

# Evaluation of Educational Technology in ELT on Students' Reading Skills with Reference to Kolkata, West Bengal

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**Abstract** – The present study aims to evaluate the assessment of educational technology in ELT on the reading skills of students. The experimental approach was adopted by the research. The researchers prepared a multimedia kit with 10 reading ability components such as phonemes, segmenting, substituting, vowels & consonants, prefixes & suffixes, nouns, prepositions, verbs, articles and SVO pattern for reading skill measurement. The multimedia system was checked by 30 5th grade students from Kolkata, West Bengal. There were 15 control groups out of 30 students and 15 were experimental groups. Treatment with the conventional chalk and talk approach was given to the control group and multimedia package treatment was given to the experimental group. There were 10 materials in a kit and each material was checked each day. To assess their academic performance, the researchers performed pre-tests and post-tests.

**Key Words** – Reading Skills, Components, Multimedia Package, Control Group and Experimental Group

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## 1. INTRODUCTION

Education in primary school plays a vital role in making the child an educated individual. In the entire education structure, it is the most crucial period and has been recognized as an endeavour of paramount importance. A child develops physically and psychologically at this age laying the basis for the growth of personality, habit, abilities and other required attributes.

In this digital era, education plays a predominant role. In the future, proper education creates many ways to go ahead. It makes individuals with technical skills mentally strong, socially respectable and guarantees a good position in the job market. Everyone has his or her own ambition to do something different in life.

In the English language classes, teachers using technology are not only strengthening their teaching for their students; they are transforming the very essence of the instruction. Promoting learning is the main purpose of education. If this function is to be accomplished, by rendering the associated pedagogy dynamic, the multimedia kit would have to expand and increase the level of student learning. There is no question that several desirable

improvements in pedagogy in many ways have been effectively brought on by the digital kit. A few of these are: teaching and learning methods, teaching style of learning, actions and context in which teaching and learning take place.

The tendency to move away from teacher-centered teaching to encourage multimedia learning, particularly through group work and student-centered learning. In the co-construction of skills, teachers and learners are allies. In order to make students learn more autonomously and quickly, they need to be involved in studying. While new technical instruments continue to develop, multimedia plays a very significant role in teaching the English language. Using multimedia presentation increases the comprehension of language by students (Sharma & Pooja, 2016). As multimedia plays a crucial role in teaching and brings importance to the learning experience, this research has made a positive contribution to the ability of primary school students to read and write.

Multimedia is becoming an important ingredient of our lives, providing interest and new opportunities for language instruction. The achievement of multimedia will allow educators to take full advantage of technology to teach non-native-

speaking students English as a second language. In traditional learning, by listening in a very passive role, learners acquire knowledge. In addition, learners perform specially designed mechanical and repeated exercises for them. Conventional learning is not conducive to grow student's learning interest, in the divergent to multimedia instruction, which is vibrant means, presenting information in a practical and vivid manner. The author claims that the introduction of multimedia would significantly improve the effect of teaching (Dong & Li, 2011 as cited in Grzeszczyk, 2016).

Each student in the classroom has a preferred visual, aural, and kinesthetic learning modality. Multimedia helps in establishing curriculum that appeals to visual, aural and kinesthetic students, therefore, learners have equal opportunities in their performances (Grzeszczyk, 2016). (Grzeszczyk, 2016). One of the vital goals of multimedia based language teaching is to promote students' motivation and learning interest, which can be a practical way to get them involved in the language learning (Thamarana, 2015). (Thamarana, 2015). Multimedia has the potential to go beyond the boundaries of interaction and explorative learning and also promote students' motivation and learning interest. Hence, the researcher adopted multimedia enhanced language learning for the primary school students.

English teachers constantly make an attempt to strengthen their teaching activities as a joyful one to improve English learning. New educational strategies focused on technology, including computer-based learning materials, particularly multimedia, are commonly recognised to have tremendous potential to improve the way people learn (Mayer, 1999, Sweller, 1999; Van Merriënboer, 1997). As a teacher method, the use of Multimedia Enabled Instructional Technique has an important, positive influence on learning English. The observations can be seen in the mindset of students towards learning and self-concept and self-esteem, and learning becomes more student-centered as well. The interactive kit can be used to facilitate co-operative learning and encourage enhanced teacher-student engagement. Latest polls suggest that students prefer taking classes that use digital displays and they believe that multimedia classes are more engaging and thrilling (Sharma & Pooja, 2016). This study is carried out under the basis that the digital instructional approach would have an effect on primary level English teaching. When the rudiments are clearer to the learner, they develop interest, use their skills, and improve the language effortlessly.

