

## EFFECTS OF REALITY PEDAGOGY AND SPACED LEARNING STRATEGIES ON READING COMPREHENSION AND BASIC ENGLISH STRUCTURE OF LOWER PRIMARY PUPILS IN OSUN STATE

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### **Abstract**

This study determined the effect of reality pedagogy and spaced learning strategies on the reading comprehension and basic English structure of lower primary pupils in Osun State. It ascertained the effects of the reality pedagogy and space learning strategies on pupils' reading comprehension and investigated the effects of the two strategies on the pupils basic English structure in the study area. Furthermore, it examined the effects of the two strategies on pupils' reading comprehension based on school type. In addition, it determined the effects of the two strategies on pupils Basic English structure based on sex. The study employed the pre-test—post-test control group research design. The population comprised lower primary school pupils in Osun State. The sample for the study consisted of 130 primary three pupils in 4 intact classes. The sample was selected using multi-stage sampling technique. Three Local Government Areas (LGAs) were used for the study. From the selected local government areas, one public, one private were selected using purpose sampling technique based on availability of library or reading room. Data were analysed using descriptive (Mean and standard deviation ANOVA and ANCOVA) statistics. Two instruments were used for data collection. The instruments are Pupils Reading Comprehension Skills Achievement Test (PRCSAT) and Basic English Achievement Test (BEATT). The results showed that there was a significant interaction effect of reality pedagogy and spaced learning strategies ( $F=6.56$ ,  $(df=126)$ ,  $p<0.012$ ) on the reading comprehension of lower primary school pupils. However, the interaction effect of reality pedagogy and spaced learning on Basic English structure was not statistically significant ( $F=1.47$ ,  $(df=126)$ ,  $p<0.227$ ). Reality pedagogy was more effective for teaching comprehension, while spaced learning was more effective for Basic English structure. Furthermore, result indicate the effect of using Reality Pedagogy ( $F=74.084$ ,  $p<0.05$ ) and Spaced Learning ( $F=23.829$ ,  $p<0.05$ ) in improving reading comprehension skills of lower primary school pupils based on school type was statistically significant.

**Keywords:** Reality Pedagogy, Spaced Learning Strategies, Reading Comprehension, Basic English Structure and Lower Primary Pupils.

## **Introduction**

The connection between teaching and learning makes whatever suitable approach one adopts in learning within a given context apt for the attainment of set academic goals. Consequently, effective teaching goes beyond disseminating information to learners to seeking an understanding of ‘would-be learners’ realities. This understanding is rooted in the teacher’s willingness towards information sharing between teachers and learners taking into consideration, the role of dialogue, co-teaching, scope, context as well as content development. Noteworthy is the fact that reading as an important means of human development has endeared for ages as a tool in facilitating inter-generational integration. To this end, Fierier (1940) affirmed reading as the methods by which people manage reality and find how to be a part of the transformation going on in their world. Okewole (2016) also views reading as one of the basic parts of literacy which assume a critical function during the process of gaining knowledge and skills for individual and societal advancement. Illiteracy not only affect the individual but have significant impact on community growth and development. Learning therefore as Alexander (2006) observed span the individual’s period of existence in formal settings, as well as informal settings. Thus, the learning, literacy and knowledge acquisition process is lifelong and functional bringing remarkable changes in the society through reading, writing and dialogical exchange of ideas among others. Ikonta (2010) describes reading as a survival skill, and tool for lifelong learning. Learning and human development for linguists does not occur in a vacuum but realised in words and actions. Accentuating the importance of reading, the National Association for the Education of Young Children (NAEYC) (2007) stated that reading has enormous contribution to vocabulary development in middle childhood and adolescence. School age children are known to use words in more reflective and analytical ways that help them appreciate the multiple meaning of words Nippold Taylor and Baker (1996) reaffirmed reading as a functional tool that presents its users a network of choices at all levels of learning Arts, Mathematics, Sciences and Social Sciences. For Edesky (2006), one of the basic tools to functioning in today’s world is reading.

Accentuating the importance of reading in early childhood, Cunningham and Stanovich (1998) hold that children who participate in as meagre as 10 minutes of self-dependent reading every day are exposed to almost 2 million words for every year which automatically expands their knowledge base. Michigan State University recommends parents and care givers to read to

children from cradle for 30 minutes a day in order to equip them with 130 hours of reading time as they progress to kindergarten; put differently, literacy skills are best built during early stages of life. Similarly, Dorothy (2006), suggested that figuring out how to read and write is a continuous procedure from earliest stages to the time the child starts schooling, therefore, it is crucial for adults to support children literacy. Literacy and knowledge development therefore, starts early in life and is consolidated during school years. Adegbite (2010) describes literacy as one's capacity for word interpretation, phrases and sentences or printed pictures. The United Nations Educational Scientific and Cultural Organization UNESCO collaborated this definition of literacy as the capacity to distinguish, comprehend, decipher, make, impart and figure, through the use of printed and written materials related with differing settings.

A good reading comprehension skill is said to assist in learning other subjects. America National Reading Conference Policy Brief (2005) affirmed that a major contributor to high stake tests scores that control advancement from elementary, middle to high schools and subsequently entrance to college globally is a mastery of good reading comprehension skills. Simply put, mastering both reading and listening comprehension skills require a long-term strategy where all reading skill aspects like: Phonics, Vocabulary and Fluency contribute to success. The essence of teaching reading comprehension skill as suggested by scholars is the need to encourage early interaction with the text as well as monitoring learners' level of understanding. The Reading Study Group and National Centre for Literacy and Numeracy (RAND) (1997), defined reading comprehension as a means of extracting and constructing meanings simultaneously through interactions and connection with written language. According to this group, reading comprehension involves three elements: the reader doing the comprehending, the text that is to be comprehended as well as the activity of which needs comprehension. These three dimensions according to Snow (2002), characterize a phenomenon that happens inside a bigger socio cultural setting that shapes and is molded by the reader and that interfaces with every one of the three components.

