awareness score of class I and II students

The mean score difference in phonemic awareness (pre-test and post-test score) among class I and II students are displayed in table 3.

Table 3: Descriptive Statistics of Phonemic Awareness Score of Class I and II Students

Phonemic Awareness	Mean	N	Minimum	Maximum	Standard Deviation
Class I					
Phonemic Awareness Score (Pre-test)	14.87	35	13	19	1.86
Phonemic Awareness Score (Post-test)	28.09	35	20	34	3.09
Class II					
Phonemic Awareness Score (Pre-test)	17.23	35	14	21	2.23
Phonemic Awareness Score (Post-test)	31.83	35	27	37	3.25

It is clear from Table 3 that the mean post-test score of phonemic awareness have increased to (28.09, 31.89) from pre-test score (14.87,17.23) among class I and II students respectively after implementing Structured Reading Programme.

3.7.2 Paired sample ‘t’-test

Table 4 depicts if the difference in pre-test and

post-test score of phonemic awareness is statistically significant.

Null Hypothesis (H1)

There is no difference in phonemic awareness score of class I and II students before and after implementing Structured Reading Programme.

Table 4: Paired Sample Test of Phonemic Awareness Score of Class I and II students

Pair	Paired Differences					t	df	Sig (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Class I Phonemic Awareness Score (Post-test) - Phonemic Awareness Score (Pre-test)	13.39	2.98	.356	12.68	14.09	37.65	34	.000
Class II Phonemic Awareness Score (Post-test) - Phonemic Awareness Score (Pre-test)	14.60	2.79	.473	13.64	15.56	30.86	34	.000

From Table 4, it is evident that there is difference between post-test and pre-test phonemic awareness score ($t_{34} = 37.65, p < 0.001$) for class I students. Similarly, there is difference between post-test and pre-test phonemic awareness Score ($t_{34} = 30.86, p < 0.001$) for class II students. Thus the null hypothesis (H1) which states that there is no difference in phonemic awareness score of class I and II students before and after implementing Structured Reading Programme is not accepted. On average, post-test phonemic awareness score for class I students were 13.39 points higher than

pre-test phonemic awareness score (95% Confidence Interval [12.68, 14.09]). Post-test phonemic awareness score for class II students were 14.60 points higher than pre-test phonemic awareness score (95% Confidence Interval [13.64, 15.56]).

3.7.3 Descriptive Statics of word recognition score of class I and II students

The mean score difference in word recognition score (pre-test and post-test score) of class I and II students are displayed in Table 5.

Table 5: Descriptive Statistics of word recognition score of class I and II Students

Word Recognition	Mean	N	Minimum	Maximum	Standard Deviation
Class I					
Word Recognition Score (Pre-test)	12.8	35	7	20	2.23
Word Recognition Score (Post-test)	25.7	35	20	31	2.9
Class II					
Word Recognition Score (Pre-test)	14.57	35	7	23	3.73
Word Recognition Score (Post-test)	27.11	35	20	36	2.73

It is clear from Table 5 that the mean post-test score of word recognition have increased to (25.7,27.11) from pre-test score (12.8, 27.11) for class I and II students respectively after implementing Structured Reading Programme. Whether it is statistically significant is depicted in Table 6.

3.7.3 Paired sample 't'-test

Table 6 depicts if the difference in pre-test and

post-test word recognition score of class I and II students are statistically significant.

Null Hypothesis (H2)

There is no difference in word recognition score of class I and II students before and after implementing Structured Reading Programme.

Table 6: Paired Sample Test of Word Recognition Score of Class I and II students

Pair	Paired Differences					t	df	Sig (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Class I Word Recognition Score (Post-test) – Word Recognition Score (Pre-test)	12.54	3.79	.453	11.64	13.45	27.69	34	.000
Class II Word Recognition Score (Post-test) – Word Recognition Score (Pre-test)	13.60	3.79	.453	12.54	14.46	28.72	34	.000

From Table 6, it is evident that there is difference between post-test and pre-test word recognition score of class I students ($t_{34} = 27.69$, $p < 0.001$). On average, post-test word recognition score were 12.54 points higher than pre-test word recognition score (95% Confidence Interval [11.64, 13.45]). Similarly, there is difference between post-test and pre-test word recognition score of class II students ($t_{34} = 28.72$, $p < 0.001$). On average, post-test word recognition score were 13.60 points higher than pre-test word recognition score (95% Confidence Interval [12.54, 14.46]). Thus the null hypothesis (H₂)

which states that there is no difference in word recognition score of class I and II students before and after implementing Structured Reading Programme is not accepted.

3.7.4 Correlation between phonemic awareness score and word recognition score

To study the relationship between phonemic awareness and word recognition score after implementing Structured Reading programme, Product moment coefficient of correlation was measured.

Table 7:

Correlation between Phonemic Awareness Score and Word Recognition Score of Class I and II

Correlation between 2(a)Word Recognition Score and Phonemic Awareness Score		Phonemic Awareness Score (Post- Test)	2(a) Word Recognition Score (Post-Test)
Class I Phonemic Awareness Score (Post-Test)	Pearson Correlation	.822	1
	Sig. (2-tailed)	.025	
	N	35	35
2(a)Word Recognition Score (Post-Test)	Pearson Correlation	1	.822*
	Sig. (2-tailed)		.025
	N	35	35
Class II			
Phonemic Awareness Score (Post-Test)	Pearson Correlation	.759**	1
	Sig. (2-tailed)	.000	
	N	35	35
2(a)Word Recognition Score (Post-Test)	Pearson Correlation	1	.759**
	Sig. (2-tailed)		.000
	N	35	35

*Correlation significant at 0.05 level(2-tailed) ** Correlation significant at 0.01 level(2-tailed)

It is clear from Table 7 that there is significant relationship between phonemic awareness score and word recognition score among class I students of experimental group ($r=.822$, $df=35$, $p(2\text{-tailed})=.025 < 0.05$ which is significant). The positive sign of 'r' ($r=.822$) indicates that there is a positive relationship (correlation) between phonemic awareness score and word recognition score. Similarly, there is significant relationship between phonemic awareness score and word recognition score among class II students of experimental group ($r=.759$, $df=35$, $p(2\text{-tailed})=.000 < 0.01$ which is significant). The positive sign of 'r' ($r=.759$) indicates that there is a positive relationship (correlation) between phonemic awareness score and word recognition score.

Conclusion:

Paired sample t-test confirmed that there is difference in phonemic awareness Score and word recognition score of class I and II students before and after implementing Structured Reading Programme (SRP). Product moment coefficient of correlation shows that there is linear positive relationship between phonemic awareness score and word recognition score. It can be considered that Structured Reading Programme delivered through expository method to teach consonant and vowel sounds have brought the change. The test sample spent their kindergarten years learning English language through online mode during the pandemic years. To bridge the gap between the acquired and

required level of phonemic awareness skill the sample were subjected to the intervention (Structured Reading Programme) which proved to be effective in teaching sounds of consonants and vowels and thereby successful word recognition.

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