Effect of Peer Tutoring Method on Students Academic Achievement in Home Economics

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Abstract

The study conducted to find out the effect of peer tutoring institutional method on the academic achievement in Home Economics among secondary school students in Dunukofia L.G.A of Anambra State. Quasi-experimental design was used. All the senior secondary school students in the local government area constituted the population of the study. Four secondary schools out of eight secondary schools was randomly selected, and all the 145 SS1 students offering Home Economics in these four schools were selected and assigned to experimental and control groups. One research question and one hypothesis guided the study. Data on student’s achievement was collected using Home Economics achievement test (HAT). The research question was answered using mean t-test statistics. The results indicated that students taught Home Economics using peer tutoring instructional methods achieved higher than those taught using lecture method, it was recommended that peer tutoring should be used in teaching Home Economics in secondary schools to enhance student’s achievement.

Introduction

Student’s achievement is usually determined through tests and examinations. A student whose academic achievement is high or impressive in a particular subject is rightly assumed to have learnt much in that subject. Therefore learning is the basic raw material for student’s achievement (Igbokwe, 1999). Learning is usually enhance by a number of factors Ngwoke (2004) identified some factors that brings about learning, learning is more effective if the experience makes sense to the learner, learning is influenced by the learners goals, values and motives.

Onyeneto and Onyibor (2000) stated that poor academic achievement in our schools queries the methodology of instruction and therefore called for an in depth investigation with a view of establishing the relationship between instructional methods and students achievement.

Afuba (2012) opined that there exists poor achievement in Home Economics in secondary schools. This poor performance according to him could be done to poor method of teaching and insufficient instructional methods. It should be recalled that teaching is an essential aspect of learning and good teaching with right methods leads to better understanding and mastering of subject matter and eventual high achievement.

Ezengwu (2007) stated that majority of teachers in the field still employ conventional methods in the classroom teaching, these methods though not without some advantages are found to be didactic, stereotype, ineffective and non-result oriented. Nebo (2012) stated that this conventional method of teaching has failed to recognize the uniqueness of the inquiry base nature of Home-Economics and the learner’s individuality thus failed to encourage creative thinking in the learner leading to poor achievement of students. Based on this educators and scholars are challenged to seek for an intervention or innovative methods that would enhance academic achievement of students in Home economics some of these methods includes concept mapping, discovering method, co-operative learning, target task approach, peer tutoring e.t.c.
Peer tutoring is a method of instruction that involves students teaching other students, a system of instruction in which learners help each other and learn by teaching. Paul (2006) defined peer tutoring as an instructional strategy that partners students to help one another learn material, reinforce skills or practice a learned task. Peer tutoring often results in academic, emotional and social gains for the students involved. Through a structured program supervised, planned and monitored by a teacher, peer tutoring can help readers receive individualized and targeted instruction that they may not otherwise receive. A study conducted by Ayuba (2011) found that peers are more sensitive than adult readers to picking up on non-verbal cues, students being tutored may give to reveal that they may not understand what a tutor is trying to communicate. In peer tutoring class each student gets more attention from the tutor and more time to speak while others listen. This allows the students take active part in constructing their knowledge.

The main thrust of the study is to find out the effect of peer tutoring method on academic achievement of secondary school students in Home Economics

Research Questions

The study was guided by the following research questions

1. What are the mean percentage scores of students taught home Economics using peer-tutoring method and that of those taught using lecture method

Hypothesis

The following Null hypothesis was tested at 0.05 level of significance.

There is no significance difference in academic achievement of students taught home economics using peer tutoring method and those taught using lecture method.

Methods

Research Design: The design of the study is Quasi-experimental. It is design because according to Onoh (2000) this design is suitable for students where absolute control of all the variables involved cannot be achieved

Population: The population of the study was all the SS1 students in eight sec school in Dunukofia L.G.A of Anambra state (Dept of Statistics, post primary school management Board Dunukofia L.G.A

Sample and Sampling Technique

Four secondary schools out of eight secondary in Dunukofia L.G.A was randomly selected. All the SS1 students offering Home Economics was used. The total number of SS1 students from the four schools is 145. The choice of the SS1 class on the fact that it was not an exam class. The four schools were divided into experimental and control group using odd and even number method, where the odd number school becomes the control group while the even number the experimental group.