## 2. REVIEW OF LITERATURE

Review of literature is collected from different sources such as journals, including international, national, and peer-reviewed journals, books, edited books and computer databases of literature namely, Science Direct, Web of Science, Jstor, Ebsco, and

Scopus which include both primary and secondary sources in the form of print and online material.

Mehmet Altin and Asuman Seda Saracaloğlu (2018) this study explores the effects of reading comprehension instruction enriched with cultural materials on the knowledge of vocabulary and attitudes towards English lessons of seventh graders. In the spring semester of the 2013–2014 academic year, the study group consisted of two 7th grade classes at a socio-economic middle-level public school in Aydın Province. A pretest and post-test quasi-experimental model was used in the study. Reading comprehension instruction enriched with cultural materials in two lesson hours per week was provided to the learners in the experimental group for 6 weeks, while the control group followed their usual reading comprehension instruction. According to the findings, reading comprehension instruction enriched with cultural materials contributed significantly to the awareness of vocabulary and attitudes of learners towards English lessons.

Namhee (2017) Several observational research and detailed reading syntheses have suggested that intensive reading in second and foreign language settings has positive effects on language learning. However, there were methodological or curricular shortcomings in many of the studies, raising concerns about the claimed beneficial effects of intensive reading. The current study adds to the limited collection of well-controlled studies by evaluating the effect of a rigorous reading approach over a 15-week semester on the reading comprehension, reading rate, and vocabulary acquisition of students learning English as a foreign language from Korean universities. Using four intact classes, a quasi-experimental research design was employed: two control (n = 88) and two experimental (n = 83). The control classes earned 100-minute intense reading instruction per week, while 70-minute intensive reading instruction and 30-minute comprehensive reading instruction per week were equivalent to the experimental classes. A multivariate variance analysis of repeated tests found that the experimental classes substantially outperformed the control classes on the combination of the three dependent variables (i.e., reading comprehension, reading rate, vocabulary acquisition). The positive impacts of intensive reading on all three areas were supported by subsequent studies of variance. Educational consequences are explored for comprehensive reading of second-language curricula.

Sung et al., (2016) Studies on the teaching of reading strategies have found that summarizing tremendously helped in reading comprehension. This study developed an automatic summary assessment and feedback system based on Latent Semantic Analysis (LSA) to provide score, concept and semantic feedback, and then investigated the

effects of concept and semantic feedback on the writing of summaries by students in the sixth grade. The design involved two feedbacks like semantic feedback and concept feedback. 120 sixth-grade students from an elementary school were used for this study, and were randomly assigned to each group. The overall results demonstrated the effectiveness of the proposed system in improving the summary writing skills of students.

Reading strategies play a predominant role in improving the reading accuracy. Hernandez & Grasparil (2015), Tiruneh & Teshome (2014), Kayiran & Karabay (2012), Aivazoglou & Griva (2014), Marzban (2011), expressed their views on using reading strategies in increasing students' reading skills and the task of reading strategies in developing reading proficiency. Buyuktaskapu (2012), revealed that children attending Family Supported Pre-Reading Program had higher reading success and also improved children's early reading skills.

In addition, Acha (2009), Jingjit (2015), Wahyono (2008), Ketsman (2012), Wu T.J (2016) highlighted that multimedia programmes designed for children self-regulated learning and which are significantly impacted on the improvement of pupils' proficiency in language skills. Kim et al. (2016) indicated that creative proficiency improved with the adoption of the instructional model for tablet-based interactive classrooms. Cheung & Slavin (2012), Wu and Zhang (2010), Ndukwe (2015), suggested that applications of educational technology produced a positive, effect in comparison to traditional methods.

### **Objective of the Study**

- To assess the level of primary school students' English language skills.
- To determine the efficacy among primary school students of multimedia packages on reading skill in English.
- to improve the pedagogical implications for improving the reading skill in English in primary school students, based on the results of the report.

