Full Length Research Paper

The effect of pre-reading activities on students' performance in reading comprehension in senior secondary schools

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This study investigated the effect of pre-reading activities on English as a Second Language students' performance in reading comprehension in senior secondary schools. Fifty students selected from two senior secondary schools student in Kaduna (Nigeria) were used for the study. The students selected were made up of both male and female. Twenty-five students (Senior Secondary year one intact class) were from Government Secondary School Ungwar Sarki, (experimental group) and twenty five students (Senior Secondary Year one intact class) from Government Secondary School Nassarawa, (control group). A Pre test – Post test experimental design was used for the study. Students were pre-tested to establish their homogeneity before the treatment. They were taught for six weeks and were tested using cloze test as an instrument. The findings through the computation and analysis of t-test revealed that better comprehension can be gained through exposure to pre-reading activities. In fact, the experimental group which was exposed to pre-reading activities gained considerable abilities in comprehension as reflected in their performance than the control group. The study recommended that teachers could use pre-reading activities as a useful tool to facilitate students' reading comprehension activities. Curriculum planners could also provide pre-reading activities such as pre-viewing activities, pre-reading discussion, and brain storming activities along side each reading task to make reading comprehension lessons more purposeful and meaningful.

Keywords: Effect, pre-reading activities, performance, reading comprehension, senior secondary students.

INTRODUCTION/BACKGROUND TO THE STUDY

Most researchers (Oyetunde 2009, Yusuf, 2010, Alderson and Urquhart 1984, Chai 2001, Hudson 1982, Goodman, 1970) would agree that reading is one of the most important skills for educational and professional success. In highlighting the importance of reading comprehension, Langer (1981: 147) stated that "reading is the most important activity in any language class, not only as a source of information and pleasurable activity, but also as a means of consolidating and extending one's knowledge of the language."

Reading reinforces the learner's other language skills. Reutzel, (1985) confirms that those who read more, have larger vocabularies, do better on test of grammar and write better (Carrel and Floyd, 1989). Chastian (1988:218) while accepting the significance of reading for meaning claimed that all activities serve to facilitate communication fluency in each of the other language skills. According to Smith (1978), in advanced levels of second language learning, (ESL) the ability to read the written language at a reasonable rate and with good comprehension has long been recognised to be as important as oral skills, if not more important.

Studies of pre-reading activities Langer (1981) and Johnson (1982) have demonstrated the facilitative effects of activating reader's prior knowledge as relevant to understanding of the new text. According to them, pre-reading activities do not only prepare readers for the concepts that follow but also makes the reading task easier and connecting the new concept more meaningful to prior knowledge. Pre-reading activities are, thus, intended to activate appropriate knowledge structures or provide knowledge that the reader lacks. Research has

not demonstrated which of these is most effective. As far as this researcher is aware, none of these pre-reading activities have, been tested empirically in secondary schools in Kaduna (Nigeria) to ascertain their effectiveness. While Langer (1981) and Reutzel (1985) have concentrated on pre-reading activities such as pictorial context, vocabulary pre-teaching and pre-questioning, the present study intends to investigate the effects of pre-reading activities such as pre-reading discussion via group work, pre-viewing activities and brain storming on students' performance in reading comprehension in some selected senior secondary schools in Kaduna metropolis (Nigeria).

It is hoped that this study will be of immense benefit to English as a second language students and reading teachers at the secondary school level. It would alert classroom teachers on the need to motivate and stimulate students' interest in reading through meaningful pre-reading activities.

Purpose of the Study

The purpose of the study is to determine whether or not pre-reading activities have any effect on students' performance in reading comprehension.

Research Question

What is the effect of pre-reading activities' on students' performance in reading comprehension?

Hypothesis

Pre-reading activities have no significant effect on students' performance in reading comprehension.

Literature Review

Pre-reading activities

Ringler and Weber (1984) call pre-reading activities enabling activities, because they provide a reader with necessary background to organise activity and to comprehend the material. These experiences involve understanding the purpose(s) for reading and building knowledge base necessary for dealing with the content and the structure of the material. They say that pre-reading activities elicit prior knowledge, build background, and focus attention.

According to Chastain (1988) the purpose of pre-reading activities is to motivate the students to want to read the assignment and to prepare them to be able to read it. Pre-reading tasks have tended to focus

exclusively on preparing the reader for likely linguistic difficulties in a text; more recently attention has shifted to cultural or conceptual difficulties. However, pre-reading, activities may not just offer conceptual language reader's supposed linguistic or socio-cultural inadequacies, they may also remind readers of what they do, in fact, already know and think, that is, to activate existing schematic knowledge.

Previewing Activities

Swaffar et al (1991) point out the benefits of previewing techniques that allow students to formulate hypothesis about the text. By taking advantages of contextual clues-titles, heading, pictures, students are encouraged to draw inferences prior to reading. In addition, Swaffar views identification of text genre: articles, poetry, nonfiction, and plays, as a very important preview exercise. She suggests that engaging in this type of analysis enables students to identify the probable rhetorical grammar, stylistic marker and possible constraints on the development of ideas.

