EFFECT OF GRAPHIC ORGANIZER AS A TEACHING STRATEGY ON THE ACHIEVEMENT OF SENIOR SECONDARY SCHOOL STUDENTS IN SOCIAL STUDIES FOR GLOBAL CITIZENSHIP EDUCATION

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Abstract
This paper focused on the effects of graphic organizer as a teaching strategy on the achievement of senior secondary school students in Social Studies. Graphic organizer is a teaching strategy used to visualize the structure of knowledge, instead of describing all concepts and their relations in text. The study adopted the quasi-experimental design-quasi-experimental design in the sense that the subjects were not randomly selected into groups. A sample of three hundred and eight-four (384) students were selected through the random sampling technique and were used for the study. The instrument used for this study was a multiple type objective questions entitled Social Studies Multiple Choice Test (SSMCT). The thirty-two items were subjected to test of reliability using the Kuder-Richardson (K-R 20) to determine the internal consistency which yielded a reliability coefficient of 0.81 which is considered highly reliable. The analysis of co-variance was used to analyze the data collected for the study at an alpha level of 0.05. The findings reveal that the graphic organizer strategy is better than the expository method in enhancing students' achievement in Social Studies. It was recommended that workshops and seminars should be organized for teachers of Social Studies on the use of graphic organizer in order to improve the achievement level of students in public examinations.

Keywords: Graphic Organizer, Teaching Strategy, Students Achievement, Secondary School, Social Studies

Introduction
One of the controversies in the field of social studies is the lack of consensus on it meaning and conceptualization. Thus, people have defined it differently. To take a few of the available definitions, social studies, in the view of Mkpa (1992) may be seen as the study of man in his environments. It is the study of how man influences and is influenced by his physical, social,

economic, political, psychological, cultural, scientific and technological environment. It is the study of interrelationships between man and his environment. To Kissock (1981) it is a programme of study which a society uses to instill in the students the knowledge, skills, attitudes and actions it considers important concerning the relationships human beings have with each other, their world and themselves. The focus of social studies therefore is essentially man, the society and the environment and its ultimate is to equip individuals with knowledge and understanding for effective relationships and living. Yet, social studies is not the study of history, geography, economics, sociology, political science and so on as in the traditional school subjects; nor is it an amalgamation or combination of them. The social studies programme is the totality of experience and understanding a child gets having been exposed to a course of studies based on man's problems in his environment. The stress here that social studies should not be studied in discrete form is based on the fact that man's problems do not occur in divisions such that they can be seen as pure historical or economic problems: Rather, problems are complex and often have interdisciplinary components. Unless we solve them, one might end up "chasing the shadow." This is why the National Conference on primary school curriculum of 1971 recommended an integrated approach to social studies as a means of providing the pupils with unified and coherent learning experiences for solving problems. By this approach, social studies now blends content and concepts from other disciplines such that these disciplines lose their original identity. This type of programme enables pupils solve various complex problems which confront them daily as individuals and as members of social group or the society. It therefore offers the child a richer preparation for life.

The goal of teaching Social Studies in secondary school is to train students to become a good citizen. The subject among other things hope to:

a. give pupils a good knowledge of their environment and its problem;
b. involve them in problems of their community in doing so, they will be able to evolve solutions to them;
c. build confidence and attitudes in them for adult life;
d. develop tolerance and understanding of the effects of great diversity of social life in Nigeria where we need to develop a lot of tolerance and understanding in order to cope with the plurality of our social and cultural heritage;
e. development in pupils a sense of belonging and pride in our nation (NERC, social studies teaching: issues and problem 1980, p.3)

In keeping with the 1981 National Policy on Education, it is expected that the Social Studies curriculum will among other things, emphasize the development of a strong sense of responsibility and effective citizenship.