### **Hypothesis of the Study**

1. The students of Control group and Experimental group in English medium do not differ in their skill in reading of English in the pre-test and post-test.
2. Students of Control Group of English medium do not differ significantly in their reading skill in English in the pre-test and the post-test with reference to the following components of reading.

Phonemes, Segmenting, Substituting, Vowels and consonants, Prefixes and Suffixes, Verbs, Nouns, Prepositions, Articles, SVO Patterns.

3. Students of Experimental Group of English medium do not differ significantly in their reading skill in English in the pre-test and the post-test with reference to the following components of reading.

Phonemes, Segmenting, Substituting, Vowels and consonants, Prefixes and Suffixes, Verbs, Nouns, Prepositions, Articles, SVO Patterns.

### **3. METHODOLOGY**

An experimental design for data collection was adopted in the current research. Using components such as phonemes, segmenting, substituting, vowels consonants, prefixes & suffixes, nouns, prepositions, verbs, articles and SVO pattern to measure the reading skills, the researchers prepared a multimedia package to collect the data. Based on the 5th grade English Text Book of the West Bengal State, the multimedia content was prepared. To develop content validity and face validity, the package was given to experts. The multimedia system was checked by 30 5th grade students from the state of Kolkata, West Bengal. There were 15 control groups out of 30 students and 15 were experimental groups. Treatment using conventional chalk and talk approaches was given to the control group and treatment using interactive packages was given to the experimental group. There were 10 materials in a package and each material was checked each day. The researchers administered pre-tests and post-tests to determine their academic performance.

### **4. DATA ANALYSIS**

The procedure of data analysis entails making sense out of text and image. The process involves arranging the data for analysis, carrying out diverse analyses, digging deeper and deeper into understanding the data, representing the data, and interpreting the deeper meaning of the data. The quantitative and qualitative data were obtained by administering appropriate tools and techniques. In the present study descriptive and inferential statistics were employed to explain the obtained data.

#### **4.1 Parametric and Non-parametric data**

Non-parametric data are those which make no assumptions about the population, usually because the characteristics of the population are unknown. Parametric data assume knowledge of the characteristics of the population, in order for inferences to be able to be made securely; they often assume a normal, Gaussian curve of distribution. In practice this distinction means

nominal and ordinal data are considered to be non-parametric, whilst interval and ratio data are considered to be parametric data. In the present study non-parametric tests are used to analyze the data. The researcher employed the Shapiro-Wilk test to check whether the data are normally distributed and this is described in the following table.

### 4.2 Quantitative Data Analysis

The Quantitative data analysis is usually concerned with finding verification from the achieved numeric data to test a hypothesis through the use of a suitable statistical test. In the current study, the investigator obtained the data from the fifth standard students at Kolkata. The distinctiveness of the collected data were analyzed to select the statistical procedures for testing the proposed hypotheses. The researcher examined the distinctiveness of collected data through ascertaining the normality of distribution. Since the sample size was less than fifty the Shapiro Wilk test was used to establish the normality distribution of the collected data.

**Table 4.1: Shapiro Wilks Normality Test of the Control Group and Experimental Group scores**

Group	Medi	Skills	Statistics	df	P value
Control group pre-test	English Medium	Reading	0.163	15	0.135
Control group post-test	English Medium	Reading	0.189	15	0.261
Experimental group pre-test	English Medium	Reading	0.147	15	0.614
Experimental group post-test	English Medium	Reading	0.164	15	0.451

The above table 4.1 indicates the results of the Shapiro-Wilk test. From this table it is found that the group scores of pre-test and post-test of the Control group and the Experimental group, that reading skills are normally distributed. It is also noted that the Control group pre-test scores with  $p= 0.095$  and Control group post-test with  $p=0.012$  are significant at 0.05 level which indicates the normal distribution. Pre-test and post-test Experimental group of English medium pre-test and post-test scores in this table are not significant at **0.05** level which are not equally distributed. Non parametric tests are most appropriate when the sample size is small and the data are not normally distributed. Non parametric tests are often used in place of their parametric counterparts.

### 4.3 Inferential Analysis

Inferential analysis is concerned with calculations or assumptions regarding a population from observation and scrutiny of a sample. Inferential analysis is employed to discern the outcomes obtained from a sample back to the population from which the sample was drawn.