By figuring out how to read, most parents expect that the child is decoding words. Be that as it may, understanding what is read originates from creating sets of skills distinct from phonics or word decoding abilities. Decoding makes the establishment on which all other reading abilities are constructed, whereas, comprehending the meaning of words, sentences and the entire

passage of texts is where the challenge lies. Roughly 85% of children diagnosed with learning difficulties have problem with reading comprehension and other language skills. Children are expected to start building comprehension skills while others still read to them. Odejobi (2014) opines that every child deserves a good foundation in life as the early stage of a child's life is known to be the most crucial stage which researchers have likened to be the stage of rapid cognitive brain development. Taken together, the foregoing suggests that at the child's early stage of cognitive development, basic comprehension skills like: summarizing, sequencing, inferencing, comparing and contrasting, drawing conclusion, self-questioning and problem-solving, relating background knowledge, distinguishing between fact and opinion among others should be taught. Equally important components like finding the main idea, important facts and supporting details could be learned in higher models. Interestingly, educational experts the world over now focus on reading dimension or scopes especially in meeting the schools' demands of enlisting contemporary knowledge models or when developing an all-inclusive education curriculum.

Findings from studies by researchers like: Obayan (2004), Obasanjo (2006) and Ajibade (2009) as cited by Okewole (2016), reveal that over 51% of Nigerians are illiterate with a higher proportion of male 62.5% compared to female 39.5% in that category. Ajibade (2009) further reported that 7.3 million Nigerian children of school age could neither read nor write. Reading as a matter of fact is essential for a child's success in life. However, according to Ambatchew (2003), the barriers faced by children learning to comprehend curriculum content far outweigh their desire to read and without proper early intervention they might never overcome them. Similar findings from scholars like Osayin (2003), Nwagbara (2005), Ajayi (2010), Angie (2008) and Okewole (2016) have suggested the need for appropriate teaching strategies to teach reading in order to foster cognitive development early in life. It is on this premise that two innovative foreign strategies known to be effective in the sciences are been adopted into the Nigerian context as a

to be skilled at pedagogy while the teacher is regarded as a learner learning how to teach (Emdinway of ascertaining their effects on the reading comprehension skills and basic English structure of lower primary pupils in Osun State Nigeria. The strategies are: Reality Pedagogy Strategy (RPS) and Spaced Learning Strategy (SLS).

Reality pedagogy (RP) as developed by Emdin (2011) is a learning/teaching technique that ‘focuses on the cultural understanding of pupils by their teacher within a particular social space.’ Here, teaching and learning depend on the reality of the pupil’s experience which the teacher recognizes and uses as a point of instruction. Reality pedagogy consists of what Emdin (2011) calls the ‘5Cs’ learning tools. The ‘5Cs are: co-generative dialogues; co-teaching; cosmopolitanism; context and content. Co-generative dialogue is a structured dialogue using what is familiar or what the learners identify with to teach the child. For instance, in America, Hip Hop, according to (Emdin, 2011) was adopted to teach the learning content. Co-teaching encourages pupils, 2011). Co-teaching permits teachers to study the way students learn one from another so as to best understand learning styles adopted by students and provide chance for students to learn in methods reflecting their reality.

Conversely, Spaced Learning Strategy is another creative strategy in learning which is starting to positively influence education. The technique includes a progression of short extraordinary instructional courses with expanded learner cooperation isolated by short interims where learners complete a totally different activities. It is founded upon research by America neuroscientist Douglas Fields into how the creation of long-term memories are done and was further developed by Paul Kelly (2010) and his team of teachers and scientists at Monkseaton High school. To apply this principle, the strategy includes a progression of three short exceptional instructional courses generally 15 to 20 minutes each with increased learner cooperation separated by 10 minutes intervals in which learners do a completely different and often physical movement. It is the break in activities that is vital to the spaced learning approach. During this interval, there are connections between new concepts and learners’ existing knowledge. This connection is often formed by the brain. The reiteration of a same content fortifies this association and the data is resolved to long time memory regardless of being canvassed in a short time.

Flores (1991) also reaffirmed the need for a distinction to be drawn between language reading exercise and authentic reading. Unlike language, reading exercise (authentic reading) is used for meaningful purposes and it is relevant and predictable to language comprehension context. It is worthy of note that children come into school in various shapes, tongues, race, class and sex. Therefore, the need for a contextual functional reading model to fill that void.

Spangenberg (1994) reaffirmed that second language learner requires the same environment both in and out of school as young children use authentic language only in approximations of the adult. Children as visual learners need to be actively engaged in a reading class that is enticing cutting across the entire curriculum content.

Looking for equilibrium between the linguistic and the functional competences presupposes that the teaching of comprehension skills and basic grammar structures using approaches strategies and techniques that would eventually lead to language development and functionality for the sake of an impactful education. Therefore the need for new innovative strategies such as Reality pedagogy and spaced learning methods with a view to improving the reading comprehension and basic grammar structure of lower primary school pupils.

### **Objectives of the Study**

The purpose of this study is to investigate the effects of reality pedagogy and spaced learning strategies on the reading comprehension and basic English structure of lower primary pupils in Osun State. The specific objective are to:

- i. ascertain the effect of the two strategies on pupils reading comprehension in Osun State
- ii. investigate the effect of the two strategies on pupils basic English structure in the study area
- iii. compare the effect of the two strategies on the pupils reading comprehension based on school type in the study area, and
- iv. investigate the effect of the two strategies based on pupils basic English structure based on gender in the study area.

### **Hypotheses**

This study tested the following null hypotheses:

- H<sub>01</sub> There is no significant effect of reality pedagogy and spaced learning strategies on the reading comprehension of lower primary school pupils in Osun State
- H<sub>02</sub> There is no significant effect of the two strategies on basic English structure of lower primary pupils in the study area

H<sub>03</sub> There is no significant difference in the effect of the two strategies on the pupils' reading comprehension skills and basic English structure skills based on school type of lower primary school pupils in the study area.

H<sub>04</sub> There is no significant difference in the effect of the two strategies on the pupils' reading comprehension and basic English structure based on gender in the study area.

