EFFECTS OF EXTENSIVE READING STRATEGY ON STUDENTS ACHIEVEMENT IN READING COMPREHENSION

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Abstract

This study was designed to determine the effect of extensive reading strategy on achievement of students in reading comprehension. The study adopted a pre-test, post-test non-equivalent control group, quasi-experimental research design which involved group of students in their intact class assigned to experimental group and control group. The population of the study was all the Junior Secondary school two (JSSII) English Studies students in Kwali Area Council of Federal Capital Territory (FCT), Abuja. The sample for the study was 210. Three research questions and three null hypotheses, tested at .05 level of significance, guided the study. The instrument used for data collection was Reading Comprehension Achievement Test (RCAT). The extensive reading lesson plan, RCAT and the training manual were subjected to face validation by three experts. The reliability coefficient for the RCAT was found to be 0.71 using Kuder-Richardson. Mean was used to answer the research questions; while ANCOVA was employed to test the hypotheses. The study found out that extensive reading strategy is more effective in improving students' achievement in reading comprehension. There was an effect of gender on students' achievement in reading comprehension favouring boys. The study found out that there was no interaction effect of extensive reading strategy and gender on achievement of Junior Secondary School students in reading comprehension. This simply means that the effectiveness of extensive reading strategy on students' achievement in reading comprehension does not depend on gender. The study recommended that the Nigerian Educational Research and Development Council (NERDC) should carry out a review of Junior Secondary Schools English Studies curriculum with a view to incorporating the extensive reading strategy into the teaching of reading comprehension.

Key words: Extensive reading, achievement, reading comprehension

Introduction

Reading is a vital skill for effective education and communication. In the present information age, it becomes a critical skill for children's success both in and out of school. The goal of reading is understanding and successful reading can only take place when the reader is able to understand the message. It is the development of a set of processes by which words in print are recognized and understood and the development of language comprehension process by which texts as well as spoken language are understood and interpreted (Elui, 2013).

Reading comprehension is a more sophisticated aspect of reading that involves understanding and interpreting what is read using background experiences. It constitutes a major part of all

Examinations in English in Nigeria. As such success or failure of students in English and other subjects is to a great extent dependent on their reading comprehension skills.

Research findings have revealed the serious problem of reading at all levels of education in Nigeria. (Idogo, 2005; Adeniyi, 2010; Ajayi, 2004). These studies have revealed that a large number of Junior Secondary School students lack literacy skills and find it difficult to read and understand. The studies by Ayodele (1987) and Ukaegbu (cited in Ene, 2002) establish that while the performance of students in public examination in the test of English is generally poor, the greatest areas of problem are in comprehension and summary. Idogo, (2005) and Ajayi, (2004) have traced this problem to the weak foundations the students had in reading at the primary school level. Thus, the 1998 WAEC Chief Examiner for English has stressed the need for schools to teach the skills of comprehension more seriously.

Studies have shown that in Nigeria, the teacher's choice method is one of the main factors of poor performance in reading comprehension (Kolawole, Adepoju and Adelore, 2000). Most teachers do not understand the difference between teaching English and teaching reading, hence they have used a number of strategies such as intensive or stock lesson strategy in teaching reading comprehension. This strategy is the oldest and most predominant strategy used in teaching reading comprehension in Junior Secondary schools today. This strategy limits the type of books and activities that children are exposed to and give them little practice of the skill of actual reading.

Gender has also been identified as one of the factors affecting students reading (Wilhem, 2002; McKenna, 1997). Gender is used to describe the behaviour and attitude expected of an individual on the basis of being born either as male or female (Mboto and Bassey, 2004). Studies on gender (Wilhem, 2002, Mckenna, 1997) have revealed a persistent literacy gap between boys and girls. While some studies such as Wilhem, (2002), Mckenna (1997), Topping, (2008) have lines of differences in favour of girls, some studies show that boys achieve better in some aspects of reading (Canadian Council of Learning, 2008). So in view of these contrasting results, there is need for a new study to contribute in resolving the issue concerning gender influence on reading achievement.