**Table 4.2 : The Mann-Whitney test results of Control group and Experimental Group in the Pre-test and Post-test Reading skill in English of English Medium**

Groups and medium English medium	N	Mean Rank	Sum of Ranks	U	w	Z	Sig.
Control Group Pre - test	15	15.93	239.00	106.00	226.00	-0.27	0.78
Experimental Group Pre - test	15	15.07	226.00				
Control Group Post - test	15	8.27	124.00	4.00	124.00	-4.507	0.00
Experimental Group post - test	15	22.73	341.00				

It can be seen from the table 4. 2 that the Control group and Experimental group do not differ in their reading skill in the pre-test. The hypotheses tested by the Mann-Whitney analysis shows that there is no significant mean rank difference between the Control group and Experimental group. Also the U statistics is found as 106.00. This value, when corrected for tied rankings and converted to a 'z' score is not significant at 0.01 level of significance. Hence the researcher retains the null hypothesis. Thus it can be inferred that the students of both the Control group and Experimental group were found to have similar levels of reading skill in English in the pre-test.

It can also be deduced from the table that the Control group and the Experimental group differ in their reading skill in the post-test. The Mann-Whitney test investigation explains that there is a significant mean rank difference between the Control group and Experimental group. The 'U' statistics is established as 4.00 and the value, when corrected for tied rankings and converted to a 'z' score is significant at 0.01 level of significance. Hence the researcher not accepts the null hypothesis. Thus it can be concluded that the students of both the Control group and Experimental group were found to have dissimilar levels of reading skill in English in the post-test.

This quasi-experimental study was to find out the effect of animation in the Primary school students. The study revealed that teaching with the help of animation can productively help the enhancement of reading skill in the primary school English medium students.

**Table 4.3 : The Wilcoxon Signed-rank test results for Pre-test and Post-test Scores of Control group in Reading skill with reference to the components of Reading in English Medium**

Groups	Rank	N	Mean Rank	Sum of Ranks	z	P
Phonemes	Negative Ranks	1	5.50	5.50	-1.761	0.078 N.S
	Positive Ranks	7	4.36	30.50		
	Ties	7	-	-		
	Total	15	-	-		
Segmenting	Negative Ranks	0	0.00	0.00	-2.060	0.039 Sig
	Positive Ranks	5	3.00	15.00		
	Ties	10	-	-		
	Total	15	-	-		
Substituting	Negative Ranks	0	0.00	0.00	-2.724	0.006 Sig
	Positive Ranks	9	5.00	45.00		
	Ties	6	-	-		
	Total	15	-	-		
Vowels & Consonants	Negative Ranks	0	0.00	0.00	-1.414	0.157 N.S
	Positive Ranks	2	1.50	3.00		
	Ties	13	-	-		
	Total	15	-	-		
Prefix & suffix	Negative Ranks	0	0.00	0.00	-1.342	0.180 N.S
	Positive Ranks	2	1.50	3.00		
	Ties	13	-	-		
	Total	15	-	-		
Verbs	Negative Ranks	0	0.00	0.00	-1.342	0.180 N.S
	Positive Ranks	2	1.50	3.00		
	Ties	13	-	-		
	Total	15	-	-		
Nouns	Negative Ranks	1	2.50	2.50	-0.272	0.785 N.S
	Positive Ranks	2	1.75	3.50		
	Ties	12	-	-		
	Total	15	-	-		
Prepositions	Negative Ranks	0	0.00	0.00	-1.633	0.102 N.S
	Positive Ranks	3	2.00	6.00		
	Ties	12	-	-		
	Total	15	-	-		
Articles	Negative Ranks	5	3.80	19.00	-1.782	0.075 N.S
	Positive Ranks	1	2.00	2.00		
	Ties	9	-	-		
	Total	15	-	-		
SVO patterns	Negative Ranks	0	0.00	0.00	-1.342	0.180 N.S

Table 4.3 presents the results of the Wilcoxon signed-rank test between the reading skill of pre-test and post-test of phonemes, segmenting, substituting, vowels and consonants, prefixes and suffixes, verbs, nouns, prepositions, articles and SVO patterns of the Control group in English Medium.

