Effectiveness of Demonstration and Lecture Methods in Learning Concept in Economics among Secondary School Students in Borno State, Nigeria

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Abstract
This study investigated the Effectiveness of Demonstration and Lecture Methods in Learning concepts in Economics among Secondary School Students in Borno state, Nigeria. Five objectives: to determine the effectiveness of demonstration method in learning economics concepts among secondary school students in Borno state, determine the effectiveness of lecture method in learning economics concepts among secondary school students in Borno state, compare the effectiveness of demonstration and lecture methods in learning economics concepts among secondary school students in Borno state, determine the effectiveness of demonstration method on male and female students in academic performance in learning economics concepts among secondary school students in Borno state and determine the effectiveness of demonstration method on male and female students in academic performance in learning economics concepts among secondary school students in Borno state. Three hypotheses were formulated: there is no significant difference in academic performance between students exposed to demonstration and lecture methods in learning economics concepts, there is no significant different in academic performance between male and female students exposed to demonstration method, there is no significant difference in academic performance between male and female students exposed to lecture method to guide the study. Quasi-experimental Design was used. It was carried out in a classroom setting where classes were intact. The sample population used were SS1 students who were selected for the two groups in two schools, fifty-two students for each school; twenty-six students for each group that was thirteen males and thirteen females. Topics were selected from SS1 senior secondary school syllabus prepared by West African Examination Council (WAEC) which was considered as standardized test and was used for the treatment. Twenty-five achievement test objective was conducted, pre-test, post-test were collected and test were given for the groups, before and after treatments. After treatment results were collected and analysed by descriptive statistic of mean, standard deviation and inferential statistics of t-test. The results of the study revealed that demonstration and lecture methods in learning concepts in economics among secondary school students in Borno state were effective. When the two methods were compared, demonstration method was more effective than lecture method in learning concepts in economics among secondary school students in Borno state. Demonstration groups results were significantly higher than lecture groups method. It was recommended that economics teachers should maximize the use of demonstration method while teaching and learning certain economics concepts. Moreover, economic teachers should be given the opportunity for in-service training, workshops, seminars and conferences to update their knowledge in methods of teaching and learning economics concepts.

Keywords: Demonstration methods, Lecture methods, learning concepts

Introduction
Background of the study
Economics is a very important subject as its knowledge is required for the successful study in very many important professions. In Nigeria, economics curriculum development passed through various phases, from traditional curriculum through the colonial era curriculum to post independence. The post 1969 National curriculum conference was organized by the Nigerian Educational Research Council (NERC) (Makinde, 1982). Economics subject like other subjects in the school systems have experienced series of reforms (Joff & Ikwumeh 1994). They are reforms either in form of elimination, contraction, substitution or expansion of the curriculum. They further stated that, business studies and commerce have been part of the curriculum of western education since the middle of the eighteen century (18th Century). They are the predecessors of economics education. Economics therefore started well after the battle over, its survival in the school system was over several decades ago. In the mid 1960’s, it was taught at the A-level as part of general studies, and in the O’level as a major
component of social studies and also as a business and commerce courses at both O-level and A-level.

According to Anyanwuocha (1998) the first economist to define economics as a discipline was Adam Smith. He is regarded as the father of economics because he laid the foundation of economics as a subject, who in 1778 published a book called the Wealth of Nation. He saw his work as an inquiry into the nature and causes of wealth of nation; why some countries are developed while others are poor and undeveloped. Anyanwu (1987) further stated that, the most widely accepted definition of economics was given by Professor Lionel Robinson who defined economics as the social science subject which studies human behavior as a relationship between ends and scarce means which have alternative uses. According to Makinde (1982) economics is related to history, geography, and statistics and now apply advance mathematical theories to economic problems known as econometrics. Economics is already being taught in SS1, SSII and SSIII (SS means Senior Secondary) in many Secondary schools in Nigeria. After its introduction in the 19th century with the approval of the respective ministries of education individual schools were allowed to adopt the economics curriculum as they were ready for it. Odokan (1990), stated that, the national policy on education was published in 1977 and revised in 1981 and 1988 – consecutively after preceding of the 1969 conference. The General Certificate of Education (G.C.E) ordinary level Economics syllabus was recently revised in line with the new 6-3-3-4 system of education introduced in the country. It is therefore necessary that students studying economics should understand the knowledge towards increasing the well-being of society (Anyanwuocha, 1998).