This call for an effective strategy for teaching reading comprehension in English studies in Nigeria. One of the pedagogical strategies of addressing the problems of teaching reading comprehension, developing reading fluency and automatic word recognition is through extensive reading. This strategy to reading exposes children to whole texts and to all kinds of prints like magazines, newspapers, poems, fiction and nonfiction, letters, notes, list etc., hence, it means reading widely and in quantity for pleasure and paying attention to the meaning of the text and not the language (Bamford and Day, 1997). Against this background, this study is conceived to expose JSS II students to extensive reading strategy using basal and graded readers, to find out the effect on their achievement in and attitude to reading comprehension.

Statement of the Problem

The teaching of reading in JSS and the performance of students in public examinations have been reported to be very poor. The results of the FME/UNICEF/UNESCO/MLA study of 1997 (Falayo, Makoju, okebukola, Olubodun & Onuche, 1997) revealed that less than a quarter of JSS II students in Nigerian schools are able to read and comprehend text written in English. The above revelation shows that reading is a national problem in Nigeria. Consequently, student's

language deficiency especially in reading comprehension must be addressed if students are expected to improve in their persistent poor performance in English and other subjects.

The general poor performance of students in reading and its effects on their performance in reading comprehension is a problem. Could it be attributed to the method of teaching? To what extent could an extensive reading strategy of vocabulary activities, explicit instruction on reading and out of class free reading help to ameliorate this problem? This study will therefore find out the effect of extensive reading on students achievement in reading comprehension.

Aim and Objective of the Study

The aim of this study is to investigate the effect of extensive reading on Junior Secondary School student's achievement in reading comprehension. Specifically, the study sought to determine:

1. Effect of extensive reading strategy on student achievement in reading comprehension when exposed to extensive reading.
2. Effect of gender on student's achievement in reading comprehension when exposed to extensive reading strategy.
3. The interaction effect of treatment and gender on student's achievement in reading comprehension.

Research Questions

The following research questions will guide the study:

1. What is the effect of extensive reading strategy on students' mean achievement scores in reading comprehension?
2. What is the effect of gender on students' mean achievement scores in reading comprehension when exposed to extensive reading strategy?
3. What is the interaction effect of treatment and gender on student's achievement in reading comprehension when exposed to extensive reading?

Hypotheses

The following null hypotheses were tested at .05 level of significance:

HO_1: There is no significant difference between the mean achievement scores of students taught reading comprehension with extensive reading strategy and those taught with conventional method.

HO_2: There is no significant difference between the effect of gender (male and female) on students achievement in reading comprehension when exposed to extensive reading strategy.

HO_3: There is no significant interaction effect of treatments given to students and their gender with respect to their mean scores on the reading comprehension achievement test.

Methodology

Design of the Study

The design adopted for this study was the quasi-experimental design. A quasi experimental design is chosen because intact classes were used. Hence, there was no random assignment of research subjects to experimental and control groups. Two groups were used for the study. Group A was taught using the conventional stock lesson strategy while Group B was exposed to extensive reading. Group A was the control group, while Group B was experimental or treatment group.

Area of the Study
This study was carried out in public Upper Basic schools in Kwali Area Council. Majority of the inhabitants are involved in farming. Many of these farmers have low educational background and most especially, poor reading culture. They therefore show little interest in their children's progress in reading and rarely provide books for them to practice reading at home. The implication of their poor reading culture is enormous on the literacy development of children living in Kwali Area Council. Many of them have problems with automatic recognition of words on sight and this deprives them of the opportunity to use reading as a tool for learning in the various content areas. The choice of Kwali Area Council for this study was therefore necessary as the study will help children living in the area to develop love for reading as well as achieve better in other school subjects.

Population of the Study
The target population for this study was all the JSS II students enrolled in the 72 Junior Secondary Schools in Kwali Area Council numbering 5845 for the 2016/2017 session (FCT Education Resource Centre). JSS II was selected because English becomes the language of instruction as well as a subject studied at this level. Independent reading is also taking place at this level of education.