### Methodology

Research design provides the strategy through which the study was carried out and specifies the methods that were employed in collection of data. In this study, the pre-test-post-test control group quasi-experimental research design was adopted. This design was used because it helped to avoid disruption of the normal academic programme of the schools. Also, quasi-experimental design was adopted in this study to minimize the threats of external validity of the study outcome. In this design, two independent variables, namely: Reality Pedagogy and Spaced Learning Strategies were used on lower primary school children to determine their effective comprehension skills and on basic English structure. The pretest-posttest, and retention test were administered on the control group. The design for the study is presented schematically below:

|                        |                |                |                |                 |
|------------------------|----------------|----------------|----------------|-----------------|
| Experimental Group I:  | O <sub>1</sub> | X <sub>1</sub> | O <sub>2</sub> | O <sub>r1</sub> |
| Experimental Group II: | O <sub>3</sub> | X <sub>2</sub> | O <sub>4</sub> | O <sub>r2</sub> |
| Control Group:         | O <sub>5</sub> | X <sub>3</sub> | O <sub>6</sub> | O <sub>r3</sub> |

Where:

|                 |                 |                 |   |                                       |
|-----------------|-----------------|-----------------|---|---------------------------------------|
| O <sub>1</sub>  | O <sub>3</sub>  | O <sub>5</sub>  | = | Pre-test                              |
| O <sub>2</sub>  | O <sub>4</sub>  | O <sub>6</sub>  | = | Post-test                             |
| O <sub>r1</sub> | O <sub>r1</sub> | O <sub>r1</sub> | = | Retention test                        |
| X <sub>1</sub>  |                 |                 | = | Treatment (Reality Pedagogy Strategy) |
| X <sub>2</sub>  |                 |                 | = | Treatment (Spaced Learning Strategy)  |
| X <sub>3</sub>  |                 |                 | = | Control group                         |

The study adopted a 3 x 2 x 2 factorial matrix and it is illustrated in table 3.1 as shown below.

**Table 3.1: 3 x 2 x 2 Factorial Matrix of the Study**

| Treatment  | School Type | Gender |        |
|--|-------------|--------|--------|
|  |             | Male   | Female |
| Experimental Group I<br>Reality Pedagogy         | Public      |        |        |
|  | Private     |        |        |
| Experimental Group II<br>Space Learning Strategy | Public      |        |        |
|  | Private     |        |        |
| Control Group<br>Conventional Method             | Public      |        |        |
|  | Private     |        |        |

### **Variables of Study**

The variables involved in the study include the following.

### **Independent Variable**

The independent variable is manipulated at three levels, namely;

- i. Reality Pedagogy Strategy (RPS)
- ii. Space Learning Strategy (SLS)
- iii. Conventional Method (CM)

### **Moderator Variable**

There are two moderator variables, these are

- i. Pupils' School Type, at two levels,
  - a) Public
  - b) Private
- ii. Pupils' gender, at two levels:
  - a) Male
  - b) Female

The study population comprised lower primary school pupils in Osun State. The total number of pupils in lower primary school in Osun State is twenty-five thousand, nine hundred

and sixty-six (25,966) (Osun State Universal Basic Education Board (SUBEB), 2019). The sample for this study consisted of 130 primary three pupils that were selected using multistage sampling technique. From each of the three senatorial districts in Osun State, one Local Government Area (LGA) was selected using simple random sampling technique. From each selected LGA, one public and private primary schools were selected using purposive sampling technique based on the availability of reading room or library. Two major instruments and two sub-tools were adopted and used for this study. They are Pupils Reading Comprehension Skill Achievement Test (PRCSAT), Basic English Achievement Test (BEAT) and two Sub-tools- Sight Word Test (SWT) and Word Sequence Test (WST), instructional guides, which were strategically used to enhance pupils' performance in reading comprehension and the basic English structure with the use of two instructional strategies:

1. Reality pedagogy instructional strategies
2. Spaced learning for instructional strategy

To determine the face and content validity of the instrument, the instrument was given to the researcher's supervisor, and test construct experts to establish the content validity of the instruments and their remarks and recommendations were used for the final preparation of the instrument. The reliability of the instrument was determined through a pilot study in which copies of the questionnaire were administered on primary three pupils in a school outside the scope of the study. A test-retest reliability of the instrument was carried out using Pearson-correlation co-efficient to gain a satisfactory reliability. The data collected from the administration of the instruments were collated and analysed using the Analysis of Covariance (ANCOVA), to test the four (4) generated null hypotheses at 0.05 level of significance.

## Results

**Table 1a: Descriptive Statistics scores obtained in reading comprehension, basic English structure and learning strategies for both pre-test and post-test.**

| Learning Strategies                      | N | Min. | Max. | Mean | S |
|--|---|------|------|------|---|
| <b>Strategy 1: Reading Comprehension</b> |   |      |      |      |   |

|  |     |      |        |       |       |
|--|-----|------|--------|-------|-------|
| Reality Pedagogy (post-test)               | 130 | 6.00 | 100.00 | 54.25 | 26.55 |
| Spaced Learning (post-test)                | 130 | 8.00 | 89.00  | 45.64 | 18.80 |
| Conventional Method (pre-test)             | 130 | 0.00 | 65.00  | 23.46 | 15.88 |
| <b>Strategy 2: Basic English Structure</b> |     |      |        |       |       |
| Reality Pedagogy (post-test)               | 130 | 7.00 | 100.00 | 53.16 | 27.24 |
| Spaced Learning (post-test)                | 130 | 8.00 | 100.00 | 62.25 | 23.06 |
| Conventional (pre-test)                    | 130 | 0.00 | 65.00  | 23.46 | 15.88 |

The descriptive statistics of pre-test and post-test scores of pupils in lower primary school in reading comprehension and Basic English Structure is presented in Table 1a. The result indicated that with respect to reading comprehension, Reality Pedagogy had a mean score of ( $M=54.3\pm 26.6$ ), while the score for Spaced Learning was ( $M=45.6\pm 18.8$ ). With respect to Basic English Structure, Reality Pedagogy had a mean score of ( $M=53.2\pm 27.2$ ), while Spaced Learning had a mean score of ( $M=62.3\pm 23.1$ ). The high standard deviation value associated with the means suggested large variation in the mean scores of the students. Though the mean scores did not provide any information regarding the level of significance of the scores. This was ascertained using the paired t-test presented in Table 1(a-b). Also, with regards to Reading Comprehension and Basic English Structure, maximum score of 100 was obtained when Reality Pedagogy was used, while maximum score of 100 was obtained with respect to Basic English Structure when Spaced Learning strategy was used.

### Hypotheses Testing

**Hypothesis One:** *There is no significant effect of Reality Pedagogy and Spaced Learning strategies on the Reading Comprehension of lower primary school pupils in Osun State.*

To test this hypothesis, ANCOVA test was performed to check for the effect of Reality Pedagogy and Spaced learning on Reading Comprehension. The independent variables are Reality Pedagogy and Spaced Learning, while the dependent variable consists of scores obtained in Reading Comprehension. The result is presented in Table 1b.