The sum of positive ranks (30.50) and that of negative ranks (5.50) in Phonemes indicates that reading skill of the Control group in the post-test is greater than that of the pre-test. As the obtained value of Z (-1.761) does not exceed the critical value  $\pm 1.96$  at 0.05 level of significance, the researcher accepts the null hypothesis. Hence it is inferred that the traditional method of teaching was not found fruitful in enhancing the understanding of the component Phonemes in primary school students.

Post-test scores of the Control group in Segmenting, the sum of positive ranks (15.00) and that of negative ranks (0.00) revealed that the reading skill is greater than that of the pre-test. As the obtained value of Z (-2.060) surpasses the critical value  $\pm 1.96$  at 0.05 level of significance, the researcher does not accept the null hypothesis. Thus it is inferred that the conventional method of teaching was found to be potential in augmenting the understanding of the component Segmenting in primary school students.

The sum of positive ranks (45.00) and that of negative ranks (0.00) in Substituting revealed that reading skill of the Control group in the post-test is greater than that of the pre-test. As the obtained value of Z (-2.724) exceeds the critical value  $\pm 1.96$  at

0.05 level of significance, the researcher does not accept the null hypothesis. Hence it can be inferred that the traditional method of teaching was found influential in increasing the understanding of the component Substituting in primary school students.

Post-test scores of the Control group in Vowels & Consonants, the sum of positive ranks (3.00) and that of negative ranks (0.00) indicated that the reading skill is greater than that of the pre-test. As the attained value of Z (-1.414) does not surpass the critical value  $\pm 1.96$  at 0.05 level of significance, the researcher accepts the null hypothesis. Hence it is interpreted that the conventional method of teaching was not found persuasive in augmenting the understanding of the component Vowels and Consonants in primary school students.

Reading skill of the Control group in Prefix & Suffix, the sum of positive ranks (3.00) and that of negative ranks (0.00) revealed that the posttest score is greater than that of the pre-test. As the obtained value of Z (-1.342) does not exceed the critical value  $\pm 1.96$  at 0.05 level of significance, the researcher retains the null hypothesis. Hence it is inferred that the traditional method of teaching was not found progressive in enhancing the understanding of the component Prefix & suffix in primary school students.

The sum of positive ranks (3.00) and that of negative ranks (0.00) in Verbs indicated that reading skill of the Control group in the post-test is greater than that of the pre-test. As the obtained value of Z (-1.342) does not surpass the critical value  $\pm 1.96$  at 0.05 level of significance, the researcher retains the null hypothesis. Thus it is interpreted that the conventional method of teaching was not found efficacious in increasing the understanding of the component Verbs in primary school students.

Post-test scores of Control group in Nouns, the sum of positive ranks (3.50) and that of negative ranks (2.50) indicated that the reading skill is greater than that of the pre-test. As the obtained value of Z (-0.272) does not exceed the critical value  $\pm 1.96$  at 0.05 level of significance, the researcher retains the null hypothesis. Hence it is inferred that the traditional method of teaching was not found fruitful in enhancing the understanding of the component Nouns in primary school students.

Reading skill of the Control group in Prepositions, the sum of positive ranks (6.00) and that of negative ranks (0.00) revealed that the posttest score is greater than that of the pre-test. As the achieved value of Z (-1.633) does not surpass the critical value  $\pm 1.96$  at 0.05 level of significance, the researcher retains the null hypothesis. Thus it is inferred that the traditional method of teaching was not found progressive in augmenting the

understanding of the component prepositions in primary school students.

In Articles, the sum of positive ranks (2.00) and that of negative ranks (19.00) indicated that reading skill of the Control group in the post-test is less than that of the pre-test. As the obtained value of Z (-1.782) does not exceed the critical value  $\pm 1.96$  at 0.05 level of significance, the researcher retains the null hypothesis. Hence, it is inferred that the traditional method of teaching was not found potential in enhancing the understanding of the component Articles in primary school students.

The sum of positive ranks (3.00) and that of negative ranks (0.00) in SVO patterns indicated that reading skill of the Control group in the posttest is greater than that of the pre-test. As the obtained value of Z (-1.342) does not exceed the critical value  $\pm 1.96$  at 0.05 level of significance, the researcher accepts the null hypothesis. Hence, it is inferred that the conventional method of teaching was not found influential in enhancing the understanding of the component SVO patterns in primary school students.

