

EFFECTS OF GRAPHIC ORGANIZER ON EXPOSITORY TEACHING STRATEGY ON ECONOMICS EDUCATION STUDENTS ACHIEVEMENT AND INTEREST IN ECONOMICS CONCEPTS

Opara Ifeoma Euphemia

Department of Economics ,FCT College of Education Zuba – Abuja

Yahaya James

Department of Economics ,FCT College of Education Zuba – Abuja

ABSTRACT

The study examined the effects graphic organizer on expository teaching strategy on economics education students' achievement and interest in economics concepts. The aim of this study is to improve on the achievement and interest of students in economics education. The study adopted the quasi-experimental research design whereby the study population were divided into 2 different groups. Both from primary and secondary sources of data collection were used by the researcher. Students of FCT Colleges of Education were used for this study. Sample of two hundred (200) students were selected to form the sample of the study using the random sampling technique. The instrument used for data collection was the Economics Multiple Choice Test (EMCT). Analysis of Variance was used to analyze the data collected for the study at an alpha level of 0.05. Recommendations were also made which amongst others include; Regular workshops and seminars should be organized for lecturers on the formulation and use of graphic organizers in teaching and learning to help improve the achievement and interest of students in economics. The government should ensure that economics resource rooms are equipped with graphic organizer materials for easy access to lecturers.

Key Words: Graphic organizer, expository teaching strategy, achievement, interest, economics education.

1. INTRODUCTION

It is not in doubt that education is the greatest force that can be used to bring about change. It is also the greatest investment that a nation can make for the quick development of its economic, political, sociological and human resources. The Nigerian Federal Government has acknowledged the fact that education is a vital instrument for effective national development and industrial growth. It an “instrument per excellence”. The extent of a nation's development depends on the quality of education of her citizens according to [9].

Poor achievement and interest of students in Economics education is alarming which calls for urgent need to find possible ways to remedy this problem, according to [10]. Poor achievement and interest amongst students is a situation whereby students perform far below average in their academic achievement and interest after being taught and evaluated.

According to the views of [11] one of the factors that cause this poor academic performance amongst students is the teacher and the methodology used in teaching and learning process. One of the methods the teacher can use for effective teaching and learning is the use of graphic organizer in teaching and learning as against the use of the old expository teaching strategy.

Objectives of the Study

The objectives of this study include:

- Examining the effects of graphic organizer on expository teaching strategies on the mean achievement and interest of economics students in FCT Colleges of Education, Zuba.
- To find out the effects of the use of graphic organizer on the performance level of students in economics.
- To find out the effects of the use of graphic organizer on students understanding and retention of economics concepts.
- To teach student teacher how to formulate and use graphic organisers in teaching and learning as against the use of expository teaching strategy.
- To make recommendations on the way forward in the use of graphic organizers in teaching and learning.

The Concept Graphic Organizer

Graphic organizers are structured frameworks that help the readers and writers to organize their thoughts in such a way to bridge prior knowledge to the new concepts being learned. Graphic organizer is spatial representation of concepts and their relationships that are intended to represent the knowledge, structures that human stores in their mind. According to [8] graphic organizers are two-dimensional representative of cognitive structures showing the hierarchies and the interconnections of concepts involved in a discipline.

Graphic organizers are divided into nodes and links. Nodes represent the concepts while links (lines) represent the relationship between concepts. Words are used to label the links in order to more explicitly, depict relationships. Once completed, the graphic organizer is a visual graphic that represents how the creator thinks about a subject or topic and its use in teaching and learning process cannot be over emphasised [4].

A graphic organizer is a visual and graphic display that depicts the relationships between facts, terms, and or ideas within a learning task. Graphic organizers are also sometimes referred to as knowledge maps, concept maps, story maps, cognitive organizers, advance organizers, or concept diagrams. Graphic organizers come in many different forms, each one best suited to organizing a particular type of information.

It is also important to note that graphic organizer is also known as concept mapping. Concept mapping can be used to facilitate meaningful learning and also as an evaluation tool.

The use of expository, “talk and chalk” teaching method in our educational system is lagging behind the educational future expectations and desires. Hence the urgent need to re-design the learning methods in the future to support this process, with focus on teacher education. The role of teacher training institutions in the process of educational innovation and the implementation of modern teaching methods is very important. The teacher training institutes provides the

teachers of the future with the necessary teaching methods because teachers are the key figures in arranging learning processes.

This research work intends to help in equipping the teacher trainers and the students in Colleges of Education with the knowledge and different ways of using the graphic organizer in teaching and learning process to help improve the academic performance of the students. The teacher trainers would be equipped with this knowledge by conducting workshops and in-house training while the students will be split into groups, one group being taught with the expository method while the other group will be taught using the graphic organizer. It is believed that the study will go a long way to improve the academic performance of the students in the Economics education.