**Table 1b: ANCOVA test showing the effect of Reality pedagogy and Spaced Learning on Reading Comprehension**

| Tests of Between-Subjects Effects         |                         |     |             |         |      |                     |
|---|-------------------------|-----|-------------|---------|------|---------------------|
| Dependent Variable: Reading Comprehension |                         |     |             |         |      |                     |
| Source                                    | Type III Sum of Squares | Df  | Mean Square | F       | Sig. | Partial Eta Squared |
| Corrected Model                           | 77749.707 <sup>a</sup>  | 3   | 25916.569   | 270.545 | .000 | .866                |
| Intercept                                 | 494.478                 | 1   | 494.478     | 5.162   | .025 | .039                |
| Reality Pedagogy                          | 6284.760                | 1   | 6284.760    | 65.607  | .000 | .342                |
| Spaced Learning                           | 251.296                 | 1   | 251.296     | 2.623   | .108 | .020                |
| Strategies * Spaced Learning              | 628.768                 | 1   | 628.768     | 6.564   | .012 | .050                |
| Error                                     | 12070.016               | 126 | 95.794      |         |      |                     |
| Total                                     | 209596.000              | 130 |             |         |      |                     |
| Corrected Total                           | 89819.723               | 129 |             |         |      |                     |

a. R Squared = .866 (Adjusted R Squared = .862)

Table 1b present the ANCOVA result showing the effect of Reality Pedagogy and Spaced Learning on reading comprehension. The result showed significant interaction effect of Reality Pedagogy and Spaced Learning on Reading Comprehension [ $F(1, 126)=6.56, p=0.12$ ] of lower primary school pupils. The null hypothesis is therefore rejected while concluding that there is a significant effect of reality pedagogy and spaced learning on reading comprehension of lower primary school pupils.

**Hypothesis Two: *There is no significant effect of the two strategies on Basic English***

***Structure of lower primary pupils in the study area.***

To test this hypotheses ANCOVA test was performed to check the effect of reality pedagogy and spaced learning strategies on Basic English structure of the pupils. The independent variables are Reality pedagogy and spaced learning strategies. The dependent variables consist of scores obtained in Basic English structure. The result is presented in table 2a.

**Table 2a: ANCOVA test showing the effect of Reality pedagogy and Spaced Learning on Basic English Structure**

To test this hypothesis, ANCOVA test was performed to check for the effect of Reality Pedagogy and Spaced learning on Basic English Structure. The independent variables are Reality Pedagogy and Spaced Learning, while the dependent variable consists of scores obtained in Basic Structure.

**Table 2a: Descriptive statistics showing the effect of Reality Pedagogy and Spaced Learning strategies on Basic English Structure of lower primary school pupils**

| Tests of Between-Subjects Effects           |                         |     |             |        |      |                     |
|---|-------------------------|-----|-------------|--------|------|---------------------|
| Dependent Variable: Basic English Structure |                         |     |             |        |      |                     |
| Source                                      | Type III Sum of Squares | Df  | Mean Square | F      | Sig. | Partial Eta Squared |
| Corrected Model                             | 39590.091 <sup>a</sup>  | 3   | 13196.697   | 33.104 | .000 | .441                |
| Intercept                                   | .039                    | 1   | .039        | .000   | .992 | .000                |
| Reality Pedagogy                            | 346.156                 | 1   | 346.156     | .868   | .353 | .007                |
| Spaced Learning                             | 62.529                  | 1   | 62.529      | .157   | .693 | .001                |
| Spaced learning * Reality pedagogy          | 586.992                 | 1   | 586.992     | 1.472  | .227 | .012                |
| Error                                       | 50229.632               | 126 | 398.648     |        |      |                     |
| Total                                       | 209596.00               | 130 |             |        |      |                     |
| Corrected Total                             | 89819.723               | 129 |             |        |      |                     |

a. R Squared = .441 (Adjusted R Squared = .427)

Table 2a present the ANCOVA result showing the effect of Reality Pedagogy and Spaced Learning on Basic English structure. The result showed no significant interaction effect of Reality Pedagogy and Spaced Learning on Basic English [F(1, 126) =1.47, p=0.23] of lower of lower primary school pupils. The null hypothesis is therefore accepted, while concluding that there is no significant effect of reality pedagogy and spaced learning on Basic English structure of lower primary school pupils.

**Hypothesis Three:** *There is no significant difference in the effect of Reality Pedagogy and Spaced Learning strategies on Reading Comprehension skills and Basic English Structure skills based on school type of lower primary school pupils in the study area*

To test this hypothesis, the post-test scores of pupils obtained when the two strategies (Reality Pedagogy and Spaced Learning) were used for Reading Comprehension and Basic English Structure were subjected to ANCOVA. The result for the effect of Reality Pedagogy on Reading Comprehension Skills based on school type is presented in table 2b.

**Table 2b: Reality Pedagogy and Spaced learning on reading comprehension by school**

| Descriptive Statistics  |             |                       |          |
|-------------------------|-------------|-----------------------|----------|
| <b>Reality Pedagogy</b> |             |                       |          |
| <b>School Type</b>      | <b>Mean</b> | <b>Std. Deviation</b> | <b>N</b> |
| Private                 | 78.3500     | 19.6293               | 40       |
| Public                  | 43.5444     | 21.8165               | 90       |
| Total                   | 54.2538     | 26.5503               | 130      |
| <b>Spaced Learning</b>  |             |                       |          |
| <b>School Type</b>      |             |                       |          |
| Private                 | 51.175      | 18.7984               | 40       |
| Public                  | 43.178      | 18.3698               | 90       |
| Total                   | 45.64       | 18.79                 | 130      |

The result revealed that scores obtained for reading comprehension was higher among pupils in private schools ( $M=78.35\pm 19.6$ ) when compared to those in public schools ( $M=43.5\pm 21.8$ ) using Reality Pedagogy strategy. This implies better performance among pupils from private schools with regards to reading comprehension. Similarly, using Spaced Learning, pupils from private schools scored higher in reading comprehension ( $M=51.17\pm 18.8$ ) when compared to pupils from public schools ( $M=43.18\pm 18.4$ ).