The general objectives of the subject are as follows:

a. Develop a capacity to learn and to acquire basic skills including those of listening, reading, speaking, writing and calculation, together with those of observation, analysis and inference which are essential to the information of sound judgment.

b.   Ensure the acquisition of the relevant body of knowledge and information which is a pre-requisite to personal development and to the making of a positive contribution to the betterment of the society as a whole

c.   Create an awareness and understanding of our physical environment and the evolving social and cultural processes.

d.   Develop the ability for national utilization of our cultural, spiritual and natural resources and their conservation for national development.

e.   Appreciate the diversity and inter-dependence of all members of the local and the national communities and the need for co-operation for the unity of the country and international understanding.

f.   Inculcate positive attitude and appropriate values of honesty, integrity, hard-work, fairness, justice and togetherness for the development of the nation.

In the senior secondary school, the curriculum listed twenty topics, eight to be taught in year one, eight in year two and four in year three to allow time for revision. They are arranged as follows:

SSI
1.   Aspect of co-operation
2.   Religion as an agent of socialization
3.   Development and its consequences
4.   Historical aspects of societal change
5.   Social attitudes to development
6.   Concept of cultural and identity
7.   Cross-cultural influences
8.   Nation-building in multi-cultural setting

SS II
1.   Social change, alienation and personality
2.   Social institution
3.   Political institution
4.   Ethnicity, class and social stability
5.   Values, technology and development
6.   National economic life
7.   Cross-cultural influences
8.   Utilization and conservation of world resources

SS III
1.   Nigeria in world economic order
2.   Human right in Nigeria
3.   Comparative economic and political system
4.   International relations

As a result, Oleabhiele (2012) suggested the need for Social Studies teacher to employ a teaching method that will simplify the curriculum contents of Social Studies and create learning experiences that are related to the learners' everyday experiences. The problem this study posed as a question is, what are the effects of graphic organizer strategy on students' achievement in Social Studies?

Graphic organizer is spatial representation of concepts and their relationships that are intended to represent the knowledge, structures that human stores in their mind (Janassen, Beissner and Yacci, 1993). Graphic organizer is a method of visualizing the structure of knowledge, instead of describing all concepts and their relations in text. Griffen, Malone and Kameenu (1995) argued that the use of graphic organizer strategy helps students organize information from expository texts and comprehend context area reading. They went further to say that graphic organizer strategy provides a useful tool for students to select, organize, and recall relevant information; it also enables them to transfer thinking and learning skills to novel situations and content.

According to Okebukola (2002) graphic organizers are two-dimensional representative of cognitive structure 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 the 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.

Procedure for Constructing a Graphic Organizer

Step I: Identify the major concepts, principal's values, or terms in a topic. For instance, topic on the structure of executives in Social Studies. The major concepts include: executive president, presidential cabinet, civil service, monarch/ceremonial president, prime minister etc.

Step II: Organize these concepts in order of hierarchies with the specific ones subsumed under the more general ones

Step III: Put the concepts in boxes or circles

Step IV: Use the lines to show relationship and linking words to give ideas on the concepts

Step V: Revise the map and review where necessary. You may develop this into a flip chart during classroom instruction