Economics is one of the major courses offered at the secondary school level. It is a course that contributes to the development of knowledge that helps individual or groups of individual(s) to build up body of economic principles and equip them with tools of economic analysis which will enable the individual or groups to understand current issues and problems confronting society. That is why economics occupies a pride of place in school curriculum. Among the objectives as specified by the Federal Government of Nigeria as cited in Makinde (1982) include the following:

i. It is necessary for students studying economics to understand the knowledge towards increasing progress and well-being of the society in economic development of the nation at large.

ii. Having knowledge and understanding of the basic concepts and principles of economics and other related subjects.

iii. Be able to practice what they have learnt towards the positive economic development of their immediate environment and the nation at large.

However, it is very disheartening to note that after so many years of implementation of the programme at secondary school level, Nigeria is yet to enjoy the benefits of economics programme fully. Orukotan (1990) expressed concern over the inability of the education programmes to adequately respond to the need of students for practicing skills and knowledge and said that has resulted in production of a pool of inadequately prepared indigenous manpower for effective participation in the economic, social and political life of Nigeria.

A study by Ngulde (1990), Hassan (1991) and Joof (1994) have identified several factors standing against the successful attainment of objectives of economics education in Nigeria. One of the factors identified was teacher-related problems and specifically the use of instructional methods or strategies adopted by teachers in secondary schools in Borno state. Hence, the inability of economic teachers to identify, select and use the most effective and easy to understand methods of teaching economics has affected the student’s ability to acquire the necessary knowledge and basic economics concepts for national development. Makinde (1982) specifically pointed out that, the most potent way of enhancing practicing skills in economics subject is through the use of an appropriate instruction. He furthermore, stressed that even with abundance of teaching materials and qualified human resources, teaching will be meaningless without the knowledge of appropriate method of imparting the concepts of economics to the students.

Hodkinson & Jephcote (1996) stated that, it is necessary for all teachers to be familiar with and know how of using great many materials techniques, ideas and special skills referred to as teaching methods. Educators like Orukotan (1990), Onwuka (1990) and Nwana (1991) recommended several methods of teaching at secondary school level for teaching Economics subjects such as discovery method of teaching, lecture, discussion, project, demonstration and individualized instruction.

The teacher should adopt method that would enable the students to understand whatever concepts or topics or principles that are being taught. There are varieties of methods for learning economic such as inquiry, problem-solving, case studies, field trips and demonstration. All these methods rely on various forms of teacher-students activities; however, some have more activities than others. Demonstration method (DM) has been recommended for teaching the contents for senior secondary school (SSS) economic curriculum (Hodkinson & Jephcote, 1996). This approach utilizes several senses; students can see, hear and possibly experience an actual event, it stimulate interest, present ideas and concepts more clearly, provide direct experiences and reinforce learning. It requires pre-preparation or it may limit student’s participation. Lecture Method (LM) on the other hand save time and energy of the teacher, as teacher can say one thing to the whole students at the same time. It helps the students to develop and improve the ability to listen attentively to the teacher but it kills student’s
initiatives as it makes them passive listeners. Economics subjects also involves tables, charts, graphs and diagrams which require learning by doing, telling and showing. The female student prefers seeing them than hearing on the other hand; male students prefer hearing them than seeing in teaching learning process.