**Table 2c Analysis of Covariance (ANCOVA) of the effect of Reality Pedagogy on reading comprehension of lower primary school pupils based on school type**

| Tests of Between-Subjects Effects |                     |                         |     |             |         |      |                     |
|-----------------------------------|---------------------|-------------------------|-----|-------------|---------|------|---------------------|
| Source                            | Learning Strategies | Type III Sum of Squares | df  | Mean Square | F       | Sig. | Partial Eta Squared |
| Corrected Model                   | Reality Pedagogy    | 33573.514 <sup>a</sup>  | 2   | 16786.757   | 37.167  | .000 | .369                |
|                                   | Spaced Learning     | 28844.301 <sup>b</sup>  | 2   | 14422.151   | 109.404 | .000 | .633                |
| Intercept                         | Reality Pedagogy    | 143967.927              | 1   | 143967.927  | 318.751 | .000 | .715                |
|                                   | Spaced Learning     | 27223.710               | 1   | 27223.710   | 206.515 | .000 | .619                |
| School Type                       | Reality Pedagogy    | 33461.065               | 1   | 33461.065   | 74.084  | .000 | .368                |
|                                   | Spaced Learning     | 3141.187                | 1   | 3141.187    | 23.829  | .000 | .158                |
| Error                             | Reality Pedagogy    | 57361.109               | 127 | 451.662     |         |      |                     |
|                                   | Spaced Learning     | 16741.706               | 127 | 131.824     |         |      |                     |
| Total                             | Reality Pedagogy    | 473587.00               | 130 |             |         |      |                     |
|                                   | Spaced Learning     | 316359.00               | 130 |             |         |      |                     |
| Corrected Total                   | Reality Pedagogy    | 90934.623               | 129 |             |         |      |                     |
|                                   | Spaced Learning     | 45586.01                | 129 |             |         |      |                     |

a. R Squared = .369 (Adjusted R Squared = .359)  
b. R Squared = .633 (Adjusted R Squared = .627)

The result as shown in table 2b indicates the effect of using Reality Pedagogy ( $F=74.084$ ,  $p<0.05$ ) and Spaced Learning ( $F=23.829$ ,  $p<0.05$ ) in improving the reading comprehension skills of lower primary school pupils based on the school type was statistically significant. The result therefore implies Reality Pedagogy and Spaced Learning can be used to improve the reading comprehension skills of lower primary school pupils in both public and private schools. The null hypothesis that states that there is no significant difference in the effect of reality pedagogy and spaced learning strategies on Reading Comprehension skills based on school type of lower primary school pupils in the study area is therefore rejected.

**Table 3** Pairwise Comparison of the effect of Reality Strategy on reading comprehension of lower primary school pupils based on school type

| Pairwise Comparisons |                 |                 |                       |            |                   |   |             |
|----------------------|-----------------|-----------------|-----------------------|------------|-------------------|---|-------------|
| Dependent Variable   | (I) School Type | (J) School Type | Mean Difference (I-J) | Std. Error | Sig. <sup>b</sup> | 95% Confidence Interval for Difference <sup>b</sup> |             |
|                      |                 |                 |                       |            |                   | Lower Bound   | Upper Bound |
| Reality              | Private         | Public          | 34.889*               | 4.054      | .000              | 26.868  | 42.911      |
| Pedagogy             | Public          | Private         | -34.889*              | 4.054      | .000              | -42.911   | -26.868     |
| Spaced Learning      | Private         | Public          | 10.690*               | 2.190      | .000              | 6.356   | 15.023      |
|                      | Public          | Private         | -10.690*              | 2.190      | .000              | -15.023   | -6.356      |

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.

To establish the significant effect of using Reality Pedagogy and Spaced Learning to improve the reading comprehension skills of lower primary school pupils, post hoc pair wise comparison was conducted. The result suggest the interaction effect of Pedagogy Strategy and Spaced Learning on reading comprehension of students from both private and public schools was statistically significant. The mean difference implies Reality Pedagogy strategy (M=34.889, p<0.05) and Spaced Learning (M=10.690, p<0.05) had more effect on the reading comprehension skills of lower primary school pupils from private schools when compared to public schools.

**Table 3a: Reality Pedagogy and Spaced Learning on Basic Structure by school type**

| Descriptive Statistics  |             |                       |          |
|-------------------------|-------------|-----------------------|----------|
| <b>Reality Pedagogy</b> |             |                       |          |
| <b>School Type</b>      | <b>Mean</b> | <b>Std. Deviation</b> | <b>N</b> |
| Private                 | 81.0750     | 17.9177               | 40       |
| Public                  | 40.7556     | 20.7155               | 90       |
| Total                   | 53.16       | 27.24                 | 130      |
| <b>Spaced Learning</b>  |             |                       |          |

| School Type | Mean    | Std. Deviation | N   |
|-------------|---------|----------------|-----|
| Private     | 80.7750 | 18.2974        | 40  |
| Public      | 54.0222 | 20.0404        | 90  |
| Total       | 62.25   | 23.06          | 130 |

The descriptive statistics showing the mean scores of Reality Pedagogy and Spaced Learning on Basic English Structure skills based on school type is presented in table 2d. The result revealed scores obtained for Basic English Structure was higher among pupils from Private school ( $M=80.07\pm 19.9$ ) when compared to those in public schools ( $M=40.8\pm 20.7$ ) using Reality Pedagogy strategy. Likewise, pupils from private school scored higher in Basic English Structure ( $M=80.77\pm 18.3$ ) than pupils from public primary school ( $M=54.02\pm 20.0$ ) using Spaced Learning strategy. This implies better performance among pupils from private schools with regards to Basic English Structure using the two strategies.

**Table 3b Analysis of Covariance (ANCOVA) of the effect of Reality Pedagogy and Spaced Learning strategy on Basic English Structure of lower primary school pupils based on school type**

| Source          | Learning Strategies | Tests of Between-Subjects Effects |     |             |         |      |                     |
|-----------------|---------------------|-----------------------------------|-----|-------------|---------|------|---------------------|
|                 |                     | Type III Sum of Squares           | df  | Mean Square | F       | Sig. | Partial Eta Squared |
| Corrected Model | Reality Pedagogy    | 46558.039 <sup>a</sup>            | 2   | 23279.019   | 60.122  | .000 | .486                |
|                 | Spaced Learning     | 21476.622 <sup>b</sup>            | 2   | 10738.311   | 28.928  | .000 | .313                |
| Intercept       | Reality Pedagogy    | 123825.427                        | 1   | 123825.427  | 319.802 | .000 | .716                |
|                 | Spaced Learning     | 153283.300                        | 1   | 153283.300  | 412.926 | .000 | .765                |
| School Type     | Reality Pedagogy    | 46121.582                         | 1   | 46121.582   | 119.118 | .000 | .484                |
|                 | Spaced Learning     | 20665.722                         | 1   | 20665.722   | 55.671  | .000 | .305                |
| Error           | Reality Pedagogy    | 49173.569                         | 127 | 387.193     |         |      |                     |
|                 | Spaced Learning     | 47144.001                         | 127 | 371.213     |         |      |                     |
| Total           | Reality Pedagogy    | 463131.000                        | 130 |             |         |      |                     |

|   |                  |            |     |
|---|------------------|------------|-----|
|   | Spaced Learning  | 572441.000 | 130 |
| Corrected                                       | Reality Pedagogy | 95731.608  | 129 |
| Total   | Spaced Learning  | 68620.62   | 129 |
| a. R Squared = .486 (Adjusted R Squared = .478) |                  |            |     |
| b. R Squared = .313 (Adjusted R Squared = .302) |                  |            |     |