**Table 4.4: The Wilcoxon Signed-rank test results for Pre-test and Post-test Scores of the Experimental group in Reading skill with reference to the components of Reading in English Medium.**

Groups	Rank	N	Mean Rank	Sum of Ranks	Z	P
Phonemes	Negative Ranks	0	0.00	0.00	-3.328	0.001 Sig
	Positive Ranks	14	7.50	105.00		
	Ties	1	-	-		
	Total	15	-	-		
Segmenting	Negative Ranks	0	0.00	0.00	-3.500	0.00 Sig
	Positive Ranks	13	7.00	91.00		
	Ties	2	-	-		
	Total	15	-	-		
Substituting	Negative Ranks	1	2.00	2.00	-3.334	0.001 Sig
	Positive Ranks	14	8.43	118.00		
	Ties	0	-	-		
	Total	15	-	-		
Vowels & Consonants	Negative Ranks	2	3.00	6.00	-2.599	0.009 Sig
	Positive Ranks	10	7.20	72.00		
	Ties	3	-	-		
	Total	15	-	-		
Prefix & suffix	Negative Ranks	2	9.00	18.00	-2.190	0.029 Sig
	Positive Ranks	12	7.25	87.00		
	Ties	1	-	-		
	Total	15	-	-		
Verbs	Negative Ranks	0	0.00	0.00	-2.956	0.003 Sig
	Positive Ranks	11	6.00	66.00		
	Ties	4	-	-		
	Total	15	-	-		
Nouns	Negative Ranks	1	3.50	3.50	-2.951	0.003 Sig
	Positive Ranks	12	7.29	87.50		
	Ties	2	-	-		
	Total	15	-	-		
Prepositions	Negative Ranks	1	1.00	1.00	-3.111	0.002 Sig
	Positive Ranks	12	7.50	90.00		
	Ties	2	-	-		
	Total	15	-	-		
Articles	Negative Ranks	1	1.50	1.50	-3.222	0.001 Sig
	Positive Ranks	13	7.96	103.50		
	Ties	1	-	-		
	Total	15	-	-		
SVO Patterns	Negative Ranks	2	2.00	4.00	-3.192	0.001 Sig
	Positive Ranks	13	8.92	116.00		
	Ties	0	-	-		
	Total	15	-	-		

Table 4.5 presents the results of the Wilcoxon signed-rank test between the reading skill of pre-test and post-test of phonemes, segmenting, substituting, vowels and consonants, prefixes and suffixes, verbs, nouns, prepositions, articles and SVO patterns of Experimental group in English Medium.

The sum of positive ranks (105.00) and that of negative ranks (0.00) in Phonemes indicated that the

reading skill of the Experimental group in the post-test is greater than that of the pre-test. As the obtained value of Z (-3.328) exceeds the critical value  $\pm 1.96$  at 0.05 level of significance, the researcher does not accept the null hypothesis. Hence, it is inferred that multimedia was acting as a guiding tool in enhancing the understanding of the component Phonemes in primary school students.

Post-test scores of Experimental group in Segmenting, the sum of positive ranks (91.00) and that of negative ranks (0.00) revealed that the reading skill is greater than that of the pre-test. As the obtained value of Z (-3.500) surpasses the critical value  $\pm 1.96$  at 0.05 level of significance, the investigator does not accept the null hypothesis. Thus it is inferred that the multimedia was found successful in increasing the understanding of the component Segmenting in primary school students.

Reading skill of the Experimental group in Substituting, the sum of positive ranks (118.00) and that of negative ranks (2.00) indicated that the posttest is greater than that of the pre-test. As the obtained value of Z (-3.334) exceeds the critical value  $\pm 1.96$  at 0.05 level of significance, the researcher does not accept the null hypothesis. Hence it is interpreted that the multimedia was found helpful in enhancing the understanding of the component Substituting in primary school students.

In Vowels & Consonants, the sum of positive ranks (72.00) and that of negative ranks (6.00) revealed that the reading skill of the Experimental group in the post-test is greater than that of the pre-test. As the obtained value of Z (-2.599) exceeds the critical value  $\pm 1.96$  at 0.05 level of significance, the experimenter does not accept the null hypothesis. Thus it is inferred that the multimedia was found efficacious in increasing the understanding of the component Vowels & Consonants in primary school students.

