

EFFECTS OF CRITICAL THINKING AND VERBAL ABILITY INSTRUCTIONS ON READING COMPREHENSION OF SELECTED SECONDARY SCHOOL STUDENTS

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Abstract

This study investigated the relative effectiveness of critical thinking and verbal ability instructions on performance of students in reading comprehension. The subjects were 360 senior secondary school II students randomly selected from Abeokuta Metropolis. The treatment was preceded by a pre-test and a posttest was applied thereafter. The major instruments are self-developed reading comprehension Achievement Tests; verbal ability tests developed by Obemeata (1976) and an observational schedule. 2 hypotheses were tested at .05 level of significance. The research findings indicated that critical thinking and verbal ability instructions contributed significantly to high rate of reading comprehension of secondary school students.

Key Words: Critical Thinking, Verbal Ability, Instructional Strategies, Reading Comprehension Skills.

Introduction and Background

Critical thinking is central to every reading endeavour. Apart from this, reading skills and thinking skills are closely related. Thinking can be regarded as the operating skill used by man to arrange and re-arrange perception and experiences, so that he may have a clearer view of things. In other words, thinking is a basic tool the learner will use to properly understand daily experiences. According to Jegede (1991), thinking can be critical or creative. Critical thinking which is the focus of this study consists of skill of logic, reasoning, critical analysis, critical questioning detecting bias and high order process skill.

According to Jiboku (2002), reading like learning generally involves complex activities and in this case, the thought process will be involved. The involvement of thought process in reading leads to various models of reading by psycholinguists. To account for the behaviour of man when he reads, scholars such as Goodman (1967), Unoli (1980) and Onochie (1987), explained the position of thought process in reading while Educators such as Ayodele (1987) and Jiboku (1991), have been making efforts on how to foster in the individual child the ability to understand the *printed* language Debono (1983), contended that, due to the very basic nature of thinking in the learning process and its relationship, its widespread use in day-to-day real life experience, it is imperative that reading skills are taught either directly or indirectly. One of the important reading skills is critical thinking. Thus, critical thinking instruction is when the teacher use instructional technique of critical analysis and evaluation to train the learner on how to deal with material for comprehension.

The critical-thinking-reading instruction strategy involves generalizing, the learners are then taught to apply this to the passage or materials for comprehension.

The verbal ability of the learner also plays significant role in reading. Language educators like Obemeata (1976), have also, explained the role of verbal ability in reading of the child. The greater the verbal ability of the child the greater the rate of his comprehension. Jiboku (2000), found out that, the students that were taught verbal skills performed better than those who were not taught to use verbal ability during their reading comprehension lessons.

Verbal skill instruction include the technique of using vocabulary map to teach learners meaning of words both contextual and connotative usages and this is then applied to analyzing passages.

Problem

English language examiners' reports over the years show that many of the students performed woefully in English Language specifically in reading comprehension and summary because they lack the necessary skills to read and understand printed materials. It is possible that these deficiencies are carried to other subjects in the curriculum. This is because reading is central. This study developed procedures the reading teacher can employ to increase the reading comprehension rate of students.

Purpose of the Study

This study is mainly designed to measure the relative effectiveness of critical thinking and verbal ability instructional strategies on the performance of selected secondary school students in

reading comprehension.

Hypotheses: Two hypotheses were tested in the course of study.

H_{o1}: There will be no statistically significant difference in the mean post-test scores of subjects exposed to critical-thinking instruction and that of the control group.

H_{o2}: There will be no statistically significance difference in the mean post-test scores of₁₁ subjects exposed to verbal ability instruction and that of the control group.