Sample and Sampling Techniques
The sample consist of 210 students (115 boys and 95 girls) from four schools in Kwali Area Council. These four schools were selected through purposive and random sampling techniques from the 88 public Junior Secondary Schools in Kwali Area Council.

Instrument for Data Collection
The instrument for this study was Reading Comprehension Achievement Test (RCAT). The RCAT contains four comprehension passages. The passages were adopted from the student's English textbooks for JSS II, following the specification of the Nigerian Educational Research and Development Council (NERDC) Curriculum. A table of specification was drawn to ensure that test items were representatives of the various areas in the units and levels of comprehension. Reading comprehension Achievement Test (RCAT) was used for both pre-test and post-test. For the Reading comprehension Achievement Test (RCAT), the overall score was 50 (each of the 25 questions was scored 2mks).

The instrument was given to three experts, one in Measurement and Evaluation and two experienced Upper Basic English teachers for face and content validation in terms of the instrument with respect to the students' operational level and learning objectives. The reliability for the RCAT was determined using Kuder-Richardson: 20 formula which yielded an internal consistency of 0.73 for the passages. Furthermore, the item discrimination and difficulty indices for the items in the RCAT were also determined using the formulae. Lesson plans and an extensive reading training program were developed by the researcher and used for the study. The experimental group has a different lesson plan for explicit instruction on reading comprehension. It was developed using the five stages in the reading plan namely, pre-reading, reading, conferencing, responding, exploring and application. Four teachers were given three weeks orientation on the extensive instructional strategy by the researcher.

Experimental Procedures
The students were pre-tested using RCAT. The RCAT contains four passages which the students read and then carried out the activities that follow. The same pretest was administered to all

students in both treatment and control group. This helped to establish equivalence of the subjects before treatment and to establish the basis on which variation in the post test after treatment or lack of treatment were justified.

After the pretest, the teacher started the teaching in both the experimental and control groups. The control groups were taught using the stock lesson strategy. The extensive reading or treatment group received a different programme. Out of the five periods assigned to English studies weekly, Mondays was used for extensive reading, while normal lessons went on for the remaining four periods. Class libraries were established using grade readers. Each reading level was provided with at least 15 graded texts. The teaching was organized on a typical 30 minutes period involving pre-reading activities of picture and text walk, and prediction, silent reading using comprehension strategies, whole class interaction about the book they are reading, reading aloud selected portions of the text, discussion of comprehension questions using question-answer relationships, sharing reactions and responses, vocabulary activities, teaching of story structure and text organization/pattern. Finally, the students applied what they had learnt in their normal reading lessons and also borrow a book/books from the class library to read. Each child carried out a reading exercise on a text he or she had read. At the end of the treatment, which lasted for six weeks, post-test was administered to subjects in the two groups. Mean score and standard deviation were used to answer the research questions, while t-test and Analysis of Co-variance (ANCOVA) were used to test the relevant hypotheses.

Results

Research Question 1
What is the effect of extensive reading strategy on students' mean achievement scores in reading comprehension?

Table 1: *Mean of Pretest and Posttest Scores of Experimental and Control Groups in the Achievement Test*

Group	N	Pretest $\overline{X}$	Posttest $\overline{X}$	Mean Gain
Experimental	110	12.79	43.82	31.03
Control	100	13.22	32.73	19.51

The data presented in Table 1 show that the experimental group had a mean score of 12.79 in the pretest and a mean score of 43.82 in the posttest making a pretest, posttest mean gain in experimental group to be 31.03. The control group had a mean score of 13.22 in the pretest and a posttest mean of 32.73 with a pretest, posttest mean gain of 19.51. With this result, the students in the experimental group performed better in the achievement test than the students in the control group. Hence, extensive reading strategy is effective than the conventional method on students achievement in reading comprehension

Research Question 2
What is the effect of gender on students' mean achievement scores in reading comprehension when exposed to extensive reading strategy?

