Effect of Peer Tutoring on Academic Achievement of Low Achievers in Keyboarding In Secondary Schools in Anambra State

Prof. Okolocha C.C. *, Okeke, Virginia Nkechi **

*Department Of Technology And Vocational Education, Faculty Of Education, Nnamdi Azikiwe University, Awka
** Okeke, Virginia Nkechi, Department Of Technology And Vocational Education, Faculty Of Education, Nnamdi Azikiwe University, Awka

DOI: 10.29322/IJSRP.8.8.2018.p8088

Abstract- The study determined the effect of peer tutoring on academic achievement of low achievers in keyboarding in secondary schools in Anambra State. Two research questions guided the study and two null hypotheses were tested at 0.05 level of significance. The study was quasi-experimental research which specifically used the pretest, posttest non-equivalent control group design. The population of the study was 140 low achieving students of junior secondary school two (JSS2) students from 262 public secondary schools in Anambra State and the sample size was 24 low achieving students from Awka education zone. The purposive sampling technique was used to select Awka education zone out of the six education zones in Anambra State. Simple random sampling was used to select two public secondary schools in the area. The experimental group had 13 students (6 males and 7 females) while the control group contained 11 low achieving students (6 males and 5 females). The academic records of the students was used in collecting the information regarding the low achievers. Keyboarding Achievement Test (KAT) developed by the researcher using JSS2 past questions between 2015 to 2017 was used as research instrument. The face and content validity of KAT was established by three experts, one expert in the Measurement and Evaluation unit of Department of Educational Foundations, one from Vocational Education department both in the Faculty of Education, Nnamdi Azikiwe University, Awka and one experienced Business studies teacher from secondary school sampled. KAT was administered to low achieving students in both experimental and control groups. Test-retest method was used to establish the reliability of the instrument and data were analysed with Pearson Product Moment Correlation coefficient which yielded 0.88. Mean was used to answer the research questions while analysis of covariance (ANCOVA) was used to test the hypotheses. The SPSS version 20.0 was used for analysis. Findings revealed that using peer tutoring instructional mode enhances secondary school low achieving students’ academic achievement in keyboarding when compared with conventional teaching method. Gender is not a significant factor on the effect of peer tutoring instructional mode on academic achievement of low achieving students taught keyboarding. Based on the findings of the study, the researcher concluded that peer tutoring instructional mode has the capacity of improving low achievers academic achievement in keyboarding. It was therefore recommended among others, that peer tutoring instructional mode should be formally adopted by business teachers in secondary schools for teaching keyboarding and other skill-based subjects to improve academic achievement of low achieving students.

Index Terms- Peer Tutoring, Academic Achievement, Low Achievers And Keyboarding

I. INTRODUCTION

All over the world, education has been regarded as an indispensable tool for societal development and transformation. It is on this basis that the Federal Republic of Nigeria (2013) stated in her National Policy on Education that education is an instrument par excellence for effecting national development. To achieve the goals of education, Federal government of Nigeria from time to time initiates various policies and programmes. These policies and programmes are achieved through the establishment of schools at various levels of which secondary education is one of them.

Secondary education is a type of education received after primary education and it has its own goals and objectives as stated in the National Policy on Education. It is important to emphasize that the extent to which these goals and objectives are achieved is dependent on the academic achievement of the students. In fact, students’ academic achievement plays an important role in identifying graduates who will become great leaders and productive manpower for nations’ economic and social development. Undoubtedly, a student’s primary objective is his academics especially at secondary school level, because it is the stage of career building. Unfortunately, many students are leaving this stage without essential business skill and knowledge. In order to achieve these required skill and knowledge, there is need for students to offer business studies at secondary school level.

Business Studies is that part of the curriculum that enables the student to make informed decisions in the everyday business of living. It contributes to the student's understanding of the world of business and encourages a positive attitude to enterprise and also develops appropriate skills in that field ( Popham, 2009). The business studies programme builds a strong foundation for those who wish to move on to further study and
training in specialised areas such as management, international business, marketing, accounting, entrepreneurship or information and Communication technology (ICT).

The recent advancement in Information and Communication Technologies (ICT) which is also revolutionizing business as well as the educational institutions across the globe is posing a challenge to teaching and learning thereby affecting students’ academic achievement. To enable students and teachers cope with the challenges and dynamics of ICT, computer studies is introduced into secondary school curriculum. It is obvious that students and teachers need adequate skills in keyboarding to enable them get a firm hold on the use of computer.