According to Chia (2001), the aim of previewing is to help readers predict or make some educated guesses about what is in the text and thus activate effective top-down processing for reading comprehension. Several stimuli in a text, such as the title, photographs, illustrations, or subtitles, are usually closely connected to the author's ideas and content. So, based on any of them, students can make predictions about the content of the text. To make more specific predictions, however, students obviously need more procedures. The following procedures were used in this study

1.   Students were asked to read the title of the passage. Do you know anything about this subject?
2.   Students were asked to read the first paragraphs, which generally introduce topics discussed in the text. Can you determine the general themes of the text?
3.   Students were asked to read the first sentence of each paragraph, usually the topic sentence, which gives the main idea of the paragraph. Can you determine the major points of the text?
4.   Students were asked to read the last paragraph, which often reveals the conclusion of the author. Students should discuss how the author organizes the information to present his point of view.

The above pre-reading activities simply consist of questions to which the reader is required to find an answer from the text. Traditionally, this type of question followed the text and was designed to test a comprehension, but in more recent materials, questions often precede the text and function as scanning tasks.

Questions stimulating meaningful discussions can be regarded as another type of top-down processing activity. Questions may be generated by the teacher or by the students and should be done before the reading, rather

than after the reading.

Pre-reading discussion via group work

How do students generate text-related questions even before they read the passage? Williams (1987) gives an interesting three-phase (pre-reading, while-reading, and post-reading) approach to reading, with particular attention to the pre-reading phase. In this study, the approach below was used. The approach begins by introducing the topic of the passage that students are going to read. Once the topic is presented, students are asked to work in groups and write a list of two columns. The first column lists things about the topic that they are sure of, and the second lists things that they are not sure of or don't know. See for an example of what a list about crocodiles might look like:

Sure	Not sure/don't know
1. Crocodiles are not fish	1. How many kinds?
2. They have a rough skin	2. How long do they live?
3. They live in water	3. How long is the largest?
4. They are dangerous	4. What do they eat?
	5. How fast can hey swim?
	6. How heavy are they?

Each member of the group, in turn, volunteers a fact or question, so that no group member is neglected. Afterwards, the teacher asks a representative from each group to write one or two items from their lists on the chalkboard so that some interesting items, which other groups may not have thought of, can be included.

Brain Storming

According to Chia (2001), many teaching techniques have been developed to activate student's prior knowledge for effective top-down processing in order to facilitate reading comprehension. Several of them have been empirically proven to be helpful, but some have not. Surprisingly, pre-reading vocabulary exercises, despite widespread use, do not improve overall comprehension (Hudson, 1982; Johnson 1982). In fact, according to Johnson, vocabulary study may result in a word-by-word, bottom-up approach that is detrimental to comprehension. But direct vocabulary instruction does not necessarily involve teaching specific words rather equipping learners with strategies necessary to expand their vocabulary.

According to Wallace (1992), one very popular kind of pre-reading activities is "brain storming". This may take the form of giving the class a particular key word or key concept. Students are then invited to call out words and concepts they personally associate with the keyword or words provided by the teacher. Brainstorming has many advantages as a classroom procedures. First, it requires little teacher preparation; second, allows learners

considerable freedom to bring their own prior knowledge and opinions to bear on a particular issue; and third, it can involve the whole class. No-one need feel threatened when any bid is acceptable and be added to the framework. In this study, students were asked to list kinds of associations which might be linked up by the key word money: 'coin', 'bank', 'poverty', 'pay day', 'interest', 'purse', etc. these bids reflect very different categories and levels of generalization. However, the initial random association can be classified and subcategorised either by the teacher or the students, and additional contributions from class members or the teacher can be added to stretch existing concepts.

Sample and Sampling Technique

The population from which the sample was drawn was made up of Senior Secondary students (in year one i.e SS1) in all the 35 Senior Secondary Schools in Kaduna metropolis. An urban population was selected in order to ensure that a wide range of reading abilities was represented among the students. Similarly, the urban population was made up of students from different parts of Nigeria, representing a wide range of ethnic groups such as Hausa, Igbo, Yoruba and socio-cultural background. Senior secondary year one students were selected because students at this level should have recorded reasonable progress in reading and acquired adequate skills to carry out the various reading tasks, in the reading comprehension test.

The sample of the study comprise fifty (50) senior secondary (year one students) selected from two schools in Kaduna (Nigeria). Twenty-five students from each school were used. Intact classes were used since the study was quasi-experimental. A pre test – post test experimental design was used. A pre-test was administered to establish the homogeneity of the sample. After six weeks of teaching, a post-test was administered to compare students performance from the two schools.

The two schools used for the study were Government Secondary School, Ungwar Sarki (as treatment group) and Government Secondary School Nassarawa (as control group). Senior Secondary year one intact classes wee used in the schools selected. These schools were selected because they are located far apart geographically to minimize interaction between the students of the two schools.