Instrument

An instrument known as Home Economics achievement test (HAT) was used for data collection. The HAT
developed by researcher is a thirty multiple choice achievement test on the identified difficult-to-learn Home Economics topics

Validation and Reliability of Instrument

The instrument was validated by four experts, two from Home Economics department of Federal College of Education (Technical) Umunze and two from the sample schools. The reliability test of the instrument was conducted at Ogidi girl’s secondary school Ogidi which is outside the study area. A test-retest method was employed to the same respondents after two weeks interval. The results of the test was correlated using pearson product moment correlation coefficient and the reliability coefficient (r) was found to be 0.87

Experimental procedure

Lesson plan was developed by the researcher for experimental group using peer tutoring methods, and control group using lecture method for the period of four weeks. Pre-test was administered to the groups to determine the equipment of their ability level. After the treatment, the researcher administered post-test using the same instrument and marking scheme.

Method of Data Analysis

The score of each of the subjects in test were converted to simple percentage. These were summed up and the mean percentage score computed for each of the two groups’ t-test statistics was used to analyze the null hypothesis at 0.05 level of significance

Results

The results of the study were presented below.

Research Question 1: what are the mean percentage scores of students taught Home Economics using peer tutoring and those taught using lecture methods.

Table 1: mean percentage scores of students in Experimental and control group.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean(x)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group (peer tutoring)</td>
<td>65</td>
<td>56.20</td>
</tr>
<tr>
<td>Control group (lecture method)</td>
<td>60</td>
<td>40.27</td>
</tr>
</tbody>
</table>

Data in table 1 showed that mean score of students exposed to peer tutoring is 56.20 while those taught with lecture method is 40.27.

Table 2 t-test analysis between the mean academic achievement of experimental and control group.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>X</th>
<th>SD</th>
<th>df</th>
<th>t-cal</th>
<th>t-crit</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>75</td>
<td>56.20</td>
<td>10.5</td>
<td>143</td>
<td>10.51</td>
<td>1.96</td>
<td>Sig</td>
</tr>
<tr>
<td>Control</td>
<td>70</td>
<td>40.27</td>
<td>7.61</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Table 2 shows that at 0.05 level of significance, t-cal (10.51) is greater than the t-crit1.96. Therefore the null hypothesis is rejected. Hence a significant difference exist between the experimental and control groups.

Discussion of Findings

Results of research question showed that students taught with peer tutoring had mean score higher than those taught with lecture method. The experimental group result performed better than the control group. Results of the analysis in table 2 showed that students that received instruction by way of interaction with their peers (peer tutoring) achieved better than students exposed to lecture method. The findings are in line with Bryan (1998) who investigated on the effects of peer tutoring on the academic achievement of university students in Georgia. The results indicated that those exposed to peer tutoring performed better than those that are not exposed to peer tutoring. Also Ayuba (2011) reported that peer tutoring instructional method enhances academic achievement of students among junior secondary school students in Bauchi metropolis. The relative superiority of peer tutoring over lecture method in enhancing student’s achievement can be attributed to the fact that students are actively involved in learning process.

Recommendations

Based on the findings, the following are recommended

1. Seminars, workshops should be organized to educate teachers on the use of peer tutoring in teaching Home Economic
2. Home Economics teachers should use peer tutoring method of instruction in secondary schools to enhance the academic achievement of students
3. Government agencies whose responsibility is to design and revise the curriculum for secondary schools should incorporate the use of peer tutoring in teaching Home Economics.

Conclusion

From the results obtained, the researcher concluded that peer tutoring instructional method is one of the effective methods of teaching Home Economics in senior secondary school since it enhances the student’s academic achievement.

References

Bryan, W.G (1998) An Investigation of the effects of Reciprocal Peer Tutoring on Achievement, self-efficacy and Test Anxiety. Contemporary Education Psychology 3(2) 144-152