Student’s academic performance in economics means three things. First, is the ability to effectively see how facts fit together and form larger patterns of knowledge second, being able to think for you in relation to facts and third, being able to communicate verbally or on paper (Dalziel & Peat, 2008). Good students’ performance is also linked to having good organization skills such as good study habits and a proper place to work and good management. This means all form of physical discomfort tend to distract the attention of students in the school which will directly or indirectly affect student’s academic performance. The school should be properly lighted, well ventilated and furnished with suitable seats, tables, desks and so on. It is difficult to maintain order where students are over-crowded and lack comfortable seating position.

The problem of student’s academic performance in economics is not with the subject as it was but a lack of interest as a result of teaching method being used. Interest in the subject will critically influence students’ attentiveness, degree of commitment and concentration on learning. Relevance of subject matter to one’s concept of life and aspiration plays a major role in being interested and motivated while learning is taking place. Methods for learning economics should therefore be made stimulating and attractive to students in addition to being the means of preparing and selecting the next generations of students of higher education who in turn become the nation’s professional teachers or leaders (Okoch, 1994).

The Borno state Teaching Service Board (2006) identified causes of failure in students’ performances. The major causes responsible for the poor performance of students both in Junior and Senior Secondary School Certificate Examination (SSCE) are shortage of qualified teachers to handle the subject in schools, lack of dedication on the part of the teachers, workload of teachers, attitude of students toward their studies, non-availability of teaching/learning materials and suitable methods of teaching specific content.

The roles of economics teachers according to Moore (1996), is to be knowledgeable in his area of specialization and should be able to communicate his knowledge to his students by using appropriate methods to specific content, teaching and learning strategies to impart the economic content. The economics teacher, just like any other in different works of life must also possess many different qualities such as personal qualities, professional qualities, command of subject and teaching materials, planning for instruction, managing instruction, establishing a satisfactory classroom climate in order to impart his knowledge to his students to perform well academically.

In the same vein, it has been discovered that prevailing teaching methods predominantly employed by secondary school teachers at secondary school level in Nigeria is the teacher-centred, involving showing, telling and observing (Ngada 2004, Moore 1996 and Agharuwe & Ogborubo 2010). Ideally, an effective method of teaching economics subject must integrate the nature of the subject into it, with the mode of inquiry, strength of the knowledge, theory, practice, and models used. By this, students are made to participate both mentally and practically in the teaching and learning activities in the class or laboratory.

Therefore, two methods of imparting knowledge, skills, and economics concepts and principles into students of economics at the secondary school level have been identified as follows: Lecture and Demonstration methods of learning. But which of these two has the capacity of yielding better result appears not to have been empirically proven in secondary schools in Borno state. This is the concern of the study.

Statement of the problem
Economics is one of the subjects offered at secondary school level whose main objective is to equip students with necessary knowledge, basic concepts and principles of practicing economics for becoming self employed. It stands as one of the fulcrums of economics development, for it is widely used and applied in almost all aspect of human comfort and activities. Unfortunately, there has been a persistent low performance in the WASSCE and NECO examinations by students that offered economics as a subject as compared with other subject in Borno state. Experts in economics have advanced reasons for this negative development in education in the state among which are the use of learning methods adopted by some teachers. It has been the habit of economics teachers to use the instructional methods that are mainly teacher-centred, that is those involving showing, telling and observing rather than the ideal practice, learning-by doing approach which involves both the teacher and the student participation. Learning methods that adopt the students-centred activities concept of development capability for developing skills and knowledge are conspicuously lacking. This trend of development could adversely affect the overall educational development of the state, if not checked and the Nation’s quest for industries, technological and economic development might be an illusion or mirage pursued. Therefore it becomes imperative to explore by means of empirical data, the most effective instructional methods between Lecture and Demonstration methods of teaching and learning concepts in Economics among Secondary schools students in Borno state, Nigeria.
Objectives of the study
The objectives of the study are:

i. Determine the effectiveness of demonstration method in learning economics concepts among secondary school students in Borno state.

ii. Determine the effectiveness of lecture method in learning economics concepts among secondary school students in Borno state.

iii. Compare the effectiveness of demonstration and lecture methods in learning economics concepts among secondary school students in Borno state.

iv. Determine the effectiveness of demonstration method on male and female students in academic performance in learning economics concepts among secondary school students in Borno state.

v. Determine the effectiveness of lecture method on male and female students in academic performance in learning economics concepts among secondary school students in Borno state.