According to Robinson (2009), keyboarding is a complex skill made up of finely discriminated movement patterns that depend upon interrelated sensory, perceptual, mental, and motor inputs and outputs which must occur close together in time. As a fundamental skill in today’s society, keyboarding provides our connection with the rest of the world through electronic communication. Students who become efficient keyboarders compose better, are proud of their work, produce documents with neater appearances, and have better motivation. Most keyboardists today are involved in generative typing which involves composing original thought directly into electronic documents and email.

Unfortunately, limited access to computers in most Nigerian schools prevents classroom teachers from involving much keyboard technology in their students’ daily activities. This is as a result of shortage of computers in secondary schools and teachers have no other choice but to concentrate on conventional teaching method. Conventional teaching method, being one of the oldest teaching methods is still the most widely used method of instruction by teachers in almost all discipline at various levels of education. This method do not seems to address students’ different needs in the learning process in the teaching of keyboarding in secondary schools. This is so because the conventional teaching method seems to be teacher-centred since the teacher does almost all the talking while the students listen and watch the teacher. Notwithstanding, conventional teaching method has its own merit as a teaching method. Teachers of keyboarding mostly use conventional method of teaching in teaching keyboarding in their schools. It also helps the teacher to cover much especially when large quantity of information needs to be passed on to the students. Unfortunately, this method does not allow students to think creatively, innovatively and critically since they possibly receive what has been taught to them. As a result student academic achievement is hampered.

Academic achievement represents performance outcomes and indicates the extent to which a person has accomplished specific goals that were the focus of activities in instructional environments, specifically in school, college, and university (Richardson, Michelle, Charles & Rod, 2012). Therefore, academic achievement should be considered to be a multifaceted construct that comprises different domains of learning. Because the field of academic achievement is very wide-ranging and covers a broad variety of educational outcomes, the definition of academic achievement depends on the indicators used to measure it. Among the many criteria that indicate academic achievement, there are very general indicators such as procedural and declarative knowledge acquired in an educational system, more curricular-based criteria such as grades on an educational achievement test, and cumulative indicators of academic achievement such as educational certificates.

The issue of poor academic achievement at the secondary school level of education in Nigeria has been widely documented. Record from Anambra State Universal Basic Education Board (ASUBEB, 2017) revealed the performance of all the junior secondary school candidates that registered for the Basic Education Certificate Examination (BECE) organized by Examination Development Centre (EDC) between 2015-2017. According to ASUBEB (2015), 42.97% performed well while 50.03% recorded poor performance. In 2016, 49.26% was good performance and 50.74% was recorded as poor performance while in 2017, 47.27% was good performance and 52.72% was recorded as poor performance. This is an indication that the major problem facing the educational system in Nigeria is the abysmal failure of students in public examinations, particularly at the secondary school level of education.

In Nigeria, academic achievement is measured by grades or by scores at the secondary school level. These grades determines whether a student will have the opportunity to continue his or her education (e.g., to move to the next higher class). Therefore, academic achievement defines whether one can take part in higher education, and based on the educational degrees one attains, influences one’s vocational career after schooling. Besides the relevance for an individual, academic achievement is of utmost importance for the wealth of a nation and its prosperity, yet some students perform below average and these students are termed low achievers.

Low achievers are those students who perform academically poor as evidenced or shown in their school academic records. This category of students is identified through their record of results with Anambra State Universal Basic Education Board (ASUBEB, 2017) and the testimonies of their teachers. According to Vanaeker-Ergle (2012), a low achiever is someone who achieves less than those around him. The author further stated that, children who are low achievers generally have a below average intelligent quotient (less than 100 IQ) and struggle in the classroom to keep up with general academic requirements. These low achieving students may not be part of nation builders because they drop out of school, join bad gang, underemployed, unemployed and also violent offenders. Notwithstanding, certain strategies could be put in place to help low achieving students improve academically. The strategies may include the use of pre-test technique, calling on low achievers regularly to answer questions, using descriptive praise, communicating high expectations, use of peer tutoring and so on. The present study focuses on peer tutoring technique.

