Effect of Blended Teaching Method on Students’ Academic Achievement in Civic Education in Senior Secondary Schools in Imo State

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Abstract
The study examined the effect of Blended Teaching Method on students’ academic achievement in civic education in senior secondary schools in Imo State. Two research questions and two null hypotheses were raised to guide the study. A quasi-experimental design with a pre-test treatment, post-test of non-equivalent group method was adopted in the study. Population of the study comprised all 94,963 senior secondary school students in Imo state. Purposive and cluster sampling techniques were used to select 82 students who offer Civic Education. The instrument used for data collection is multiple choice test termed Civic Education Achievement Test (CEAT). The items in the instrument were subjected to content and face validation by 5 specialists; two specialists in educational measurement and evaluation, one from civic education and two from Educational Technology. The reliability of the research instrument was established using Kuder-Richardson (K-R20) and this gave a reliability index of 0.86. Mean and standard deviation were used to answer the research questions while the hypotheses were tested using Analysis of Covariance (ANCOVA) F-test statistics at 0.05 level of significance. From data analysed, it was found that blended teaching method is effective in the improvement of students’ academic achievement in Civic Education. It was also revealed that blended teaching is more effective on the male students than on the female students. The study recommended among others that: since the use of blended teaching method has been found to enhance achievement in Civic Education, teachers of Civic Education should employ it more in the teaching of the subject especially for topics that are abstract.

Keywords: Blended Teaching Method, Academic Achievement, Civic Education, Secondary School Students
Introduction

Civic education is one of the subjects taught in both primary and secondary schools which inculcates sound moral values in the youths. It is the subject which aims to help people learn how to become active, informed and responsible citizens. Civic education remains an important means of teaching the populace about individual rights and what duties and responsibilities the leaders and the led have. Civic education is a classroom subject introduced into the Nigerian school curriculum as part of the basic education programme for the purpose of developing young Nigerian people into responsible citizens (Federal Ministry of Education, 2007). Specifically, civic education seeks to expose pupils and students to the tenets and rudiments of citizenship education. It is envisaged that the teaching of the subject in our schools will lay a strong foundation for effective citizenship education and public participation in governance and other ethical issues that affect our lives.

Effective implementation of civic education provides a philosophical and structural framework on which to base the teaching of skills and strategies that reinforce reasoned decision-making skills, evaluation of information, practical application of civic virtue, and an in-depth understanding of citizenship responsibility (Kidwell, 2005). Generally, Civic Education has been viewed by many academics as a course of study that is geared towards producing responsible and law abiding citizens (Ukegbu, et.al. 2009). Ukegbu and associates also outlined objectives of Civic Education to include:

1. Developing and transforming the Nigerian youths into effective and responsible citizens by making them law-abiding.
2. Creating awareness of one’s rights, duties and obligations as citizens of this great nation and also to appreciate the rights of other citizens, and
3. Helping the young people to acquire a sense of loyalty, honesty, discipline, courage, dedication, respect, patriotism, hard work (p.22).

Civic education inculcates in students, the spirit of nationalism and desirable habits, values and attitudes. However, Civic education aims at providing learners with useful information on their rights, responsibilities and requirements for political engagements with the purpose of enabling the citizens to make meaningful contribution to the political system. The introduction of civic education into the Nigeria educational system is to enhance the attainment of the objectives of education (Azebamwan, 2010). Teaching Civic education in secondary schools lay a strong and effective citizenship education and public participation in governance and other ethical issues that affect lives and culture as Nigerians. Therefore academic achievement of the students in civic education should be an utmost priority.

The achievement of students in Civic Education at the end of the secondary school programme has not improved lately in the last decade (Ibe, 2006). Poor achievement in Civic Education can be attributed to many factors such as: lack of instructional materials, ill-utilization of time allocation, large class size and poor instructional delivery approaches (Chowdhury & Pati, 2011). According to Etukudo (2009), the fall in standard of achievement is incontrovertibly attributed to poor instructional delivery approach adopted by teachers in schools. West African
Examination Council (WAEC) Chief Examiner’s report (2014-2016) also states that the persistent poor achievement of students at secondary schools certificate examination leaves one in doubt about the effectiveness of instructional delivery approaches popularly used by the teachers for the teaching and learning. To this effect, the WAEC (2016) chief examiner proffered remedies to solve this problem, one of which is adopting instructional delivery approaches that utilizes learner centred approach to help students understand concepts.