Hypotheses
The hypotheses for the study are:

HO1 There is no significant difference in academic performance between students exposed to demonstration and lecture methods in learning economic concepts.

HO2 There is no significant difference in academic performance between male and female exposed to demonstration method.

HO3 There is no significant difference in academic performance between male and female students exposed to lecture method.

Methodology
The research design adopted for this study was Quasi-experimental design. This design used two groups, experimental and control groups. It was carried out in a classroom setting where classes were intact. The groups were equivalent in all relevant aspects, differing only in their exposure to experimental variable manipulated X. The groups were randomly selected before they were assigned to their groups. Pre-test was given to both groups and they performed equally.

The mean of the post-test control lecture method was significantly higher on post-test than the pre-test results due to the experimental treatment given in both schools. The mean of the post-test on demonstration experimental groups was high than the pre-test, in both schools A and B. This cannot be confidently said that the difference was due to the experimental treatment given only; it might also have occurred due to subjects increased sensitization after the pre-test. (Sambo, 2005). This can be shown diagrammatically.

<table>
<thead>
<tr>
<th>Group</th>
<th>pre-test</th>
<th>independent variable</th>
<th>post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>(R)</td>
<td>E</td>
<td>O₁</td>
<td>X</td>
</tr>
<tr>
<td>(R)</td>
<td>C₁</td>
<td>O₁</td>
<td>X</td>
</tr>
</tbody>
</table>

Where:
(R) – Randomization
E – Demonstrations Methods
C – Control Group (Lecture Method)

Population and Sample
The population for the study comprised all private and public senior secondary schools students in Borno state with an estimated population of about 210,000 students, with 60,000 students for the private schools and 150,000 for the public schools. The sample for the study was SSI students in two schools private and public. One hundred and four (104) students were randomly selected using simple random sampling for the two groups in two schools. Fifty two (52) students for each school and twenty-six (26) students for each group that was thirteen (13) males and thirteen (13) females. The research wrote the names of all the students on a piece of paper which was folded and mixed thoroughly in a hat. Each student dips one’s hand into the hat and picked any piece of paper. The name of the student was recorded and refolded and returned to the hat for the next draw until the required number was obtained (Oche, 2007).

Research Instrument
The research instruments used for data collection were pre-test and post-test using past WAEC questions on Economics. This provided the researcher with achievement tests for data analysis.

Procedure for Data Collection
The research obtained an introductory letter from the Head of Department of Education, University of Maiduguri
which was used to visit the sampled schools. On arrival at each school, the introductory letter was presented to the school principal and permission was granted to conduct the study.

The data were collected by the researcher before and after teaching/learning for four (4) weeks. Pre-test was given before teaching and learning for the two groups that was experimental group for demonstration method and control group for lecture method.

Post-test was given immediately after teaching/learning for four (4) weeks, experimental group was taught using demonstration method and control group using lecture method. Lecture method group were taught mainly by lecturing, talking most of the time by the researcher using photographs and textbooks as means of explanation and lecture notes were given to students to copy. The demonstration method group were taught using demonstration, whereby both the researcher and the students demonstrated together where necessary which enable the students saw things practically and participated actively and later, notes were given to them to copy. To ensured equal treatments all lesson plans were prepared by the researcher alone for the experimental groups in two schools for four weeks.