The result as shown in table 2e indicates the effect of using Reality Pedagogy (F=119.118, p<0.05) and Spaced Learning (F=55.671, p<0.05) in improving the Basic English Structure skills of lower primary school pupils based on school type was statistically significant. This result therefore implies Reality Pedagogy and Spaced Learning strategy can be used to improve the Basic English Structure skills of lower primary school pupils in both public and private schools. The null hypothesis that states that there is no significant difference in the effect of reality pedagogy and spaced learning strategies on Basic English Structure skills based on school type of lower primary school pupils in the study area is therefore rejected.

**Table 3c** Pair wise Comparison of the effect of Reality Pedagogy and Spaced Learning on Basic English Structure of lower primary school pupils based on school type

| Pairwise Comparisons |                 |                 |                       |            |                   |   |             |
|----------------------|-----------------|-----------------|-----------------------|------------|-------------------|---|-------------|
| Learning Strategies  | (I) School Type | (J) School Type | Mean Difference (I-J) | Std. Error | Sig. <sup>b</sup> | 95% Confidence Interval for Difference <sup>b</sup> |             |
|                      |                 |                 |                       |            |                   | Lower Bound   | Upper Bound |
| Reading Pedagogy     | Private         | Public          | 40.962*               | 3.753      | .000              | 33.535  | 48.388      |
|                      | Public          | Private         | -40.962*              | 3.753      | .000              | -48.388   | -33.535     |
| Spaced Learning      | Private         | Public          | 27.419*               | 3.675      | .000              | 20.147  | 34.691      |
|                      | Public          | Private         | -27.419*              | 3.675      | .000              | -34.691   | -20.147     |

Based on estimated marginal means

\*. The mean difference is significant at .05 level.

To establish the significant effect of the using Reality Pedagogy and Spaced Learning to improve the Basic English Structure skills of lower primary school pupils, post hoc pairwise comparison was conducted. The results suggested that the interaction effect of Reality Pedagogy and Spaced Learning on Basic English Structure of students from both private and public schools were statistically significant. The mean difference implies Reality Pedagogy strategy (M=40.962,  $p < 0.05$ ) and spaced learning (M=27.419,  $p < 0.05$ ) had more effect on Basic English Structure skills of lower primary school pupils from private schools when compared to public schools.

**Hypothesis Four:** *There is no significant difference in the effect of Reality Pedagogy and Spaced Learning strategies on Reading Comprehension skills and Basic English Structure skills based on gender of lower primary school pupils in the study area*

To test this hypothesis, the post-test scores of pupils obtained when the two strategies (Reality Pedagogy and Spaced Learning) were used with respect to Reading Comprehension and subjected to ANCOVA using scores obtained from the conventional method as covariate. The result for the effect of Reality Pedagogy on Reading Comprehension Skills based on sex is presented in Table 3a.

**Table 3d Descriptive Statistics of Reality Pedagogy and Spaced Learning scores on reading comprehension according to Gender**

| Descriptive Statistics |        |        |                |     |
|------------------------|--------|--------|----------------|-----|
| Learning Strategies    | Gender | Mean   | Std. Deviation | N   |
| Reality Pedagogy       | Male   | 48.415 | 29.2584        | 53  |
|                        | Female | 58.273 | 23.8882        | 77  |
|                        | Total  | 54.254 | 26.5503        | 130 |
| Spaced Learning        | Male   | 41.189 | 17.7613        | 53  |
|                        | Female | 48.701 | 18.9910        | 77  |
|                        | Total  | 45.63  | 18.79          | 130 |

The result revealed scores obtained for reading comprehension was higher among female pupils ( $M=58.27\pm 23.9$ ) when compared to male pupils ( $M=48.42\pm 29.3$ ) using Reality Pedagogy strategy. Similarly, using Spaced Learning strategy, the females scored higher ( $M=48.70\pm 18.9$ ) than the males ( $M=41.19\pm 17.8$ ) in reading comprehension. This implies better performance of the female pupils when compared to their male counterpart with regards to reading comprehension.

**Table 3e Analysis of Covariance (ANCOVA) of the effect of Reality Strategy on reading comprehension of lower primary school pupils based on gender**

| Tests of Between-Subjects Effects |                         |                         |          |                 |              |             |                     |
|-----------------------------------|-------------------------|-------------------------|----------|-----------------|--------------|-------------|---------------------|
| Source                            | Learning Strategy       | Type III Sum of Squares | Df       | Mean Square     | F            | Sig.        | Partial Eta Squared |
| Corrected Model                   | Reality Pedagogy        | 3751.146 <sup>a</sup>   | 2        | 1875.573        | 2.732        | .069        | .041                |
|                                   | Spaced Learning         | 25704.464 <sup>b</sup>  | 2        | 12852.232       | 82.098       | .000        | .564                |
| Intercept                         | Reality Pedagogy        | 129167.640              | 1        | 129167.640      | 188.158      | .000        | .597                |
|                                   | Spaced Learning         | 24564.550               | 1        | 24564.550       | 156.914      | .000        | .553                |
| <b>Gender</b>                     | <b>Reality Pedagogy</b> | <b>3638.698</b>         | <b>1</b> | <b>3638.698</b> | <b>5.300</b> | <b>.023</b> | <b>.040</b>         |
|                                   | <b>Spaced Learning</b>  | <b>1.350</b>            | <b>1</b> | <b>1.350</b>    | <b>.009</b>  | <b>.926</b> | <b>.000</b>         |
| Error                             | Reality Pedagogy        | 87183.477               | 127      | 686.484         |              |             |                     |
|                                   | Spaced Learning         | 19881.544               | 127      | 156.548         |              |             |                     |
| Total                             | Reality Pedagogy        | 473587.000              | 130      |                 |              |             |                     |
|                                   | Spaced Learning         | 316359.00               | 130      |                 |              |             |                     |
| Corrected Total                   | Reality Pedagogy        | 90934.62                | 129      |                 |              |             |                     |
| Total                             | Spaced Learning         | 45586.008               | 129      |                 |              |             |                     |

a. R Squared = .041 (Adjusted R Squared = .026)  
b. R Squared = .564 (Adjusted R Squared = .557)