According to Outhred and Chester (2010), peer tutoring is an instructional strategy that consists of student partnerships, linking high achieving students with lower achieving students or those with comparable achievement. Peer tutoring may play a special role in children’s development in addition to parents and teachers. There are many types of peer tutoring such as cross-age peer tutoring, peer assisted learning strategies (PALS), reciprocal peer tutoring (RPT), same-age peer tutoring, class wide peer tutoring and so on. The present study would focus on class wide peer tutoring. Class wide peer tutoring (CWPT) involves
dividing the entire class into groups of two to five students with differing ability levels. Students then act as tutors, tutees, or both tutors and tutees. Typically, CWPT involves highly structured procedures, direct rehearsal, competitive teams, and posting of scores (Kalkowski, 2011). Some scholars believe that pairing of low and high achieving students are influenced by gender. Kunsch, Jitendra and Sood (2012) opined that the pairing of students should base on sex, male and male, female and female or male and female.

Gender is one variable that could always be a factor in the issue of students’ academic achievement. It is a term which describes behaviour and attributes expected of individuals on the basis of being male or female in a given society (Uwameyie & Osunde, 2009). Undoubtedly, the gender of students may have influence on academic achievement of keyboarding irrespective of the fact that the Federal Government of Nigeria (2013) through its National Policy on Education has provided for equal opportunities for all citizens to study all subjects in schools irrespective of their gender. Okeke (2008) noted that there are many challenges posed by gender on academic achievement of students where certain subjects and activities are recognized as masculine and others, feminine. For instance, in a study conducted by Amoor and Umar (2015) on the influence of demographic variables such as gender on business education students’ choice of secretarial option in colleges of education revealed that more female students opted for secretarial option than male students. This was found to be based on the notion that secretarial education where keyboarding is housed is meant for female gender. Such challenges call for instructional method that will enhance academic achievement of students irrespective of gender.

In view of the above, there is indeed a need to have a re-examination of the mode of teaching and learning of keyboarding so that students especially the low achievers might apply the knowledge they acquired to real life situations. It is against this background that the researcher seeks to find out the effect of peer tutoring on academic achievement of low achievers in keyboarding in secondary schools in Anambra State.

Statement of the Problem

The technological innovation in the 21st century has altered the way people do things including education sector. Everything today is technologically driven which create the need for students to be computer literate. Observation has shown that despite the effort of teachers, curriculum planners and government secondary school students still perform poorly in computer keyboarding in public examinations and this has become a source of worry to education stakeholders especially in Anambra State. The issue of poor academic achievement at the secondary level of education has been widely documented. Record from Anambra State Universal Basic Education Board (ASUBEB, 2017) revealed poor academic achievement of students that registered for Basic Education Certificate Examination between 2015-2017. Records from ASUBEB shows that in 2015, 42.97% performed well while 50.03% recorded poor performance. In 2016, 49.26% was good performance and 50.74% was recorded as poor performance while in 2017, 47.27% was good performance and 52.72% was recorded as poor performance. A number of factors have been identified to be contributory to students’ poor academic achievements in keyboarding in schools. In the literature, some of these factors identified were to include students’ study habits, school environment, lack of facilities and inappropriate teaching methods. Supporting the above stance, literature attributed poor academic achievement of students to deficiency in teaching methods adopted by the teachers which invariably do not encourage students’ active participation in the instructional process.

Conventional teaching method often used in Nigerian secondary schools though help teachers to cover much especially when a teacher needs to pass a lot of information to the students. The advantage on the part of the teacher notwithstanding, it does not give students the opportunity of being actively involved in their own learning. The conventional teaching methods prevalent in Nigerian secondary schools have made the role of the students, most times a passive one. The student is regarded as the recipient of learning while the teacher is the giver. Onukaogu and Arua in Agboh (2015) saw the student in this regard, as one who sits and swallows what the teacher has to give in terms of narration, exposition, instruction, classification, definition, and so on. The resultant effect of this has always been poor academic achievements of students.

Poor academic achievement of secondary school student could be improved through the use of other teaching methods such as peer tutoring. 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. Though, peer tutoring as an instructional mode may be known by teachers and students, its effect in the teaching and learning of keyboarding has not yet been fully researched and established. Therefore, the problem of this study is that students performed poorly in keyboarding hence the need to determine the effect of peer tutoring on academic achievement of low achievers.