The sum of positive ranks (87.00) and that of negative ranks (18.00) in Prefix & Suffix indicated that reading skill of Experimental group in the post-test is less than that of the pre-test. As the obtained value of Z (-2.190) surpasses the critical value  $\pm 1.96$  at 0.05 level of significance, the researcher does not accept the null hypothesis. Hence it is inferred that the multimedia was found operative in enhancing the understanding of the component Prefix & Suffix in primary school students.

Post-test scores of the Experimental group in Articles, the sum of positive ranks (103.50) and that of negative ranks (1.50) indicated that reading skill is greater than that of the pre-test. As the obtained value of Z (-3.222) surpasses the critical value  $\pm 1.96$  at 0.05 level of significance, the researcher does not accept the null hypothesis. Hence it is inferred that the multimedia found potential in

enhancing the understanding of the component Articles in primary school students.

In SVO patterns, the sum of positive ranks (116.00) and that of negative ranks (4.00) revealed that reading skill of the Experimental group in the post-test is greater than that of the pre-test. As the obtained value of Z (-3.192) exceeds the critical value  $\pm 1.96$  at 0.05 level of significance, the researcher does not accept the null hypothesis. Thus it is inferred that the multimedia was found persuasive in augmenting the understanding of the component SYO patterns in primary school students.

Post-test scores of the Experimental group in Verbs, the sum of positive ranks (66.00) and that of negative ranks (0.00) indicated that reading skill is greater than that of the pre-test. As the obtained value of Z (-2.956) exceeds the critical value  $\pm 1.96$  at 0.05 level of significance, the researcher does not accept the null hypothesis. Thus it is inferred that the multimedia was found essential in augmenting the understanding of the component Verbs in primary school students.

Reading skill of the Experimental group in Nouns, the sum of positive ranks (87.50) and that of negative ranks (3.50) indicated that the posttest is greater than that of the pre-test. As the obtained value of Z (-2.951) surpasses the critical value  $\pm 1.96$  at 0.05 level of significance, the researcher does not accept the null hypothesis. Hence it is inferred that the multimedia was found influential in enhancing the understanding of the component Nouns in primary school students.

The sum of positive ranks (90.00) and that of negative ranks (1.00) in Prepositions revealed that the reading skill of the Experimental group in the post-test is greater than that of the pre-test. As the obtained value of Z (-3.131) exceeds the critical value  $\pm 1.96$  at 0.05 level of significance, the researcher does not accept the null hypothesis. Thus, it is inferred that the multimedia was found useful in increasing the understanding of the component Prepositions in primary school students.

## 5. FINDINGS

### ► Findings from the quantitative Study

The following are the findings that were obtained by testing the hypotheses quantitatively.

1. In their reading precision in English in CG and EG, post-test scores of English medium primary school students are slightly higher than pre-test scores.
2. In their reading precision in the English medium, male and female students of CG and EG do not vary in the post-test.

3. In their reading ability skill in English in the post-test, CG students in the English medium vary greatly from the pre-test in comparison to the components segmenting substitution. There is little meaning for other things such as phonemes, vowels and consonants, prefixes and suffixes, verbs, nouns, prepositions, articles and SVO patterns.
4. In terms of the elements, phonemes, segmentation, replacement, vowels and consonants, prefix and suffix, verbs, nouns, prepositions, articles and SVO trends in the post-test, students of EG in the English media vary substantially in their reading abilities than in the pre-test.

### ► Findings from the Qualitative Analysis

The results obtained from these studies are explained as follows:

1. When the media was shown on the board, students were excited and listened closely.
2. The conventional way of teaching did not interest students.
3. The songs performed as videos were enjoyed by students.
4. The pupils were inspired by videos.
5. Affirmation expressions such as nice, good were favorably mirrored in the actions of the student.
6. The students found it fascinating and fun to teach grammar with the aid of stories and songs.

The results of the quantitative and qualitative data sources used in this study enabled the researcher to provide a thorough review that takes into account the language requirements of primary school students and the need to turn to conventional teaching methods in order to improve the language skills of primary school students.

## 6. CONCLUSION

Technology - improved multimedia teaching enabled teachers to adapt instruction to various needs and styles of students and offered opportunities for student thought skills to be practiced. In their skills, students are distinct and their learning style varies from person to person. Facilitated multimedia training can improve well. This is why multimedia packages and applications an improved teaching approach would make it easier for students to read at all grades.

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