All lesson plans were prepared based on the following topics:
1. Theory of Demand
2. Theory of supply
3. The price System

Achievement test was given before and after teaching. The items/questions used for all the test were twenty-five (25) selected WAEC past questions where were found to be relevant to the content taught and used to obtained students scores for data analysis for the study. The twenty –five selected past WAEC questions were multiple choice types and were administered to the students on the pre-test that determined their entering behaviours for the treatment and also assisted in equal distribution of students to their groups. Each question was equal to four (4) marks, making a total of 100% marks (4x 25 = 100). The test was re-administered immediately after four (4) weeks teaching period that determined the effects of the two teaching methods (demonstration and lecture).

Method of Data Analysis
The data collected from the students’ scores was analysed school by school using descriptive statistics of mean, standard deviation and inferential statistic of t-test. Mean and standard deviation were used to compare a student’s performance with his group in terms of whether the student is an average, below or above average and also allows for precise interpretation of scores within the distribution and for the transformation of raw scores into t-test (Oche, 2007). T-test was used because the population variance was not known and it has interval scale of measurement and involved two mean groups in the study (Oche, 2007).

Result
The data collected from the students’ scores was analysed school by school using descriptive statistics of mean, standard deviation and inferential statistic of t-test. Mean and standard deviation were used to compare a student’s performance with his group in terms of whether the student is an average, below or above average and also allows for precise interpretation of scores within the distribution and for the transformation of raw scores into t-test (Oche, 2007). T-test was used because the population variance was not known and it has interval scale of measurement and involved two mean groups in the study. The findings of the study are presented below:

Research Question 1a: Pre-test, Post-test on Lecture and Demonstration Methods of Students’ Academic Performance in Learning Economic Concepts

Table 1a School A

<table>
<thead>
<tr>
<th>Groups</th>
<th>Pre-Test</th>
<th>Post-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sample</td>
<td>Mean</td>
</tr>
<tr>
<td>Lecture</td>
<td>26</td>
<td>19.23</td>
</tr>
<tr>
<td>Demonstration</td>
<td>26</td>
<td>19.34</td>
</tr>
</tbody>
</table>

Table 1b School B

<table>
<thead>
<tr>
<th>Groups</th>
<th>Pre-Test</th>
<th>Post-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sample</td>
<td>Mean</td>
</tr>
<tr>
<td>Lecture</td>
<td>26</td>
<td>18.46</td>
</tr>
<tr>
<td>Demonstration</td>
<td>26</td>
<td>19.42</td>
</tr>
</tbody>
</table>

From table 1A and 1B, performed the same on pre-test no group was better than the other which means the test items suits them equally. On post-test results, the mean of demonstration group was 64.30 and standard deviation of 17.26, while the mean of lecture group was 55.38 and standard deviation of 13.89 for school A and School B. lecture group has the mean of 51.76 and standard deviation of 15.82 while demonstration group has
the mean of 64.30 and standard deviation of 17.26. Demonstration groups performed better result than lecture groups on post-test which means there was significant effects on post-test result than the pre-test.

**Hypothesis 1:** There is no significant difference in academic performance between students exposed to demonstration and lecture methods in learning economics concepts among secondary school students in Borno state.

Table 2 Summary of t-test, post-test of demonstration and lecture methods in students’ academic performance in learning economic concepts.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Sample</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Df</th>
<th>T-Cal</th>
<th>T-Value</th>
<th>Standard error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstration</td>
<td>26</td>
<td>67.80</td>
<td>17.73</td>
<td></td>
<td>2.721</td>
<td>2.021</td>
<td>1.0</td>
</tr>
<tr>
<td>Lecture</td>
<td>26</td>
<td>55.38</td>
<td>13.89</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From table 2A and 2B showed that there was significant effectiveness between the academic performance of students exposed to demonstration and lecture groups at the 0.05 level of significance in various of demonstration method. The mean scores indicated that students for the demonstration group in school A recorded 67.80 as against 55.38 for the lecture group in school A. The standard deviation for demonstration group was 17.73 as against 13.89 for the lecture group while at school B; the demonstration group had 64.72 as mean as against 51.76 for the lecture group and standard deviation of 17.26 for the demonstration group and 15.82 for the lecture group. In both schools, demonstration groups performed better than the lecture groups at 0.05% level of significance and t-calculated 2.721 and 2.731 was greater than the t-value of 2.021 in respect of the two schools. The null hypothesis was rejected. This means significant difference existed in favour of demonstration method.