In most secondary schools in Nigeria, traditional method of teaching is mostly use in delivering learning to the students. In this method, the teacher stands before the students and delivers his lecture while students listen, take notes and remained passive throughout the teaching and learning process. This method is a teacher-centred approach; the teacher dominates the class and students accept what the teacher says without questioning or contributing to the lecture (Olarinoye, 2001; Offiah & Achufusi, 2010). In a classroom situation, students differed in terms of intellectual ideas and perception; they learn and understand more quickly and easily than others but these facts were not taken into consideration in traditional method of teaching (Umoh, & Akpan, 2014). Traditional method of teaching alone may not be suitable for individual requirements thus, there is need for modern technology to cater for difference in learning styles. These could include: mobile learning, flipped classroom, e-learning, blended teaching, among others.

The concept of blended teaching has been around for a long time, but its terminology was not firmly established until around the beginning of the 21st century. Blended teaching can be defined as learning systems that combine face-to-face instruction with computer mediated instruction. It involves a combination of conventional face-to-face and online technology-based learning. The combination may involve mixing various event-based activities such as face-to-face classroom, live e-learning, self-paced learning, synchronous online conference and training, or asynchronous self-paced learning (Akude, 2010; Graham, 2013). In addition, Graham (2013) argued that the blended teaching will replace the traditional approach in education because it maximizes the best advantages of face-to-face and e-learning approaches. It motivates students to learn on their own at their own pace and their own time. If properly implemented, it is a promising alternative learning approach compared to conventional and e-learning approach, and can improve student success, satisfaction and retention.

The theoretical framework for this study is hinged on Active Learning Theory, propounded by Bonwell and Eison in 1991. Bonwell and Eison stated that active learning theory is a model of instruction that focuses the responsibility of learning on learners. It states that in order to learn, students must do more than just listen to teachers or lecturers, they must also read, write, use learning materials, discuss, or be involved in problem solving. This model of learning theory identifies three learning domains namely; Knowledge, Skills and Attitudes (KSA). It stresses that students should participate in higher-order thinking tasks such as analysis, synthesis, and evaluation. Active learning by students involves two key aspects, doing things and thinking about the things they are doing. The connection between blended teaching and Active Learning Theory is that, the theory stresses on learners working together, with the use of materials (like computers, videos, ICTs), role-playing, debate, case study,
cooperative learning, to improve on their learning and thus enhance academic performance/achievement. The argument is that when active learning exercises are carried out or used in blended teaching manner, students seem to learn more and perform better. Educational technologists as well as measurement specialists have proved that the use of innovative media has high potential in enhancing student’s academic achievement. This therefore, imperative for the researcher to examine the effect of blended teaching method on students’ academic achievement.

In most secondary schools, the conventional instructional delivery approach of teaching (lecture method) is in vogue. This has constantly led to poor achievement of students in the Senior Secondary School Certificate Examination as earlier stated by WAEC Chief Examiner’s 2016 report. High achievement is usually enhanced by proper instructional delivery approach. Educational technologists as well as curriculum specialists have proved that the use of innovative media have high potential in the teaching and learning situation. It can multiply and widen the channel of communication between the teacher and students. It is clear that the use of traditional lecture method is teacher-centered. One begins to ponder what improved teaching method could be used to improve students’ academic achievement in Civic Education? Could blended teaching be more effective than the lecture method? The problem of this study posed as a question is: what is the effect of blended teaching method on students’ academic achievement and in Civic Education in Secondary Schools in Imo State when compared with the traditional lecture method? The answer to the above question might transform the teaching of the subject to the benefit of students.

Objective of the Study
1. To ascertain the mean achievement scores of students taught Civic Education with BT method and those taught with lecture method at post test,
2. To ascertain the mean achievement scores of male and female students taught Civic Education with BT method at post test,

Research Questions
The following research questions were posed to guide the study:
1. What are the mean achievement scores of students taught Civic Education with BT method and those taught with lecture method at post test?
2. What are the mean achievement scores of male and female students taught Civic Education with BT method at post test?

Hypotheses
The following null hypotheses were formulated and tested at 0.05 level of significance.
1. There is no significant difference in the mean achievement scores of students taught Civic Education with BT method and those taught with lecture method at post test.
2. There is no significant difference in the mean achievement scores of male and female students taught Civic Education with BT method at post test.