Table 2: *Mean of Pretest and Posttest of Male and Female Students Taught reading comprehension in the Achievement Test*

Gender	Extensive Reading Strategy				Conventional Method			
	N	Pretest	Posttest	*Mean Gain* $\overline{X}$	N	Pretest	Posttest	*Mean Gain* $\overline{X}$
Male	51	12.57	42.68	30.11	44	13.35	33.01	19.66
Female	59	12.37	40.56	28.19	56	12.79	31.23	18.44

The data presented in Table 2 show that male students taught reading comprehension with extensive reading strategy had a mean score of 12.57 in the pretest and a mean score of 42.68 in the posttest making a pretest, posttest mean gain in the male students taught with extensive reading strategy to be 30.11. Meanwhile, female students taught reading comprehension with extensive reading strategy had a mean score of 12.37 in the pretest and a posttest mean of 40.56 with a pretest, posttest mean gain of 28.19. Also, male students taught with conventional method had a mean score of 13.35 in the pretest and a mean score of 33.01 in the posttest making a pretest, posttest mean gain in the male students taught with conventional method to be 19.66. Meanwhile, female students taught reading comprehension with conventional method had a mean score of 12.79 in the pretest and a posttest mean of 31.23 with a pretest, posttest mean gain of 18.44. With these results male students taught reading comprehension had higher mean gain scores than female students in the Achievement Test. Thus, there is an effect attributable to gender on the achievement of students taught reading comprehension.

Hypotheses

HO$_1$: There is no significant difference between the mean achievement scores of students taught reading comprehension with extensive reading strategy and those taught with conventional method.

HO$_2$: There is no significant difference between the effect of gender (male and female) on students achievement in reading comprehension when exposed to extensive reading strategy.

HO$_3$: There is no significant interaction effect of treatments given to students and their gender with respect to their mean scores on the reading comprehension Achievement test.

The data presented in Table 3 shows F-calculated values for mean scores of experimental and control groups in the achievement test, gender and interaction effect of treatments and gender on students' achievement in reading comprehension. The F-calculated value for Group is 98.428 with a significance of F at .000 which is less than .05. The null-hypothesis is therefore rejected at .05 level of significance. With this result, there is a significant difference between the mean achievement scores of students taught reading comprehension with Extensive reading strategy and those taught with conventional method. The F-calculated value for gender is 8.923 with a significance of F at .041 which is less than .05. This means that there is significant difference between the effects of Gender on students' achievement in reading comprehension. Therefore, the null hypothesis of no significant difference between the effect of gender (male and female) on students' achievement in reading comprehension is rejected at .05 level of significance. The interaction of treatments and gender has F-calculated value of 0.914 with significance of F of .257. Since .257 is higher than .05, the null hypothesis for interaction effect of treatment and

gender is accepted. Hence, there is no significant interaction effect of treatments given to students and their gender with respect to their mean scores on the Reading Comprehension Achievement Test.

Table 3: *Summary of Analysis of Covariance (ANCOVA) for Test of Significance between the Mean Scores of Experimental and Control groups in the Achievement Test, Effects of Gender and Interaction Effect of Treatments given to Students and their gender with respect to their mean scores on the reading comprehension Achievement Test*

Source	Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	840.522[a]	4	193.04	56.833	.000
Intercept	1609.005	1	1609.005	417.003	.000
Pretest	12.79	1	12.79	.671	.415
Group	644.550	1	644.550	98.428*	.000
Gender	24.94	1	24.94	8.923*	.041
Group * Gender	12.37	1	12.37	0.914	.257
Error	611.130	207	12.43		
Total	35999.30	210			
Corrected Total	1742.456	219			