The Place of Teaching and Learning Economics Education

In line with the philosophy of teaching and learning economics at the Nigeria Certificate in Education (NCE) in Nigeria the subject Economics is a desired subject by all citizens either as producers or as consumers so that they can acquire knowledge of the economic system and how it operates. By implication therefore, the insight derivable from the study of economics not only provides the air of freedom in the minds of the recipients from the shackles of destiny and chance events but also equips them with solutions to problems of our country Nigeria. Besides, it facilitates the development of critical thinking required for making logical contributions towards economic growth and development, according to [6].

From the above understanding therefore, one sees every need to teach and learn Economics as a subject in all ramifications to pursue all the developmental programme of the nation. Every citizen of the country needs this knowledge. No wonder, the Federal Government of Nigeria included the teaching of economics as a humanity subject in the secondary school syllabus. In our attempt to analyze how teacher preparation is a good strategy towards achieving effective teaching and learning economics in secondary schools, we that make use of this methodology namely a definition of the key concepts, look at the aim of teaching economics at the secondary school level, then discuss the need for teacher preparation as a strategy towards achieving effective teaching and learning economics at the secondary school level and draw a conclusion.

Economics is a difficult concept to be defined, because several economists have given several definitions. This is not to say that it cannot be defined. But again in defining, the most important or essential elements of the subject matter must be included. Robbins in [2] sees economics as “the teacher which studies human behavior as a relationship between ends and scarce means which have alternative uses”. Three main things appear here namely science, human behavior and the relationship between ends and scare means and alternative uses.

Alfred Marshall in [1] defined Economics as “the study of mankind in the ordinary business of life”, Here too man is involved to the extent of doing business again the relationship between ends and scare means which have alternative uses. Economics is an indispensable tool in understanding the complexities of the modern economy and myriad of other scientific development useful to mankind. Economics has contributed immensely to the personal and intellectual development of its recipient according to [3]. It is one of the relevant subjects that

qualify one for admission into higher institutions. [7] asserted that some of the secondary students conceive economics as a very complex subject whose comprehension requires a kind of judgement that is beyond their competence. He further contends that students believe that the subject is meant for those with high level of intellectual development. This belief often has negative effects on students' academic achievement in economics. [7] corroborated this when he noted emphatically that despite the increase in students' enrolment for economics in our secondary schools their performance has not been good and that this trend has not changed even with the introduction of a new economics syllabus. Thus, there has been vigorous search for an instructional strategy that will improve the quality of economics instruction and subsequently students' learning and achievement in teacher training institutions in Nigeria.

This, study, therefore, is a response to this challenge, and is faced with the problem of evaluating the effects of graphic organizer on expository teaching strategies on the achievement and interest of students in economics.

Effects of the use of Graphic Organizer in Economics Education

Graphic organizers are helpful learning tools for students of all ages to organize, clarify, or simplify complex information. They help students construct understanding through an exploration of the relationships between concepts. Teacher-generated organizers are a useful scaffold to support student learning.

Graphic organizers are visual charts and tools used to visually represent and organize a student's knowledge or ideas. They are often used as part of the writing process to help students map out ideas, plots, character details and settings before beginning to write.

Graphic organizers such as thinking bubbles, character change maps, and partially filled in cause/effects maps help student use visual imagery to infer. Graphic organizers such as a cause/effect chart can help students understand the relationships they have with adults and peers at school.

According to [3] the advantages of the use of graphic organizer or concept mapping are as follows:

- Enables the students to organize their reading.
- Help to reduce students' anxiety in learning situations.
- It helps to make learning easier because it helps students to see how the teacher organises the presentation of the concepts.
- Makes for easy understanding as it helps to present learning concepts in sequence of stages and aid retention of the concepts.
- Concept mapping can be used to guide classroom discussion.

2. METHODOLOGY

Description of Sample

The study population for this study are students of economics department in FCT Colleges of Education, Zuba. The study adopted the simple random sampling technique to select the sample from the population. A total of two hundred (200) students in Economics department formed the sample. The selected samples were divided into two (2) groups. Group A and Group B

respectively. Group A was named the experimental group (those to be taught using graphic organizers), Group B was named the control group (those to be taught using the expository method). The study comprised of all the students in the three (3) different levels in Economics department: NCE I, NCE II and NCE III respectively.

Research Design

The research design used was quasi-experimental research design whereby the researchers used pre-test, post-test, control group and experimental group in order to determine the effects of the treatment on the variable. The treatment was the use of graphic organizer in teaching and learning process while the variables were effective teaching and learning of Economics.

