



INFLUENCE OF INTERACTIVE ACTIVITIES ON STUDENTS' PERFORMANCE IN READING COMPREHENSION IN SENIOR SECONDARY SCHOOLS IN KADUNA, NIGERIA

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Abstract:

The research investigated the influence of interactive activities on students' performance in reading comprehension. Two secondary schools were used for the study. Eighty (80) homogenized senior secondary school II students were used for the study, i.e 40 students from each school. The two schools were located far apart i.e Government Secondary School Doka, Kaduna North, Government Secondary School, Makera in Kaduna South. Two instruments were administered on the students. T-test was used to analyse the result of the tests. The results revealed that interactive activities had significant influence on students' performance in reading comprehension. The findings suggest that interactive activities are helpful in understanding and comprehending written texts. It also helps teachers to see how students' individual thought processes are working with the information received from texts. Teachers are encouraged to use interactive activities to facilitate students' reading comprehension. Interactive activities such as 'turn on the meaning by engaging students in purposeful strategic conversations' provide students with ample opportunities to interact with the text, teacher and peers. Curriculum planners are equally encouraged to include interactive activities in the reading component of the English language curriculum for senior secondary schools.

Keywords: interactive, activities, learning resources, inclusive education, preschools

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1. Introduction

Most teacher-training institutions in Nigeria are not adequately equipped and oriented to prepare teachers meaningfully for reading instruction at the primary and secondary school level (Oyetunde, 2009). Furthermore, poor methodology has been identified as the main cause of students' reading failure. Investigations of the curriculum in teacher training colleges in Nigeria have shown that reading methodology is either ignored completely or is very poorly taught with the English methods course. Researches (Oyetunde, 2009, Yusuf, 2010, 2013) have equally proved that providing opportunities for students to talk or discuss reading texts can promote reading fluency. Promoting conversations in classrooms can increase children's use of language. This present study sets out to investigate the influence of interactive activities on students' reading comprehension with the aim of suggesting ways of improving the teaching of reading in secondary schools in Nigeria.

1.1 Review of Related Literature

Reading is far more than looking at individual words and saying them. Readers are in the fortunate position of encouraging language that is created mostly by unknown individuals who may be distant in space and time.

Reading is a transaction between the text and the reader (Ruddel, 1994); that is the reader constructs unique meanings through integrating background knowledge, emotions, attitudes, and expectations with the meaning the writer expresses.

Various Reading Scholars such as (Adams, 1980, Oyetunde, 2009, Stanovich, 1993) state that reading is not only deciphering a sign code, but also understanding the information covered by the text and integrating this information with the reader's previous knowledge. Thus, reading involves processes at different levels, from recognition of graphemes to the integration of global ideas from the text into the reader's knowledge. In this sense (Adams, 1980) indentifies three levels of processing that intervene in reading: word recognition, syntactic processing and semantic processing.

Different explanatory models of the reading process have been developed on the basis of these theses (Ruddel & Singer, 1994, Perfetti, 1985). The existing models differ in explaining how these processes relate functionally with each other; essentially, they differ in acknowledging or not the need to complete one of the processes in order to pass the information on to the next one. According to (Ruddel & Singer, 1994) these differences have given rise to three types of models: bottom-up processing, top-down processing and the interactive model, which is more widely accepted nowadays. The latter advocate a parallel distributed processing, where top-down and bottom-up information happens at the same time, the processing is then both interacting and compensating at the same time (Stanovich, 1993). They suggest teaching of reading comprehension should focus on learning and mastering the basic abilities of word understanding and should focus on the construction and integration of the text's significance in the reader's memory.

The present study has made use of interactive activities such as turning on the meaning by engaging students in purposeful strategic conversations. Interactive activities are activities learners can be exposed to that demand high level of students' participation and various forms of group activities ranging from discussion to retelling. The teacher guides students to perform different learning tasks at various levels of interaction. By turning on the meaning, students learn about the mental processes involved in activating ideas and making connections between known and new ideas. This strategy makes students aware that three different kinds of meaning can be constructed during reading – literal, inferential and personal. They develop understanding that a reader's prior knowledge plays a significant role in constructing meaning and that multiple meanings exist around a text.