The result as shown in Table 3b indicates that the difference in the effect of using Reality Pedagogy to improve the reading comprehension skills of lower primary school pupils was

statistically significant ( $F=5.300, p<0.05$ ). However, the difference in the use of Spaced Learning strategy to improve the reading comprehension skills of lower primary school pupils was not statistically significant ( $F=0.009, p>0.05$ ) with respect to gender. This result therefore implies that sex is a good predictor of reading comprehension skills of lower primary school pupils with respect to the use of Reality Pedagogy. However, with regards to the use of Spaced Learning strategy to improve reading comprehension skills of lower primary school pupils, sex is not a good predictor.

**Table 3f** Pairwise Comparison of the effect of Reality Strategy on reading comprehension of lower primary school pupils based on school type

| Pairwise Comparisons |            |            |                       |            |                   |   |             |
|----------------------|------------|------------|-----------------------|------------|-------------------|---|-------------|
| Dependent Variable   | (I) Gender | (J) Gender | Mean Difference (I-J) | Std. Error | Sig. <sup>b</sup> | 95% Confidence Interval for Difference <sup>b</sup> |             |
|                      |            |            |                       |            |                   | Lower Bound   | Upper Bound |
| Reality Pedagogy     | Male       | Female     | -11.180*              | 4.856      | .023              | -20.789   | -1.571      |
|                      | Female     | Male       | 11.180*               | 4.856      | .023              | 1.571   | 20.789      |
| Spaced Learning      | Male       | Female     | .215                  | 2.319      | .926              | -4.373  | 4.804       |
|                      | Female     | Male       | -.215                 | 2.319      | .926              | -4.804  | 4.373       |

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.

To establish the significant effect of the use of Reality Pedagogy and Spaced Learning to improve the reading comprehension skills of lower primary school pupils, post hoc pairwise comparison was conducted. The result suggests that there was significant difference in the effect of Reality Pedagogy on reading comprehension based on Gender given the significant means differences ( $M=11.180, p<0.05$ ), while there was no significant difference in the effect of using Spaced Learning strategy ( $M=0.215, p>0.05$ ) on reading comprehension based on gender.

**Table 4a Descriptive Statistics of Reality Pedagogy and Spaced Learning scores on Basic English Structure according to Gender**

| Descriptive Statistics |        |         |                |     |
|------------------------|--------|---------|----------------|-----|
| Learning Strategies    | Gender | Mean    | Std. Deviation | N   |
| Reality Pedagogy       | Male   | 45.8491 | 28.5963        | 53  |
|                        | Female | 58.1948 | 25.2420        | 77  |
|                        | Total  | 53.16   | 27.2416        | 130 |
| Spaced learning        | Male   | 55.3585 | 25.6883        | 53  |
|                        | Female | 67.0000 | 19.8852        | 77  |
|                        | Total  | 62.25   | 23.0639        | 130 |

To test this hypothesis, the posttest scores of pupils obtained when the two strategies (Reality Pedagogy and Spaced Learning) were used for Basic English Structure were subjected to ANCOVA using scores obtained from the conventional method as covariate. The result for the effect of Reality Pedagogy and Spaced Learning on Basic English Structure Skills based on sex is presented in Table 4a-c. The result revealed scores obtained for Reality Pedagogy with regards to Basic English Structure was higher among female pupils ( $M=58.19\pm25.2$ ) when compared to male pupils ( $M=45.85\pm28.6$ ). Likewise, using Spaced Learning strategy, the females scored higher ( $M=67.00\pm19.9$ ) than the males ( $M=55.36\pm25.7$ ) in Basic English Structure. This suggests better performance of the female pupils when compared to their male counterpart with regards to Basic English Structure using the two strategies.

**Table 4b Analysis of Covariance (ANCOVA) of the effect of Reality Pedagogy and Spaced Learning on Basic English Structure skills of lower primary school pupils based on gender**

| Tests of Between-Subjects Effects |                   |                         |    |             |       |      |                     |
|-----------------------------------|-------------------|-------------------------|----|-------------|-------|------|---------------------|
| Source                            | Learning Strategy | Type III Sum of Squares | Df | Mean Square | F     | Sig. | Partial Eta Squared |
| Corrected                         | Reality Pedagogy  | 4790.186 <sup>a</sup>   | 2  | 2395.093    | 3.345 | .038 | .050                |

|           |                  |                       |     |            |         |      |      |
|-----------|------------------|-----------------------|-----|------------|---------|------|------|
| Model     | Spaced Learning  | 4382.460 <sup>b</sup> | 2   | 2191.230   | 4.332   | .015 | .064 |
| Intercept | Reality Pedagogy | 107100.121            | 1   | 107100.121 | 149.566 | .000 | .541 |
|           | Spaced Learning  | 142729.948            | 1   | 142729.948 | 282.180 | .000 | .690 |
| Gender    | Reality Pedagogy | 4353.729              | 1   | 4353.729   | 6.080   | .015 | .046 |
|           | Spaced Learning  | 3571.560              | 1   | 3571.560   | 7.061   | .009 | .053 |
| Error     | Reality Pedagogy | 90941.422             | 127 | 716.074    |         |      |      |
|           | Spaced Learning  | 64238.163             | 127 | 505.812    |         |      |      |
| Total     | Reality Pedagogy | 463131.00             | 130 |            |         |      |      |
|           | Spaced Learning  | 572441.00             | 130 |            |         |      |      |
| Corrected | Reality Pedagogy | 95731.608             | 129 |            |         |      |      |
| Total     | Spaced Learning  | 68620.62              | 129 |            |         |      |      |

a. R Squared = .050 (Adjusted R Squared = .035)

b. R Squared = .064 (Adjusted R Squared = .049)

The ANCOVA result shown in Table 4b indicates that the effect of using Reality Pedagogy ( $F=6.080$ ,  $p<0.05$ ) and Spaced Learning ( $F=7.061$ ,  $p<0.05$ ) in improving the Basic English Structure skills of lower primary school pupils based on sex of the pupils was statistically significant. This result therefore implies sex is a good predictor of Basic English Structure skills of lower primary school pupils with respect to the use of Reality Pedagogy and Spaced Learning strategies.