Purpose of the Study

The major purpose of this study was to determine the effect of peer tutoring on academic achievement of low achievers in keyboarding in secondary schools in Anambra State. Specifically, the study sought to determine:

1. Effect of peer tutoring technique and conventional method on achievement of low achievers in keyboarding.
2. Effect of peer tutoring technique on achievement of male and female low achievers in keyboarding.

Research Questions

The following research questions guided the study:

1. Is there any effect of peer tutoring technique and conventional method on achievement of low achievers in keyboarding?
2. Is there any effect of peer tutoring technique on achievement of male and female low achievers in keyboarding?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance:
1. Peer tutoring technique and conventional method had no effect on the achievement of low achievers in keyboarding.

2. Peer tutoring technique had no effect on the achievement of male and female low achievers in keyboarding.

II. LITERATURE REVIEW

Peer Tutoring

Peer tutoring is designed to supplement rather than replace a variety of teacher directed activities. In this process, peer tutoring provides low achievers with a high level of active responding (with ongoing guidance and feed-back) on a concept that has been introduced, explained and demonstrated by the teacher. The reason behind the idea of peer tutoring is that it is assumed that most pupils working in pairs may learn better in social context.

According to Topping (2011), peer tutoring is the acquisition of knowledge and skills through active helping and supporting among learners of equal status or level. Topping added that peer tutoring involves people from similar social groupings who are not professional teachers helping each other learn while learning themselves. Kourea, Cartledge and Musti-Rao (2013) reported that peer tutoring may consist of students of the same learning level working together or students of varying learning levels working together. This can easily be implemented even in a classroom of diverse learners. The authors further added that by implementing peer tutoring as a teaching strategy, classroom teachers are able to individualize instruction for each of their students, giving all the students in the classroom the opportunity to be actively engaged in learning at the same time.

Nnaka (2014) opined that peer tutoring is an instructional strategy in which students in their groups under the guidance of a teacher work together through a given instructional assignment with brilliant student as a peer tutor, providing assistance and instruction to others. The author added that peer tutoring is fruitful and successful because hierarchical atmosphere in the classroom is removed and cordial, friendly and free atmosphere that facilitates learning is obtained. During peer tutoring, there is no more fear of criticism in the students, blame or punishment from the teacher when they are not coping as the teacher wants. Igbo (2015) saw peer tutoring as a teaching process whereby a student who has proficiency in a skill teaches another student under the teacher’s supervision. It is a process of chain teaching whereby the teacher shows a student how to perform a skill and the student in turn trains a second student on the same or similar skill. This means that for effectiveness of the teaching, the teacher plans the peer tutoring.

According to the researcher, peer tutoring is an instructional mode designed to supplement rather than to replace a variety of teacher directed activities. It involves students serving as academic tutors and tutees.

Academic Achievement

Academic achievement, according to Soohyun (2011) is defined as the level of individuals’ education and/or educational outcomes accomplished successfully, as a result of learning at school. It is usually determined by comparing his or her score in a school test and or a standardized test with the average score of other people of the same age. Loo and Choy (2013) see academic achievement as a multidimensional construct consisting of three dimensions: student’s characteristics, teacher competencies and academic dimension. Lopez (2015) in her view stressed that academic achievement refers to a person’s strong performance in a given academic arena. A student who earns good grades or awards in exams has achieved in the academic field. Academic achievement may be defined as excellence in all academic disciplines, in class as well as co-curricular activities.

According to Ganail and Ashraf (2013), academic achievement includes excellence in sporting behaviour, confidence, communication skills, punctuality, arts, culture and the like which can be achieved only when an individual is well adjusted. The authors defined academic achievement as knowledge attaining ability or degree of competence in school tasks usually measured by standardized tests and expressed in a grade or units based on pupils’ performance.

The researcher opined that academic achievement concerns how students cope with or accomplish different task given to them by their teachers thus the determinants of this dimensions are students’ intelligence, personality and the socio-economic status within the academic context.