1.2 Objective of the Study

To determine the influence of interactive activities on students' performance in reading comprehension in senior secondary schools.

1.3 Research Question

What is the influence of interactive activities on students' performance in reading comprehension in senior secondary schools?

1.4 Hypothesis

There is no significant difference in the performance of students taught reading comprehension using interactive activities and those taught without interactive activities in senior secondary schools.

2. Methodology

Two senior secondary schools were used for the study. Eighty (80) senior secondary I i.e SSI students were used for the study. The two schools were located far apart to minimize possible interaction between the two groups. Government secondary school (GSS) Doka was used as the experimental group while Government Secondary School (GSS) Makera was used as the control group. Intact classes made up of forty (40) students from each school were used for the study.

2.1 Research Design

A pre-test, post-test quasi experimental design was used for the study. The pre-text was administered eight weeks before the students were taught. This was done in order to establish the homogeneity of the two groups.

2.2 Instrumentation

The instruments for the study were two reading comprehension tests. Eight (8) passages were carefully selected from the "Senior English project for secondary schools" text book

I. The passages were selected because they were interesting in nature, relevant to the subject matter and of interest to both gender. The passages were educative and informative.

2.3 Administration of Instruments

A pretest was administered to both control and experimental groups to establish the homogeneity of the students. The experimental group was taught reading comprehension using interacting activities for eight weeks while the control group had their normal reading comprehension lessons taught by their teacher. A post test on the passages that were taught was administered on the two groups after eight weeks of teaching to determine the influence of interactive activities on students' performance in reading comprehension.

2.4 Treatment

Step 1: Teacher introduces the metaphor of turning on a light in a person's mind when they have a "bright idea" Teacher asks the question, "How is getting an idea like turning on a light bulb in your mind?"

Step 2: Teacher explains that as students read, they can "turn on" the meaning by using questions as "switches" to help them understand the writer's ideas.

Step 3: Teacher ask students if there is only one meaning in a text. Discuss how there can be more than one interpretation, more than one kind of meaning.

Step 4: Teacher introduces the poster for these activities. Teacher explains that there are three different kinds of light bulbs on the poster and that we are going to learn how to turn on the meaning for each one of them.

Step 5: Teacher draws students' attention to the first light bulb and explains that readers sometimes don't understand what they are reading because they don't understand the words. Teacher explains that what the words say is one kind meaning and it is called the literal meaning.

Step 6: Teacher draws students' attention to the second light bulb and explains that sometimes sentences mean more than just what the words say. As readers construct meaning they make inferences – these are ideas suggested by the words. When readers link these inferences to other things they know, they are constructing inferential meaning.

Step 7: Teacher talks about the third light bulb, explains that an idea in a text can have special significance for some people because it connects to something personal; it might remind them of what happened to them or how they felt in the past. People can make personal meaning when they read any text. Information in texts can mean different things to different people.

Step 8: Teacher asks students to read the passage in their text books through the guided reading questions and discuss the different levels of comprehension involved in answering the questions. As teacher works through the inferential questions, show students that the passage did not say these things exactly. Talk about how readers build ideas from the words they say and what they already know. Through answering the

personal meaning questions, teacher helps students develop understanding that reader's prior knowledge plays a significant role in constructing meaning and that multiple meanings exist around a text.

Step 9: To practice and consolidate teacher asks students to silently read the passage and then write a question (literal, inferential, personal) under each of the light bulbs. Students can then exchange questions with a partner, answer the questions, and discuss whether the question really were literal, inferential or personal as categorized.

Step 10: Teacher splits the students into small groups to discuss answers to the comprehension questions. Teacher moves round the class to facilitate the group discussions.