**Hypothesis 2:** There is no significant difference in academic performance between male and female students exposed to demonstration method in learning concepts in economics among secondary school students in Borno state.

Table 3 Summary of t-test, post-test scores of male and female students exposed to demonstration method in academic performance in learning concepts in economics.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Sample</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>df</th>
<th>T-Cal</th>
<th>T-Value</th>
<th>Standard error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>13</td>
<td>61.38</td>
<td>16.10</td>
<td>24</td>
<td>1.98</td>
<td>2.064</td>
<td>1.0</td>
</tr>
<tr>
<td>Female</td>
<td>13</td>
<td>74.23</td>
<td>16.91</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From tables 3A and 3B showed that the t-calculated (t-cal) was less than the t-value (t-table) hence the null hypothesis was accepted. The result of the test suggested that there was no statistically significant difference between academic performance of male and female students exposed to demonstration method in learning economics concepts in both schools. Differences observed were as a result of sampling errors.

**Hypothesis 3:** There is no significant difference in academic performance between male and female students exposed to lecture method in learning concepts in economics among secondary school students in Borno.

Table 4. Summary of t-test, post-test scores of male and female students exposed in lecture method in academics performance in learning concepts in economics.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Sample</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>df</th>
<th>T-Cal</th>
<th>T-Value</th>
<th>Standard error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>13</td>
<td>60</td>
<td>16.13</td>
<td>24</td>
<td>1.86</td>
<td>2.064</td>
<td>1.0</td>
</tr>
<tr>
<td>Female</td>
<td>13</td>
<td>50</td>
<td>8.94</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Ngulde (1990) also reported that, lecture method was observed as the cause of low academic performance of concepts in both schools. Any difference observed may have arisen from sampling errors.

The null hypothesis that guided the table 4A and 4B was accepted the t-calculated at school A as well as at School B was less than the t-critical value. Thus, there were no statistically significant differences between the academic performance of male and female students exposed to lecture method in learning economics concepts in both schools. Any difference observed may have arisen from sampling errors.

Summary of findings
1. Lecture method was effective in learning economics concept among secondary school students in Borno state.
2. Demonstration method was effective in learning economics concepts among secondary school students in Borno state.
3. Demonstration method was more effective than lecture method in learning economics concept among secondary school students in Borno state.
4. There was no difference between the academic performance of male and female students exposed to demonstration method in learning economic concepts among secondary school students in Borno state. Differences observed was as a result of sampling error.
5. There was no difference between the academic performance of male and female students exposed to lecture method in learning economics concepts in Borno state. Any difference observed as a result of sampling error.

Discussion
The study found out that lecture method was effective in learning concepts in economics among secondary school students in Borno state. The finding was disagreed with the findings of Hassan (1991) who reported that lecture method was not effective in learning ecology in secondary schools in Borno state. Moore (1996), was not in supported that lecture method was effective, she said that students remember only 20% of what they hear, Ngulde (1990) also reported that, lecture method was observed as the cause of low academic performance of students in public secondary schools in Borno state.

The study also revealed that demonstration method was effective in learning concepts in economics among secondary school students in Borno state. This study was in the agreement with Enaiyaju, (1997) who reported that, teacher demonstration method was effective in learning chemistry subject in secondary schools in Zaria. Ernest (2010) was in consulate that, demonstration method was effective in learning science subject in Essan, Edo state. He reported that, students performed better results and teachers were encouraged to use more of demonstration method while learning some selected concepts in science.