Low Achievers

According to Vanauker-Ergle (2012), a low achiever is someone who achieves less than those around him. The author further stated that children who are low achievers generally have a below average (100) IQ and struggle in the classroom to keep up with general academic requirements. Low achievers typically do not qualify for special education services because they do not meet the 70 or below IQ requirement for mentally retarded or the IQ/achievement discrepancy for learning disabled classification. Hensen (2014) in his view stated that low achievers is a term referring to students who are slow learners, disadvantaged, underachieve, and backward in their academic pursuit.

As noted by Shaw (2013), the author stated that low achievers are children who do not perform well in the classroom. Low achievers account for a large numbers of school drop outs, unwed teen mothers, illicit drug users, functionally illiterate persons, incarcerated persons. Others include unemployed, underemployed violent offenders, alcohol abusers, school failures, low scorers on group test and gang and hate group members. According to the researcher, low achievers are students who their parents and teachers have put in maximum effort and all forms of strategies necessary to make them better academically, but all to no avail.

Keyboarding

Keyboarding is the penmanship of the computer age.” (Johnson, Nelson & Townsend, 2008).It has been a separate course which involved learning the meteoric skills of typing as well as formatting skills in writing reports and various forms of correspondence (Rogers, 2010). According to Robinson (2009), Keyboarding is a complex skill made up of finely discriminated movement patterns that depend upon interrelated sensory, perceptual, mental, and motor inputs and outputs which must occur close together in time. Supporters of this thought like Prigge (2011) believed that children should be taught
keyboarding skills before the habitual hunt-and-peck method becomes a difficult habit to overcome.

Braathen (2013) opined that keyboarding is the skills involving typing without hunt-pecking. According to Wolf (2011), the hunt-and-peck method gives students a false sense that they 'know how to keyboard. Nieman (2012) demonstrated that children with keyboarding skills compose faster, produce documents with a neater appearance, have better motivation, and demonstrate improved language arts skills. In other words, she indicated that a digital divide exists between students with keyboarding skills and students without keyboarding skills. To master keyboarding skills proficiently, students' fingers must be able to flow freely. According to Bartholome (2010) asserted that keyboarding is a lifelong skill. It is no longer a routine for transferring ideas from scribble to print. Most keyboardists today are involved in generative typing which involves composing original thought directly into electronic documents and email. According to the researcher, keyboarding is the smooth movement of fingers in the home keys of computers or typewriters without hunt-pecking.

III. METHOD

The research was carried out using quasi-experimental design of pre-test and post-test non-equivalent control group. The study was carried out in Anambra State of Nigeria and the population consisted of 140 low achievers of all the Junior Secondary School two (JSS2) studying keyboarding under Information Communication and Technology (ICT) as a compulsory subject in Awka Education Zone in Anambra State and the sample size was 24 low achieving male and female junior secondary schools two (JSS2) students drawn from the two sampled schools out of 18 public secondary schools in Awka Education Zone in Anambra state. The instrument for data collection was Keyboarding Achievement Test (KAT) extracted from JSS2 past questions from 2015-2017. The instrument was validated by three experts and the reliability of the test was calculated using Pearson Product Correlation Coefficient and the result revealed a reliability coefficient of 0.88. Mean and standard deviation were used in analyzing the data and Analysis of Covariance (ANCOVA) was used in testing the hypotheses at 0.05 level of significance.

IV. RESULTS

Research Question 1: Is there any effect of peer tutoring technique and conventional method on achievement of low achievers in keyboarding? The result of the analysis in respect of research question 1 is presented in Table 1.

Table 1: Effect of Peer tutoring technique and Conventional method on Achievement of Low Achievers in Keyboarding

<table>
<thead>
<tr>
<th>Methods</th>
<th>N</th>
<th>Pre-test Mean</th>
<th>Post-test Mean</th>
<th>Mean gain</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer Tutoring</td>
<td>13</td>
<td>13.73</td>
<td>41.60</td>
<td>27.87</td>
<td>Effective</td>
</tr>
<tr>
<td>Conventional</td>
<td>11</td>
<td>13.57</td>
<td>33.43</td>
<td>19.86</td>
<td></td>
</tr>
</tbody>
</table>

Data in Table 1 shows that the pre-test and post-test mean scores of low achievers taught keyboarding using peer tutoring are 13.73 and 41.60 while the pre-test and post-test mean scores of students taught with conventional method are 13.57 and 33.43 respectively. The mean gain of experimental group of 27.87 is higher than that of control group (19.86). This show that experimental group perform better than the control group.