3. Data Presentation

Table 1: Mean scores of students in the pre-test and post-test for experimental and control groups in reading comprehension test no. 1 (Cloze test)

Group	N	Df	Pre-test \bar{X}	Post-test \bar{X}	Standard deviation
Experimental	40	39	47.66	56.58	12.28
Control	40	39	46.88	49.00	11.14

Table 2: Mean score of students in the pre-test and post-test for experimental and control groups in reading comprehension test no 2 (Retelling test)

Group	N	Df	Pre-test \bar{X}	Post-test \bar{X}	Standard deviation
Experimental	40	39	49.50	58.52	8.62
Control	48	39	48.00	50.00	7.42

The data on table 1 and 2 show a difference in the pre-test and post test scores of students in the experimental and control groups. The scores of students in the experimental group is higher than those of the control group in reading comprehension test no 1 and 2 i.e cloze test and retelling test respectively. The answer to the research question therefore is that there were differences between the pre-test and post test scores of students in the experimental group and control group in cloze and retelling tests. The mean scores recorded in the performance of the experimental and control groups could be probably as a result of the instruction both groups were exposed to for eight weeks. Both groups were taught reading comprehension for eight weeks. The result, however, revealed that interactive activities have a positive influence on students' reading comprehension.

Table 3: Comparison of mean scores of students of the two groups in reading comprehension test no 1 (Cloze test)

Group	N	Df	Pre-test \bar{X}	Post-test \bar{X}	t-cal	t-crit	Decision
Experimental	40	39	47.66	56.58	2.09	1.96	Reject
Control	40	39	46.88	49.00	1.22	1.15	Reject

Table 4: Comparison of the mean scores of students of
 the two groups in reading comprehension test no. 2 (Retelling test)

Group	N	Df	Pre-test \bar{X}	Post-test \bar{X}	t-cal	t-crit	Decision
Experimental	40	39	49.00	58.52	1.97	1.65	Reject
Control	40	39	48.00	50.00	1.53	1.44	Reject

The hypothesis was tested using T-test as a statistical tool. The null hypothesis states that there is no significant difference in the post test gain scores of students in the experimental group and those of the control group in cloze and retelling tests.

Table 3 and 4 indicate that students in the experimental group performed better than those in the control group. The mean scores of students in the experimental group is much higher than those of the control group. One could therefore conclude that interactive activities could improve one's reading comprehension performance by motivating students through positive interaction between teacher and student and between students and students. This finding is in line with (Stanovich, 1993, Perfetti, 1985, Oyetunde, 2009, Yusuf, 2010, 2013 and Ruddel, 1994) who asserted that providing students with opportunities for students to talk or discuss reading texts can promote reading fluency and also help students construct meaning from a given text. The findings revealed that students were more lively, active and excited in having purposeful conversations with the teacher. Interactive activities made it easy for teachers to see how individual thought process are working with received from texts. It is worthy of note that the effectiveness of interactive activities could also depend on a number of factors such as background experiences, class size, classroom situation, school type, location and so on.

4. Conclusion

Reading comprehension can be facilitated by providing students with ample opportunities to discuss reading texts through purposeful strategic conversations. Promoting conversation through turning on the meaning using light bulbs, multiple activities and experiences using various channels of communications such as teacher-student, student-teacher, student-students' could increase students' use of language as well as improve reading fluency. The goal of reading instruction should be to assist students/learners interact with print meaningfully. Students should be trained to be independent readers by being able to obtain meaning from print and make sense of the content of what is read.

4.1 Recommendations

- Teachers should expose students to interactive activities that will encourage students to interact meaningfully with texts during reading comprehension lessons. This should be done through multiple activities and experiences.

- Teachers should as much as possible, use purposeful, strategic conversations in reading comprehension lesson by encouraging interactions in the classroom via teacher-student talk student-teacher talk and student-student talk.
- The use of interactive activities in reading comprehension lessons could be creative inspiration for curriculum planners, textbook writers, teachers and students. The result of this study should inspire curriculum planners, textbook writers and instructional material designers to include interactive activities in students' guides. Teacher training colleges should provide courses in reading instruction to prepare teachers to teach reading at various levels of education.
- Teachers should be flexible in teaching reading comprehension. They should adopt strategies that students' interest, attitudes and abilities. This will motivate students to make use of their innate schemata to make reading enjoyable and more meaningful.
- Through interactive activities such as "turn on the meaning using light bulbs, students learn to activate ideas and make connections between known and new ideas. Students learn to turn on light in their minds when they have a bright idea. They also learn to turn on meaningful 'light bulbs' by using switches to help them understand the writer's ideas.

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