Methodology
The design of the study was quasi-experimental design with a pre-test treatment, post-test of non-equivalent group method. The quasi-experimental design was chosen for this study because it assures internal validity of results and treats the initial group equivalence and researchers selection bias, since there was no randomization of the subjects into groups.
The population of the study was 94,963 Senior Secondary School Students (SS1-SS3) from 275 public secondary schools in Imo State. The sample consisted of 82 senior secondary two (SS II) students who offer Civic Education. Purposive and cluster sampling techniques were used to sample two coeducational schools: Comprehensive Development Secondary School, Douglas Road and City School Owerri. Purposive sampling technique was used to sample the schools because they are co-educational schools and are very accessible to the researcher. The researcher purposely chose SSII class of Civic Education and clustered them into two groups of experimental and control (that is in the two coeducational schools used). Specifically, 39 students in the experimental group I and 43 in the experimental group II (control). Male and female students of Civic Education made up the sample size (19 male and 20 female students in the experimental group I with 21 male and 22 female students in the experimental group II). The instrument used in this study was a researcher developed achievement test titled: Civic Education Achievement Test (CEAT). The CEAT has a bio-data section that contains the name and gender of the students. The test items were derived from three different topics in Civic Education syllabus. The test is made up of 50 items of multiple choice questions with four options (letters A to D) each, out of which only one option is the correct answer. A table of specification was constructed and it guided in the allocation of questions (at the required level of domain). Each test item was allocated one mark and this gave a total of 50 marks for the test items. Lesson plans for teaching the experimental group I (BT) were prepared. CEAT-post-test has the same features like the CEAT-pre-test. The only difference is that the CEAT-post-test and CEAT-post-post-test items and test options are reshuffled to avoid test-wiseness. Content and face validity of the instrument were ensured. The research instrument (CEAT) along with the purpose of the study, research questions, hypotheses, test blue print and marking guide were face and content validated by five specialists in the Faculty of Education, Imo State University, Owerri, two in Educational Measurement and Evaluation and two from Educational Technology and one from comprehensive secondary school, Umuekwune, Ngor Okpala who teaches Civic Education. The instrument was subjected to trial test using 30 senior secondary school students outside the study area that has the same characteristics. Trial testing enabled the researcher to determine the clarity of the test items, its readability, appropriateness and adequacy and as well as helped to determine the actual time. The data obtained from the responses of students in the trial testing were used to estimate the reliability of the instrument. Scores of the CEAT were used to estimate the reliability co-efficient of the instrument using Kuder Richardson formula (KR-20) which yielded a reliability index of 0.86. Kuder Richardson (K-R-20) was used because the test items consisted of multiple choice objective questions that were dichotomously scored. Data collected were analysed using both descriptive and inferential statistics. Research questions were answered using mean and standard deviation while Analysis of Covariance (ANCOVA) was used to test the hypotheses at 0.05 level of significance.

Results

Research Question 1: What are the achievement mean scores of students taught Civic Education with BT method and those taught with lecture method at post test?
Table 1: Mean scores of students taught Civic Education with BT method and those taught with lecture method at post test

<table>
<thead>
<tr>
<th>Academic Achievement</th>
<th>Teaching Methods</th>
<th>N</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Mean Gains</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Blended teaching</td>
<td>39</td>
<td>18.46</td>
<td>35.13</td>
<td>16.67</td>
</tr>
<tr>
<td></td>
<td>Lecture Method</td>
<td>43</td>
<td>17.51</td>
<td>17.74</td>
<td>0.23</td>
</tr>
</tbody>
</table>

It was indicated in Table 1 that at pre test, the mean scores of the two groups (Blended teaching and Lecture Method) were low as 18.46 and 17.51 respectively, but at post test, the mean scores of blended teaching group increased to 35.13 while that of lecture method was still minimal at 17.74, indicating a mean gain scores of 16.67 and 0.23 respectively. The standard deviation of the two groups at post test are 1.949 and 2.517 respectively, indicating that there is more homogeneity of the scores at post test in blended teaching group than the lecture group. With the increase in the mean score of the blended teaching group, it can be explained that blended teaching is effective in the improvement of students’ academic achievement in Civic Education.

Research Question 2: What are the achievement mean scores of male and female students taught Civic Education with BT method at post test?

Table 2: Mean scores of male and female students taught Civic Education with BT method at post test

<table>
<thead>
<tr>
<th>Academic Achievement</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blended teaching: Gender</td>
<td>n</td>
</tr>
<tr>
<td>Male</td>
<td>19</td>
</tr>
<tr>
<td>Female</td>
<td>20</td>
</tr>
</tbody>
</table>

The result presented in Table 2 above showed that male students that were taught Civic Education with blended teaching had post-test mean achievement score of 36.05 while the female students that were taught Civic Education with blended teaching had post-test mean achievement score of 34.25. The standard deviations of the two groups at post test are 1.471 and 1.970 respectively, indicating that there is homogeneity of the scores at post test in blended teaching group. This result indicated that teaching Civic Education to students using blended teaching strategy increased the achievement of male students more than the female students. This implies that blended teaching is more effective on the male students than the female students.