Research Question 2: Is there any effect of peer tutoring technique on achievement of male and female low achievers in keyboarding? The result of the analysis in respect of research question 2 is presented in Table 2.

Table 2: Effect of Peer tutoring technique on Achievement of Male and Female Low Achievers in Keyboarding

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Pre-test Mean</th>
<th>Post-test Mean</th>
<th>Mean gain</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>6</td>
<td>32.32</td>
<td>55.28</td>
<td>22.01</td>
<td>Positive</td>
</tr>
<tr>
<td>Female</td>
<td>7</td>
<td>28.15</td>
<td>54.67</td>
<td>19.01</td>
<td>Positive</td>
</tr>
<tr>
<td>Mean gain difference</td>
<td></td>
<td></td>
<td></td>
<td>0.61</td>
<td></td>
</tr>
</tbody>
</table>

http://dx.doi.org/10.29322/IJSRP.8.8.2018.p8088
Data in Table 2 shows that the pre-test and post-test mean scores of male low achievers taught keyboarding using peer tutoring are 32.32 and 55.28 while the pre-test and post-test mean scores of female low achieving students are 28.15 and 54.67 respectively. The mean gain of male low achievers is 22.01 higher than that of their female counterpart which is 19.01. This implies that the mean achievement scores of male low achieving students are 0.61 higher than that of females’ low achievers. Hence, peer tutoring enhanced the performance of males more than the female low achievers.

**Hypothesis 1**

Peer tutoring technique and conventional method had no effect on the achievement of low achievers in keyboarding. The statistical test for hypothesis 1 is presented in Tables 3.

**Table 3**

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>392.959</td>
<td>2</td>
<td>196.479</td>
<td>15.607</td>
<td>.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>647.988</td>
<td>1</td>
<td>647.988</td>
<td>51.471</td>
<td>.000</td>
</tr>
<tr>
<td>Pretest</td>
<td>55.612</td>
<td>1</td>
<td>55.612</td>
<td>4.417</td>
<td>.048</td>
</tr>
<tr>
<td>Group</td>
<td>326.512</td>
<td>1</td>
<td>326.512</td>
<td>25.936</td>
<td>.000</td>
</tr>
<tr>
<td>Error</td>
<td>264.375</td>
<td>21</td>
<td>12.589</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7730.000</td>
<td>24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>657.333</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The result in the Table 4 shows that there is a statistically significant difference on the effect of Peer tutoring technique and Conventional method on Achievement of Low Achievers in Keyboarding. This is because the p-value (.000) is greater than the level of significant (0.05). Based on the above, the null hypothesis is not rejected, implying that there is a statistically significant difference on the effect of Peer tutoring technique and Conventional method on Achievement of Low Achievers in Keyboarding.

**Hypothesis 2**

Peer tutoring technique had no effect on the achievement of male and female low achievers in keyboarding. The statistical test for hypothesis 2 is presented in Tables 4.

**Table 4**

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>104.045</td>
<td>2</td>
<td>52.022</td>
<td>3.356</td>
<td>.077</td>
</tr>
<tr>
<td>Intercept</td>
<td>377.270</td>
<td>1</td>
<td>377.270</td>
<td>24.335</td>
<td>.001</td>
</tr>
<tr>
<td>Pretest</td>
<td>95.325</td>
<td>1</td>
<td>95.325</td>
<td>6.149</td>
<td>.033</td>
</tr>
<tr>
<td>Gender</td>
<td>7.339</td>
<td>1</td>
<td>7.339</td>
<td>.473</td>
<td>.507</td>
</tr>
<tr>
<td>Error</td>
<td>155.032</td>
<td>10</td>
<td>15.503</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5784.000</td>
<td>13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>259.077</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The result in the Table 5 shows that there is no statistically significant difference on effect of Peer tutoring technique on Achievement of Male and Female Low Achievers in Keyboarding. From the analysis of data presented, the following findings were made:

**V. SUMMARY OF FINDINGS**

From the analysis of data presented, the following findings were made:
1. The mean gain of experimental group is higher than that of control group. This shows that experimental group taught keyboarding with peer tutoring performs better than the control group taught keyboarding with conventional method.

2. The male low achieving students taught keyboarding using peer tutoring had mean scores higher than their female counterparts, which shows that male low achieving students perform better than their female counterparts when taught using peer tutoring.