*Significant at sig of F< .05

Discussion of Findings

The data presented in Table 1 provided answer to research question one. Finding revealed that the main effect of extensive reading strategy on students' achievement in reading comprehension is higher than the main effect of conventional method. At the same time, Analysis of covariance was used to test the first hypothesis, Table 3, at the calculated F-value (98.428), Significance of F (.000) and confidence level of .05, there was a statistically significant difference between the main effect of (extensive reading strategy and conventional method) on students achievement in reading comprehension confirming that the difference between the main effect of Extensive reading strategy and conventional method was statistically significant. The implication of this finding is that Extensive reading strategy is more effective than conventional method in enhancing students' achievement in reading comprehension. The finding that Extensive reading strategy has positive effect on students achievement is similar to the finding of Ene (2002) and Hafiz & Tudor (1989) who in their study found out that the adoption of close instructional approach and extensive reading strategy in the teaching of students improved the students achievement in reading comprehension than the students taught with traditional instructional method. A possible explanation for the effectiveness of the Extensive reading strategy is the students' active involvement in learning process through micro-integrative, macro-elaborative and meta-cognitive processes (Irwin, 1991).

The more a child reads, the more his vocabulary increases, the more the child understands and the more that child advances in knowledge (Pivotal Teaching Programme Manual, 2003).

The data presented in Table 2 provided answer to research question 2. Finding revealed that male students had a higher mean score in the reading comprehension achievement test than female students. At the same time, Analysis of covariance was employed to test the second hypothesis, Table 3, at the calculated F- value (8.923), significance of F (.041) and confidence level of .05, there was a significant difference between the main effects of gender (male and female) on students' achievement in reading comprehension which confirmed that the difference between the achievement of male and female students in reading comprehension was statistically significant favouring boys. The obvious implication of this finding is that there was an effect attributable to gender on achievement of students in reading comprehension. This finding is similar to findings of several other studies that had been conducted on gender effects on achievement of male and female students in English Language and other related fields. For instance, one of the important discoveries emerging from studies involving the impact of sentence combining instructional strategy on Junior Secondary School students' achievement in written English and attitude to composition writing was the revelation of gender differences favouring boys. This also affirms Mela (2009) that it has been documented that disparity exists between male and female students' performance in English Language and other related fields, and in some cases boys had an edge over girls in academic achievement. The identified gender effect on achievement in reading comprehension was responsible for the significant gender effect found on students' achievement in reading comprehension. Thus, the superiority of male in vocational skills was responsible for their improved achievement in reading comprehension. However, Analysis of covariance was used to test hypothesis three, Table 3. At the calculated F-value (0.914), significance of F (.257) and confidence level of .05, there was no interaction effect of treatment given to students and their gender with respect to their mean scores on reading comprehension Achievement test.

Conclusion

The need to find the best strategy to assist English Studies students in learning reading comprehension is paramount since interest is essential for achievement in reading comprehension and English language as a whole. The study therefore, set out to determine the effect of Extensive reading strategy on academic achievement of students in Reading comprehension. The study adopted quasi-experimental research design. Specifically, the study makes use of pre-test, post-test non-equivalent control group design. This study has found out that extensive reading strategy is more effective in improving students' achievement in reading comprehension than conventional technique. Also the study revealed that, there was an effect attributable to gender on students' achievement in reading comprehension. However, the study found out no interaction effects of Extensive reading strategy and gender on achievement of upper basic students in Reading comprehension. This simply means that the effectiveness of extensive reading strategy on achievement in reading comprehension does not depend on the levels of gender. Hence, irrespective of nature of sex, learners will record improved performance in achievement in reading comprehension when Extensive reading strategy is employed for teaching reading comprehension. These results therefore showed that extensive reading strategy is a viable teaching method for reading comprehension.

Recommendations

Based on the findings of this study and subsequent discussion, the following recommendations are made:

1. Secondary School teachers should adopt the use of the extensive reading strategy to the teaching of reading comprehension.
2. Nigerian Educational Research and Development Council (NERDC) should consider review of the curriculum for reading comprehension with a view to incorporating extensive reading strategy into the teaching of reading comprehension.
3. Government should provide tools and equipment needed to teach the state- of- the- art of reading comprehension in the Secondary Schools.
4. Workshops, seminars and conferences should be organized by Ministry of Education and administrators of Secondary Schools to enlighten English Studies teachers and improve their knowledge and skills on the use of extensive reading strategies for improving students' achievement in reading comprehension.

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