The structure of the Executive

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┌──────────────┐                              ┌──────────────────────┐
│  Executive   │                              │  Monarch/Ceremonial  │
│  President   │                              │      President       │
└──────┬───────┘                              └──────────┬───────────┘
       │                                                 │
┌──────▼───────┐                              ┌──────────▼───────────┐
│ Presidential │                              │    Prime Minister    │
│   Cabinet    │◄───────┐             ┌──────►└──────────┬───────────┘
└──────┬───────┘        │             │                  │
       │          ┌─────┴─────────────┴──┐    ┌──────────▼───────────┐
       │          │     Government        │    │       Cabinet        │
       │          │    Department/        │    └──────────┬───────────┘
       │          │    Ministries         │               │
┌──────▼───────┐  └──────────────────────┘    ┌──────────▼───────────┐
│ Civil service│                              │  Public corporations/ │
└──────────────┘                              │  government companies'│
                                              │    civil service      │
                                              └──────────────────────┘
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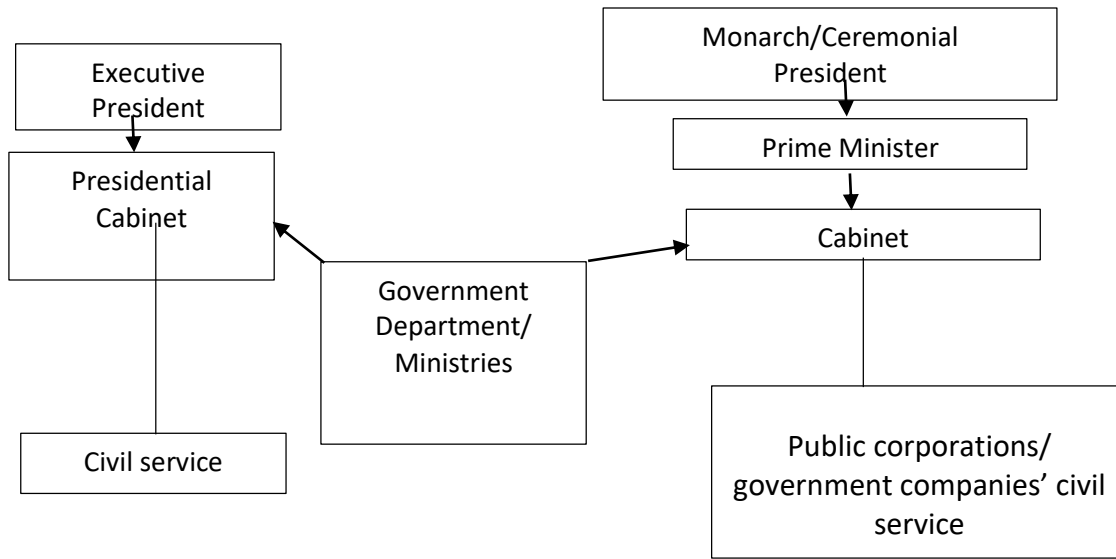
Diagram showing the structure of modern executives

The idea of graphic organizer has been shown to work by enabling students to make visual connections between information and thus, helping them to better understand the subject (Aidman and Egan, 1998). That is, it provides concrete basis for conceptual thinking, removes meaninglessness and abstraction from teaching and learning of Social Studies making the task to learning Social Studies easier and pleasurable.

Purpose of the Study

The main purpose of the study was to ascertain the effect of graphic organizer on student's achievement in Social Studies.

Research Question

What are the mean achievement scores of SS II students taught Social Studies using the graphic organizer and those taught using the expository method?

Hypothesis

There is no significant main effect on the achievement scores of students taught Social Studies using the graphic organizer and those taught using the expository method.

Research Design

The study adopted the quasi-experimental design-quasi-experimental design in the sense that the subjects were not randomly selected into groups. Specifically, the pre-test post-test non-equivalent control group design was adopted. This design usually involves two groups with pre-test administered to ascertain the extent to which the groups are different before treatment. After treatment, the post-test is administered to determine the efficacy of the independent variable (treatment) on the dependent variable (achievement).

Population, Sample and Sampling Technique
The population of the study comprised all SS II students offering Social Studies in Abakaliki Education Zone. Abakaliki Education zone is made up of four Local Government Areas. Four secondary schools were selected through the simple random sampling technique. From the secondary schools that constitute the target population, a sample of three hundred and eight-four (384) students were selected through the random sampling technique.

Instrumentation
The instrument used for this study was multiple type objective questions entitled Social Studies Multiple Choice Test (SSMCT). It has two sections A and B. Section A sought information on personal data such as name of students, name of school and sex, while section B consisted of 40 multiple choice questions that covered the contents/topics taught. Each item was followed by four questions A – D from which the students were expected to select the correct option.

Validation of the Instrument
The SSMCT was subjected to both face and content validation by specialists in Social Studies education and measurement and evaluation. The test items were scaled down to thirty-six after the face validation. Thereafter, it was subjected to content validation using the test blue-print. The researcher further subjected the instrument to item analysis to ascertain the item difficulty and discrimination indices which further reduced the items in the instrument to thirty-two.