Instrumentation

The instrument used for this study was Economics Multiple Choice Test (EMCT). It was designed by the researcher and it consists of items based on the six levels of cognitive domain and in accordance with the National Senior Secondary School curriculum content on Economics.

Validity and Reliability of the Instrument

The instrument (EMCT) was subjected to both face and content validity by education specialist. Testing for reliability, the test-retest method was used at four weeks interval.

Procedure for Data Collection

The regular Economics teachers were trained and used for the study by the researchers to teach both the experimental and control group. The teachers used the lesson notes prepared by the researchers to teach. The teaching was conducted during the normal school period using the normal timetable of the college. The pre-test for the real study for the students was given to the students the same day in each of the selected schools which was being monitored by the researchers. The four weeks interval between the pre-test and post-test was enough to make students drop some traits they will exhibit during the pre-test thereby controlling test effect. The pre-test was administered to the subjects and their scores recorded. After the pre-test, the treatment was given to Group A being the experimental group as they were taught using the graphic organizer or concept mapping strategy while the control group were taught using the expository method. By the end of the teaching, which lasted for four weeks, the post-test was administered for the course. Scores for the pre-test and post-test for each group were recorded separately and were scored over hundred percent (100%).

Data Analysis

The EMCT was manually scored and coded numerically for easy analysis. Statistical Analysis of Variance (ANOVA) was used to analyze the data collected at 0.05 significance level.

3. RESULTS

To test the hypothesis stated, the pre-test and post-test scores for the two groups were analyzed and summarized in the tables below:

Table 1: Summary of ANOVA table for the Pre-Test Achievement Scores between the experimental and the control groups.

Source of Variation	Sum of Squares	DF	Mean Squares	F	P-Sig. Diff.
Between group	37.504	1	37.504	409	.524ns
Within groups	10461.418	114	91.767		
Total	10498.922	115			

ns Not significant at p is 0.05

As shown in table I above, there is no significant difference in the pre-test achievement scores between the experimental and the control groups because the p-value of .524 is greater than 0.05 alpha levels. This ascertained that the subject had equivalent entry behaviour in both groups.

Table 2: Summary of ANOVA table for the Post-Test Achievement Scores between the experimental and the control groups.

Source of Variation	Sum of Squares	DF	Mean Squares	F	P-Sig. Diff.
Between group	8844.023	1	8844.023	45.516	.000*
Within groups	21179.400	109	194.306		
Total	30023.423	110			

*= significant at p is 0.05

As shown in table 2 above, there is significant difference in the post-test achievement scores in Economics between the experimental and the control groups because the p-value of 0.000 is less than 0.05 alpha levels. In this case there is a significant difference in the post-test achievement scores between the experimental and the control groups.

4. DISCUSSION OF FINDINGS

It is evident as shown in Tables 1 and 2 that the use of graphic organizer in teaching and learning of economics had significantly improved post-test achievement scores for the experimental group over the post-test achievement scores of the control group that was a conventional strategy group. This implies that the use of graphic organizer facilitates teaching and learning of economics and invariably it can be concluded that low achievement, interest and performance of students in economics may be connected to the expository teaching adopted by the teachers of economics. This agrees with the findings of [5].

5. CONCLUSION

In conclusion, graphic organizers help the teacher to teach without stress and the learner to learn without stress because the use of it in teaching and learning help the students to integrate both

text and visual as it is an effective way of teaching and learning. When they are used in teaching and learning, they can be extremely useful for both teachers and students as they will make lessons more engaging, interesting and easily comprehensible.

The beauty in the use of graphic organizers in teaching and learning is that it can be used in all grade levels in the schools, it has also been proven to be an effective learning tool for different kinds of learners, be they normal, gifted students or students with special needs. And with adult learners, graphic organizers also help to enable the connection between what they already known and newly acquired knowledge.

6. RECOMMENDATIONS

The researchers made the following recommendations based on the findings.

- Regular workshops and seminars should be organized for lecturers on the formulation and use of graphic organizers in teaching and learning to help improve the achievement and interest of students in economics.
- The government should ensure that economics resource rooms are equipped with graphic organizer materials for easy access to lecturers.
- Lecturers are to teach the students on how step to step ways of formulation different economics concepts using the graphic organizer.
- The government and educational bodies should ensure regular educational programmes, workshops, conferences, training and seminars geared to help upgrading teachers with new and current techniques and methods of teaching and learning Economics.
- Regular use of instructional materials, different teaching methods and adequate should be encouraged among student teachers in teaching and learning exercise.

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