Methodology

Design

The quasi-experimental pre-test, post-test control group design was used in the studs, the outline of the study is stated below:

O_i X₁ O₂ (Experimental group I)

O₁ X₂ O₄ (Experimental group 2)

O₅ X₃ O₆, (Control group)

Where

X₁ = treatment I (critical thinking)

X₂ = treatment II (verbal ability instruction)

X₃ = Control

O₁ O₃ O₅ = Pre-test for experimental and control groups

O₂ O₄ O₆ = Post tests for experimental and control groups

Subjects

Three hundred and sixty (360) SS II students in nine intact classes from three co-educational secondary schools in Abeokuta metropolis, Ogun State were used for the study. A random sampling technique was used to identify the three schools from a pool of twelve secondary schools in two local government areas in Abeokuta.

Research Instruments

The research instruments used in this study were:

- a) Reading Comprehension Tests: These were passages from the test on English. The passages were subjected to fry readability formula to assess their suitability to the level of students. They (passages) were found to be appropriate to their age and grade level.
- b) Verbal Ability Test developed by Obemeata (1976); was used. This was made up of forty-two items. The items measure the verbal reasoning of the subjects.

Procedure

The reading comprehension achievement test was administered to the students as a pre-test on the first day of the study. In the following week the students in the first experiment group i.e. critical thinking instructional group, were exposed to teaching of the thinking skills and were asked to apply these skills to reading of the material. Students in the second group (verbal ability instruction group) were exposed to various verbal cues and strategies to apply verbal cues to unravel meaning of a material. The controls were given conventional teaching. Instructional strategies procedures developed by the author were followed. The study lasted three weeks; a post-test was administered on the last day of the study.

Data Collection and Analyses

Two sets of data were collected, they are:

- i) pre-test scores from reading comprehension test and verbal ability test.
- ii) the post test scores from reading comprehension test and verbal ability test.

Table 1: Critical-Thinking Instruction and Performance in Reading Comprehension

Group	N	X	SD	T	P
Critical thinking instructional strategy	239	42.2	2.8	3.1	***.000
Control (conventional method)	121	39.1	1.8	-2.21	

*** Significant at p 0.05.

From Table 1, it could be seen (that the treatment was found to have contributed significantly to the variations in subjects' achievement scores. The mean score of critical thinking instructional group ($x = 42.2$) is higher than that of control ($x = 39.1$). With this finding, the hypothesis which states that there will be no statistically significant difference in the mean post-test scores of subjects exposed to critical thinking instruction and the control is not accepted.

Table 2: Verbal-Ability Instruction and Performance in Reading Comprehension

Group	N	X	SD	T	P
Verbal ability instruction	230	39.6	3.4	3.1	.000***
Control	130	22.4	2.3	-2.21	.001

Table 2 shows, the t-test comparison of mean scores of verbal ability instruction group and the control. The mean score of verbal ability instruction group of 39.6 is higher than that of control (conventional) group of 22.4. With this finding, the hypothesis which states that there will be no statistically significant difference in the mean post-test scores of subjects exposed to verbal ability instruction is not accepted.

Discussion and Conclusion

The findings of this study are interesting. They supported the fact that there should be concerted effort on the part of the teacher to teach the necessary skills that will enhance students reading comprehension. The instructional strategies (critical thinking and verbal ability) were found to have contributed significantly to the gains in the achievement of students exposed to them (Table 1 and Table 2). The findings supported the assumptions of psycholinguists like Thorndike (1971) Unoh (1980), Debono (1983), Stenberg (1987), who contended that, reading comprehension as a complex human behaviour, must be systematically taught to the learner. Verbal ability will also determine the extent of comprehension of a material.

According to Obemeata (1976), a student that is grossly deficient in verbal ability will not be able to interact with the author in a reading material.

In summary, the findings of this study have profound implications for the teaching of reading comprehension in Nigerian Secondary Schools. In the past, English Language teachers were fond of testing reading comprehension skills of students without teaching the students how to read and comprehend. Others use crude methods. One of these Onochie (1987), described as 'Read the passage and answer the questions that follows' syndrome. The two instructional strategies in this study are fashioned out from the fact that reading comprehension is a complex process, which involves the interaction of thought, language and cognition of the learner. Thus, they are instructions that will aid the thinking and enrich the experience of the learner during reading comprehension lesson.

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