Reliability of the Instrument
In order to determine the reliability of the instrument, the thirty-two items were subjected to test of reliability using the Kuder-Richardson (K-R 20) to determine the internal consistency which yielded a reliability coefficient of 0.81 which is considered highly reliable.

Method of Data Analysis
The Analysis of Co-variance was used to analyze the data collected for the study at an alpha level of 0.05.

Result and Discussion
Research Question
What are the mean achievement scores of SS II students taught Social Studies using the graphic organizer and those taught using the expository method?

Table 1: Mean Achievement of Scores of Students Taught Social Studies using Graphic Organizer Strategy and Expository Method

Group	Adjusted Mean	SD	Cases
Graphic organizer strategy	75.03	10.45	71
Expository method	70.93	17.43	58

The findings in Table 1, showed that graphic organizer strategy is better than the expository strategy in enhancing students' achievement in Social Studies. As shown in Table 1, graphic organizer teaching strategy yielded a mean achievement score of 85.3 with a standard deviation of 10.45 while the expository method yielded a mean score of 70.93 with a standard deviation of 17.43.

Table 2: Analysis of Co-variance for Students' Achievement in Social Studies Based on Graphic Organizer Strategy and Expository Method

Source of Variation	Sum Square	Df	Mean of Square	F_{cal}	F_{crit}
Covariates	4816.203	1	4816.203	33.559	
Pretest	4816.203	1	4816.203	33.559	
Main effects	522.505	2	261.252	1.820	
Method	197.978	1	187.978	33.310	3.84
Gender	255.421	1	255.421	1.780	
2-way	1504.16	1	1504.156	10.481	
Interactions method	1504.156	1	1504.156	10.481	
Gender explained	7693.528	4	1923.382	13.402	
Residual	17796.007	124	143.516		
Total	25489.535	128	199.137		

In the ANCOVA table, hypothesis I shows that f calculated (33.310) is greater than the f-critical value (3.84) at an alpha level of 0.05. The decision rule is to reject the null hypothesis whenever the calculated value is greater than the critical value at a given level of significance. The researcher therefore rejected the null hypothesis and concluded that there was a significant effect in the mean achievement scores of students taught Social Studies using the graphic organizer strategy while those taught using the expository methods.

Discussion of Result
The findings in Table 1 revealed that the graphic organizer strategy is better than the expository method in enhancing students' achievement in Social Studies. As shown in the Table, the graphic organizer strategy yielded a mean achievement score of 75.03 with a standard deviation 10.45 while the expository strategy yielded a mean score of 70.73 and a standard deviation of 17.43. On the test of significant effect on the mean achievement of students taught Social Studies using the graphic organizer strategy and those taught using the expository method, the analysis of co-variance (ANCOVA), table shows that f-calculated value of (33.310) is greater than the f-critical value of (3.84) at an alpha level of 0.05. Based on the decision rule, the researcher therefore

rejected the null hypothesis and concluded that there was significant effect in the mean achievement scores of students taught Social Studies using the graphic strategy unlike those taught using the expository method. This finding is line with Griffen, Malone and Kameenu (1995) which argued that the use of graphic organizer strategy helps students organize information from expository texts and comprehend context area reading. They went further to say that graphic organizer strategy provides a useful tool for students to select, organize and recall relevant information, it also enables them to transfer thinking and learning skills to novel situations and content.

Recommendations

From the study it was observed that there was a greater improvement in the achievement level of students taught Social Studies using the graphic organizer strategy. Thus, this strategy should be embraced by Social Studies teachers and school administrators should ensure that seminars, and workshop should be organized to expose Social Studies teachers to the use of this innovative teaching strategy for better results both in internal and external examinations.

Conclusion

There was a higher achievement in the mean achievement scores of the students after they were exposed to graphic organizer strategy. Thus, it is believed that the contribution of the findings of this study would improve hitherto poor performance of students in Social Studies in public examinations.

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