When compared, the effectiveness of demonstration and lecture method in learning economics concepts, demonstration method was more effective than the lecture method. The finding of this study is in support of the finding of Okocha (1994) who reported that demonstration method was more effective in learning physic concepts. This showed that, demonstration method was more effective than the lecture method. This is in line with Moore (1996) reports which said that students remember 90% of what they see and do than what they hear.

The study also revealed that, female students perform significantly better than male students when exposed to demonstration method in both school A and B. This finding is in line with Ernest (2010) who reported that teacher demonstration method was more effective in learning science subject in Esan, Edo state. He also reported that female students performed better results when demonstration method was used than their male counter parts. This finding is also in line with Fred (2010) findings, who reported that teacher demonstration method was more effective in learning chemistry subject at central/high school Kansas City Missouri than individual laboratory. The findings of this study led credence to the saying that, females preferred doing than saying, male students performed significantly better than female students when exposed to lecture methods in learning economics concepts in both school A and B.

All the t-calculated were based on chosen alpha of 0.05% level of significance. Both the internal and external validity threats of the study were controlled. The study was not extended over a period of time which does not provided any event to occur beside experimental treatment such as political instability, instability of calendar etc. there was no maturation biological and psychological within the students occurred as a result of treatment given. There was stability on students scores when test-retest was given to those students with highest scores maintained their scores as well as average students and lower scores. There was no lost of subjects in the study because it was only four weeks in a term for the experimental which does not affected the outcome of the study. When test- retest was given, students performed significantly better on retest scores because of the importance of the treatment. The measurement of the instrument produced accurate and consistent that demonstration group method was more effective than lecture group method with a different mean value of 12.54

<table>
<thead>
<tr>
<th>Groups</th>
<th>Sample</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>df</th>
<th>T-Cal</th>
<th>T-Value</th>
<th>Standard error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>13</td>
<td>53.15</td>
<td>16.89</td>
<td>24</td>
<td>0.45</td>
<td>2.064</td>
<td>1.0</td>
</tr>
<tr>
<td>Female</td>
<td>13</td>
<td>50.38</td>
<td>14.49</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
in school A and 45.07 in school B. Placebo control group where not distinguished from the real medication or placebo effect. The control of extraneous variable sin the study was done in line with randomization in intact class, which was been accomplished by the experimental groups and considered to be statistically equivalent in all possible ways using simple random techniques. The researcher wrote the names of the students on a piece of paper which was folded and mixed thoroughly in a bowl. Each student dipped one hand into the bowl and picked any piece of paper. The name of the student was recorded returned to the bowl for the next draw until the required number was obtained. All the researchers used alpha level of 0.05% of significance and both internal and external validity threats of the studies were controlled. The measurement of the instrument produced accurate and consistent that demonstration method was more effective than lecture method.


**Conclusion**

Students learning Economics concepts improves their academics performance after teaching and learning for four weeks using demonstration and lecture methods in learning economics concepts among secondary school students in Borno state. When the two methods were compared, demonstration method was more effective in improving students’ academic performance than lecture method.

The study was also able to identify some areas that need improvement in teaching/learning economics. In public schools students wee over-crowded and lack instructional materials relevant to effective learning, only textbooks were relied on. It was observed that the teachers interest influence that of the students interest. All the students involved in the study showed interest in the study, especially the demonstration method groups in both schools, became enthusiastic and even wanted to continue with the study after completion of the course.

**Recommendation**

Based on the findings of the study, the following recommendations are made:

(i) Economic teachers should maximize the use of demonstration method which learning some selected economic concepts among students, than lecture method.

(ii) Economics teachers should be given the opportunity for in-service training, workshops, seminars and conferences to update their knowledge in appropriate selection of learning methods that suit a specific objective.

(iii) Government should build more classes to reduce the overcrowded students per class.

(iv) The number of periods allocated was adequate to meet learning needs but the forty (40) minutes learning period was not enough. The forty minutes should be doubled to make it eighty (80) minutes when demonstration method is to be used.

(v) Government should employ more qualified teachers to reduce the work load of teachers.

**References**


Nigeria.