**Table 4c** Pairwise Comparison of the effect of Reality Pedagogy and Spaced Learning strategies on Basic English Structure of lower primary school pupils based on sex

| Pairwise Comparisons |            |            |                       |            |                   |   |             |
|----------------------|------------|------------|-----------------------|------------|-------------------|---|-------------|
| Learning Strategies  | (I) Gender | (J) Gender | Mean Difference (I-J) | Std. Error | Sig. <sup>b</sup> | 95% Confidence Interval for Difference <sup>b</sup> |             |
|                      |            |            |                       |            |                   | Lower Bound   | Upper Bound |
| Reality              | Male       | Female     | -12.229*              | 4.960      | .015              | -22.043   | -2.415      |

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|          |        |        |          |       |      |         |        |
|----------|--------|--------|----------|-------|------|---------|--------|
| Pedagogy | Female | Male   | 12.229*  | 4.960 | .015 | 2.415   | 22.043 |
| Spaced   | Male   | Female | -11.076* | 4.168 | .009 | -19.325 | -2.828 |
| Learning | Female | Male   | 11.076*  | 4.168 | .009 | 2.828   | 19.325 |

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.

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To establish the significant effect of using Reality Pedagogy and Spaced Learning to improve the reading comprehension skills of lower primary school pupils, post hoc pairwise comparison was conducted. The result suggests the interaction effect of Pedagogy Strategy and Spaced Learning on Basic English Structure of both male and female students was statistically significant. The mean difference implies Reality Pedagogy strategy (M=12.346,  $p < 0.05$ ) and spaced learning (M=11.642,  $p < 0.05$ ) had more effect on female pupils' Basic English Structure skills of lower primary school when compared to the males.

## Discussion

This study examined the effects of Reality Pedagogy and Spaced Learning strategies on Reading Comprehension and Basic English Structure of Lower primary three pupils in Osun State. Four research hypotheses were tested.

The result of the first hypothesis: there is no significant effect of reality pedagogy and spaced learning strategies on the reading comprehension of pupils in lower primary school in Osun state revealed that Reality Pedagogy and Spaced Learning strategies had significant effect on the reading comprehension skills of lower primary school pupils in the study area. This implies that the two strategies can be used to improve the Reading Comprehension skills of lower primary three pupils. The result also suggests that Reality Pedagogy Strategy was more effective for improving reading comprehension of lower primary pupils relative to Spaced Learning Strategy. This result corroborates Taher's (2012) study that found reality pedagogy to have had significant effect on the Grade 8 pupils' English phonology and spelling skills.

Findings from the second hypothesis: there is no significant effect of the two strategies on basic English Structure of lower primary schools also revealed that the effect of Reality Pedagogy and Spaced Learning strategies on Basic English Structure of lower primary school

pupils in the study area was significant. In other words, Reality Pedagogy and Spaced learning strategies can be used to improve the Basic English Structure skills of lower primary three pupils. The result however suggests that Spaced Learning strategy was more effective for improving the Basic English Structure of the pupils relative to the Reality Pedagogy strategy thereby collaborating Hutchins's (2017) study.

The third hypothesis states that there is no significant difference in the effect of the two strategies on the pupils' reading comprehension skills and basic English structure skills based on school type of lower primary school pupils in the study area. The results of analysed data however, revealed that the effect of using Reality Pedagogy and Spaced Learning in improving the reading comprehension skills of lower primary school pupils based on school type was statistically significant. The result therefore implies that Reality Pedagogy and Spaced Learning can be used to improve the reading comprehension skills of lower primary school pupils in both public and private schools (school type). However, in assessing the mean differences, it was found that both Reality Pedagogy strategy and Spaced Learning had more effect on the reading comprehension skills of lower primary school pupils from private schools when compared to those in public schools. Similarly, the result also revealed that the effect of using Reality Pedagogy and Spaced Learning strategies in improving the Basic English Structure skills of lower primary school pupils based on school type was statistically significant. This result therefore suggest that Reality Pedagogy and Spaced Learning strategy can be used to improve the Basic English Structure skills of lower primary school pupils in both public and private schools which is in tandem with the earlier findings of Toppino and Koenig (2015). Moreover, the assessment of the mean difference showed Reality Pedagogy and Spaced Learning strategy had more effect on Basic English Structure skills of lower primary school pupils from private schools when compared to their counterpart from public schools.

Furthermore, the result of the fourth hypothesis revealed the significant difference in the effect of using Reality Pedagogy to improve the reading comprehension and basic English structure of lower primary school pupils based on gender. However, the result showed that difference in the use of Spaced Learning strategy to improve the reading comprehension skills of lower primary school pupils was not significant with respect to gender. This suggests gender is a good predictor of reading comprehension skills of lower primary school pupils with respect to

the use of Reality Pedagogy. However, with regards to the use of Spaced Learning strategy to improve reading comprehension skills of lower primary school pupils, gender is not a good predictor. With regards to Basic English Structure, the result revealed better performance among the female pupils when both Reality Pedagogy and Spaced Learning strategies were used, compared to their male counterpart. Overall, the result suggests gender is a good predictor of Basic English Structure skills of lower primary school pupils with respect to the use of Reality Pedagogy and Spaced Learning strategies as earlier found by Loveless(2015).

### **Conclusion**

The results of this study provide empirical evidence in attempting to facilitate, enhance and inculcate reading comprehension and basic English grammar structure in lower primary school pupils. Reality pedagogy and Spaced learning strategies are efficacious especially, when the learning environments are conducive for proper implementation of these strategies to boost learning.

### **Recommendations**

Consequent upon the experience of the researchers, the following recommendations are hereby made:

- The unparalleled success of the use of these two strategies recorded in lower primary pupils warrant its recommendation in upper primary schools to facilitate and improve early reading comprehension and basic grammar skills of the pupils.
- Primary school authorities should create structured play environment and ample time should be allocated to this leaning space. Also, qualitative periods should be given to pupils not just for reading exercise but for comprehension exercises.
- Teachers of English language should understand that there is nothing new in English language as letters will always remain letters; therefore, innovative approach towards grammar and comprehension learning instruction should be coveted for effective learning and instructional for sustainable growth and development. The strategies adopted in this work are cheap and easy to use hence, should be adopted to make learning and instruction easy for both teachers and pupils.

- There is need to bridge the disparity in reading across gender therefore, stake holders should spur both male and female gender towards reading.

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