Hypotheses Testing

H0: There is no significant difference in the achievement mean scores of students taught Civic Education with BT method and those taught with lecture method at post test
Table 3: Results of ANCOVA on significant difference in the achievement mean scores of students

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>6181.427</td>
<td>2</td>
<td>3090.714</td>
<td>596.167</td>
<td>.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>466.822</td>
<td>1</td>
<td>466.822</td>
<td>90.045</td>
<td>.000</td>
</tr>
<tr>
<td>Pre-Test</td>
<td>.984</td>
<td>1</td>
<td>.984</td>
<td>.190</td>
<td>.664</td>
</tr>
<tr>
<td>Teaching Methods</td>
<td>5696.260</td>
<td>1</td>
<td>5696.260</td>
<td>1098.749</td>
<td>.000</td>
</tr>
<tr>
<td>Error</td>
<td>409.561</td>
<td>79</td>
<td>5.184</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>62075.000</td>
<td>82</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>6590.988</td>
<td>81</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a. R Squared = .938 (Adjusted R Squared = .936)

Table 3 shows that the F-calculated value is 1098.749 and its sig. value is .000. This significance value of .000 is less than 0.05 level of significance. This led to the rejection of the null hypothesis and deducing that; there is significant difference in the achievement mean scores of students taught Civic Education with BT method and those taught with lecture method at post test.

Ho: There is no significant difference in the achievement mean scores of male and female students taught Civic Education with BT method at post test.

Table 4: Results of ANCOVA on significant difference in the achievement mean scores of male and female students

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>6212.354</td>
<td>2</td>
<td>1553.089</td>
<td>315.841</td>
<td>.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>496.743</td>
<td>1</td>
<td>496.743</td>
<td>101.019</td>
<td>.000</td>
</tr>
<tr>
<td>Pre-Test</td>
<td>.213</td>
<td>1</td>
<td>.213</td>
<td>.043</td>
<td>.836</td>
</tr>
<tr>
<td>T/Methods</td>
<td>5721.300</td>
<td>0</td>
<td>5721.300</td>
<td>1163.50</td>
<td>.000</td>
</tr>
<tr>
<td>Gender</td>
<td>15.740</td>
<td>1</td>
<td>15.740</td>
<td>3.201</td>
<td>.078</td>
</tr>
<tr>
<td>T/Methods *</td>
<td>17.672</td>
<td>0</td>
<td>17.672</td>
<td>3.594</td>
<td>.062</td>
</tr>
<tr>
<td>Error</td>
<td>378.633</td>
<td>36</td>
<td>4.917</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>62075.000</td>
<td>39</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>6590.988</td>
<td>38</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a. R Squared = .943 (Adjusted R Squared = .940)

The table 4 further showed that the F-calculated (F-cal) value is 3.201 and the p-value of 0.078 is greater than 0.05 level of significance. This led to the acceptance of the null hypothesis indicating that there is no significant difference in the achievement mean scores of male and female students taught Civic Education with BL method at post test.
Discussion of Findings

The study revealed that blended teaching is effective in the improvement of students’ academic achievement in Civic Education, when tested, the difference in the mean scores was found to be significant. This shows that the students that were taught with blended teaching performed significantly better than those taught with lecture method. This implies that blended teaching is a good instructional method relative to lecture method, and that it can be used to improve students’ performance in Civic Education. In affirmation, Abidoye (2015) study revealed that blended teaching instructional approach was more effective in enhancing students’ achievement in geography than conventional teaching method. Similarly, Ezekoka (2015) findings indicated that blended teaching enables students to study anywhere and at their own pace; it facilitates independent learning; it helps to reduce the withdrawal rate of students; it enhances student learning outcomes. Also, Turki (2014) revealed that using blended teaching strategy to teach, has a positive impact in achievement skill and attitudes. The study showed high level of performance on achievement test as a whole after applying blended teaching strategy. The similarities in the findings could be attributed to the effectiveness power of the blended teaching method over lecture method.

It was also revealed in this study that blended teaching is more effective on the male students than the female students. The difference in the mean scores was found to be insignificant. This implies that blended teaching enhanced the performances of male students more than the female students. Blended teaching concretizes learning to male students more than the female students. But it was confirmed by the study inference that irrespective of gender, blended teaching is significantly effective. In line with this finding, Abidoye (2015) result also revealed that there was no significant difference between the academic achievement of male and female students. However, Ümit and Akbayin (2012) results revealed that the blended teaching model contributed more to the students’ biology achievement than traditional teaching methods did and that the students’ attitudes towards the Internet developed statistically significantly. Hence, the similarities recorded, could be attributed to similar nature of the area of the studies.

Conclusion

Based on the findings, the researcher concluded that; blended teaching method improves students’ academic achievement irrespective of the student’s gender.

Recommendations

The study also recommends that:
1. Since the use of blended teaching in teaching has been found to enhance achievement in Civic Education, its teachers should employ the approach more in the teaching of the subject especially for topics that are abstract.
2. Both male and female Civic Education students should also be encouraged to study Civic Education together as both are equally good in the subject.

References