Data collection procedure

Cloze test was used to test students performance in reading comprehension.

Three passages were carefully selected from the Senior Secondary "English Project" textbook currently in use for this particular level of students in Kaduna. The

Table 1: showing the difference in the pre-test and post-test scores of students in the two groups.

	Pre test	Post test	Difference In gain score	Standard Deviation
Pre-reading activities (school A)	54.170	72.50	18.33	
Experimental group	49.67	61.33	11.66	
Control group (school B)				7.98

Table 2: showing the test of the hypothesis using T-test.

	Mean	Standard Deviation	Standard Error	T Calculated	T Critical	DF	
Pre-reading activities group	72.50		1.672				
Control Group (School A)	61.33	7.98	1.077	0.999	0.009	49	Rejected

N = 50
$P \leq 0.05$

passages namely "fishing" and "A Journey" and "on the farm" were selected because the passages were interesting in nature; subject matter of the passage were of interest to both male and female students; and content of passages were educative and informative.

Cloze test is a procedure whereby key words are deleted from a passage and students are required to provide the correct answers to fill in the gaps. Cloze is used for this study because it is a valuable and reliable means of discriminating effectively between 'good' and 'poor' comprehenders; and between high and low achievers (Smith, 1978). Thus one can safely assume that a good reader will perform better on a cloze reading comprehension task than a poor one.

The cloze test format used was a fixed-ratio deletion format (deletion of every nth word) the deletion rate chosen was every seventh word. These were two major reasons for the choice of an every seventh deletion rate. Cloze test with a fixed deletion rate are easiest for secondary school teachers to construct. Secondly, using an every seventh deletion means that the length of the passage does not have to exceed 200 words to yield 20 deletions (Bormuth, 1963). In this study, the cloze test was based on the three passages.

Data Presentation

The hypothesis earlier stated was tested using T-test at 0.05 level of significance.

DISCUSSION OF FINDINGS/CONCLUSION

The tables 1 and 2 above have revealed that the students in the experimental group performed better than those in the control group. The null hypothesis earlier stated is rejected on the basis of the T value, indicating that the experimental group which was exposed to pre-reading activities gained considerably in performance in reading comprehension tasks than control group. The experimental group performed much better than the control group in the cloze test. The computation and analysis of the T test provided the basis to reject the null hypothesis of the study, based on the decision rule which states that the hypothesis (H_0 is rejected if T-calculated values is greater than T-critical value. Results of the study indicated that providing pre-reading activities such as pre-reading discussion, pre-viewing and brain storming might serve as useful tools for language teachers and reading teachers in facilitating learners' reading comprehension ability. In this study, discussion, pre-viewing via group work and brain storming has been found to activate what students know through the exchange of information to enhance their knowledge of the subject. The results of this study also provided empirical answer to the research question posed and has stressed the effectiveness of using pre-reading activities in reading comprehension lessons.

From the discussion on findings, one can conclude that pre-reading activities have positive effect on students' performance in reading comprehension. The present study agrees with Langer (1981) and Johnson (1985) and provides some empirical support from Nigeria with regards to the fact that pre-reading activities such as pre-reading discussion, pre-viewing and brain storming can boost students' interest and help them construct mental models for the in-coming text.

Teachers can benefit from pre-reading activities, before any reading tasks, by helping students to activate their prior knowledge, build background and focus attention on the reading tasks through pre-reading activities.

Implication for teachers/Curriculum Planners

Reading comprehension is too often kept at the low level of recalling information explicitly stated in a text, whereas, it should go beyond this level to involve complex thinking skills in which students should be guided and encouraged to make the reading text their own through activities that will guide them into analysing texts such as pre-reading discussion, pre-viewing, and brain storming. Teachers should prepare students for linguistic, cultural or conceptual difficulties they may likely face with the reading comprehension text. Teachers can do this by exposing students to pre-reading activities that will activate their existing schematic knowledge (i.e what they, already know and think about the text).

Teachers should always help students to make educated guesses about what is in the text in order to activate effective top-down processing for reading comprehension. For instance, teachers can ask student questions about the title or topic sentence of the text/paragraph which is usually, closely connected to the author's ideas and content. What does this title suggest? What do you think the passage is about? What do you think the topic sentence suggest about the paragraph? All these will help students to activate their prior knowledge/background experience to make reading comprehension more meaningful.

Curriculum planners should ensure that they make provisions for pre-reading activities in the content of the curriculum. A section should be provided for pre-reading activities along side each reading task. Such activities should include pre-viewing activities, pre-reading discussion via group work, brain storming. This will help to make reading comprehension lessons more purposeful and meaningful. This will gradually help students to build a knowledge base necessary for dealing with content and structure of the reading text. The curriculum will be enriched if pre-reading activities are included as a guide to teachers. Text book writers will in turn, ensure that they include pre-reading activities before every reading comprehension passage.

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