3. The male low achieving students taught keyboarding using conventional method had mean scores higher than their female counterparts meaning that male low achieving students perform better than their female counterparts when taught using lecture method.

4. There is significant difference on the effect of Peer tutoring technique and Conventional method on Achievement of Low Achievers in Keyboarding.

5. There is no significant difference on the effect of Peer tutoring technique on Achievement of Male and Female Low Achievers in Keyboarding.

6. There is no significant difference on the effect of Conventional method on Achievement of Male and Female Low Achievers in Keyboarding.

VI. DISCUSSION OF FINDINGS

The findings revealed from Table 1 that low achievers who were taught keyboarding using peer tutoring technique performs better than those taught keyboarding using conventional method. The findings in Table 4 also revealed that academic achievement of low achieving students taught keyboarding using peer tutoring differed significantly from the low achievers taught using conventional method.

The findings of this study agree with Ejiofor (2011) who found out that peer tutoring has a significant effect on academic achievement of students in biology. In support, Okoye (2013) study revealed that students taught home economics using peer tutoring performed better than those taught using conventional teaching method. The relationship between the findings is that the use of peer tutoring technique enhances academic achievement of low achievers in various subjects.

The findings in Table 2 showed that male and female low achieving students taught keyboarding using peer tutoring performs better than those taught keyboarding using conventional method.

These findings are in line with the findings of Ifeakor (2010) which revealed that students taught physics using peer assessment achieved higher than those taught using conventional method and that gender had no statistical effect on the student’s achievement in physics. This implies that peer tutoring is effective for both male and female low achieving students in keyboarding and other subjects. Therefore, peer tutoring can be a yardstick to improve low achievers academically.

The findings in Table 3 showed that the male low achieving students taught keyboarding using conventional method had mean scores higher than their female counterparts, meaning that male low achieving students perform better than their female counterparts when taught using conventional method. The findings in Table 6 also revealed that there is no significant difference on the effect of Conventional method on Achievement of Male and Female Low Achievers in Keyboarding. Hence, such differences in academic achievement with respect to gender are a chance occurrence.

The findings of the literatures reviewed support these findings of the study. For instance, Oludipe (2012) found that gender did not significantly influence students’ academic achievement in skill subjects when taught with conventional method. In contrast, Orjikutu (2012) showed that gender difference exist between secondary school students taught skill subjects using conventional teaching method. Efanga (2014) found that significant difference did not exist in academic achievement between male and female students when taught using peer tutoring strategy as oppose to use of conventional teaching method. This implies that conventional method can unevenly influence academic achievement of both male and female low achieving students in keyboarding.

VII. CONCLUSION

As a result of the findings of this study, it could be concluded that peer tutoring is an effective instructional strategy capable of enhancing low achieving students’ academic achievement in keyboarding. Also, the academic achievement of low achieving students in keyboarding is not influenced by gender when peer tutoring and conventional method are employed in teaching. However, it is necessary for business studies teachers at secondary school level to use peer tutoring as an effective instructional strategy especially in teaching skill-based subjects. This strategy when properly used will continue to improve students’ academic achievements and low achievers in particular.

VIII. RECOMMENDATIONS

Based on the findings of this study, the researcher makes the following recommendations:

1. Peer tutoring technique should be adopted in secondary schools by business studies teachers for teaching of keyboarding so as to improve academic achievement of low achieving students.

2. Secondary school business studies teachers should ensure constant and effective utilization of peer tutoring for instruction in keyboarding and other skill-based subjects.

3. Secondary school administrators should periodically organize training programmes for teachers on effective utilization of peer tutoring strategy.

4. Enlightenment programme should be carried out by government and secondary school education board to enlighten students on the benefits of peer tutoring and how effectively peer tutoring mode can be in enhancing their academic achievement.
REFERENCES


AUTHORS

First Author – Prof. Okolocha C.C.,Department Of Technology And Vocational Education, Faculty Of Education, Nnamdi Azikiwe University, Awka, 08035927423

Second Author – Okeke, Virginia Nkechi, Department Of Technology And Vocational Education, Faculty Of Education Nnamdi Azikiwe University, Awka, 08063853866 & 08037007727, nkokike@gmail.com