



Effects of class size on students' academic performance in junior secondary school social studies education, Rivers State

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Abstract

This study aimed at investigating the effect of class size on Junior Secondary School Students' academic performance in Social Studies. A pre-test post-test experimental design was adopted. The population of the study was 3601 students from 14 Junior Secondary Schools in Gokana Local Government Area. The sample size was 180 JSS 3 students selected through simple random sampling techniques. An instrument titled 'Social Studies Performance Test' (SOSPT) was used. The reliability of the instrument gave a Cronbach Alpha index of 0.87 which was considered reliable. Mean and standard deviation statistics were used to answer the research question while analysis of variance was used to test the hypothesis at 0.05 level of significance. The result showed that class size has significant effects on students' performance in social studies. The researchers recommended among others that students be admitted based on space and more social studies teachers be recruited.

Keywords: effects, class size, social studies, secondary school

Introduction

The issue of large class size is becoming so topical that one cannot easily contend with in Nigerian schools especially at the upper basic levels or junior secondary schools. In view of the above, both past and present studies seem to support the facts that the relationship between a small and large classroom has a perplexing academic effect in favour of that of the small classroom. The work of Ale (2010) ^[2] is in support of small class size when he opined that increased students' enrolment has not been associated with high performance but has led to a serious decline in the standard and level of students' achievement. Most teachers tend to view teaching in large classes rather negatively. They often associate large classes with disorderliness, lack of control, lack of learner's attentiveness, lack of teacher-learner interactions and therefore, lack in efficiency and effectiveness (Olajede, 2012) ^[8]. Perhaps, it was on this note that some educators as well as researchers were of the opinion that small class size allow instructors to provide effective instruction that enhanced better level of students' performance in the classroom.

The above situation became so worsened when the Federal Government in Nigeria launched the Universal Basic Education Scheme on September 30th 1999 and signed into law in 2004. This was done to provide free and compulsory education to every school-going child. By so doing, teachers were saddled with the responsibilities of teaching large or congested or uncondusive classes under the umbrella of poor and under staffing of schools. In most cases, students are packed and taught in untidy environments. Most classrooms have fewer desks for student to seat on and some even stand on their feet while receiving instruction and resources spread more thinly among the students' populace. This is centrally to what is stated in the Nigerian National Policy on Education. In Section 2, sub-section 23, the policy clearly spelled out the approved norms of class size at the

junior secondary school level to be a ratio of one teacher to thirty-five (1:35) students (NPC, 2004).

As noted by Egumu (2009) ^[4], large class size in practical terms increase teachers work load, create space problem, high level of indiscipline and inhibits teachers' routine operational practices, including difficulty in assessing class work and to reduces teacher-students interaction.

Social Studies was introduced as a compulsory subject at the basic level of education in Nigeria. This was consciously done to develop problem-solving skills, attitude and values as well as knowledge that enable the students socializes well into the society. To Mezieobi (2016) ^[6], the introduction of social studies in schools were to make social studies to have the ability to investigate, analyse, criticize and understand the society they live in. Mezieobi (2016) ^[6] also added that having "knowledge and understanding of their fundamental responsibilities (obligations) and fundamental right (privileges) to engage in public life" opted for the introduction of social studies.

Social studies, a subject that is made compulsory in schools, became an overriding concern of all the students to offer right from the lower to upper basic of education in Nigeria. Given the foregoing, social studies classes are expected to be a larger one and such may bring about a threatening environment that are capable of affecting the performances of the students. This, to a large extent informed the researchers to embark on this study.

Statement of the Problem

The introduction of social studies as a compulsory subject on the Nigerian school curriculum was seen as a welcome development especially at the upper basic level of education. This was to enable the students acquire valuable knowledge, skills, attitude and values for proper socialization in the society. Unfortunately, among a lot of researches conducted on students' poor performances

revealed various variables affecting them and that of class size ranked very high. This situation has created several challenges in ensuring quality education in social studies. Therefore, the problem of this study put in question form is “what is the effect of class size on the academic performance of junior secondary school students in social studies?”

Purpose of the Study

The main purpose of this study is to investigate the effect of class size of academic performances of students in social studies instruction.

Research Question

To what extent does large class size affect the academic performance of social studies students?

Research Hypothesis

Ho: There is no significant difference in the mean academic performance of student in small and large class size in social studies.

Methodology

The study adopted a pretest posttest control group experimental design. Three groups were used in the study. The population of the study comprised of all the 3601 junior secondary school students in Gokana Local Government Area of Rivers State. The sample size of the study consisted of 180 JSS 3 students selected through simple random sampling techniques. This is made up of 100 males and 80 female that were randomly assigned to group A, B and C. Group A was made up of 60 students which was assumed to be students in their normal class and group B and C consisted 40 and 80 students respectively, as experimental group.

The instrument used to elicit opinion from the respondents was a questionnaire titled “Social Studies Performance Test (SOSPT) developed by the researchers. The (SOSPT) was subjected to face and content validity by two experts. The reliability of the instrument was tested using 20 respondents who were not part of the sample, but equivalent in all respect using test-retest method. Cronbach’s Alpha reliability estimate was employed and a reliability coefficient of 0.87 was obtained which was considered adequate for the study.

The social studies class teachers were instructed on the treatment method through the rehearsal prepared lesson plan. The lesson plan focused on the topic for the prescribed weeks for the term as contained in the JSS scheme of work. This was done so as to modify the methods of instrument that would otherwise be different as the teachers differed in methodologies.

Results

The results of the analysis are presented in tables according to the research question and hypothesis that guided the study.

Research Question

To what extent does large class size affect the academic performance of social studies students?

Research Hypothesis

Table 1: Range, Mean and Standard Deviation of Pre-Test and Post-Test Scores of Social Studies Students

Groups	N	Pre-Test		SD	Post Test		SD
		Range	Mean		Range	Mean	
A	60	0-60	15.52	15.53	10-65	25.10	15.36
B	40	0-60	18.10	17.40	15-75	33.10	17.40
C	80	0-65	13.28	15.28	5-65	19	

Data from Table 1 above, revealed that the range of pre-test scores is uniform with the usual distribution as obtained in Social Studies scores, many scoring zero, although few scored slightly above average. This trend was observed with the mean and standard deviation of the post-test scores. The experimental group ‘B’, having the smallest class size was observed to have the highest post-test score of 75 and the highest group mean score of 33.1. The observed high standard deviation could be an indication of a high level of variation in the performances of students in the subject. This tends to indicate a change in behaviour as a result of the strategy adopted.

Table 2: Summary of Analysis of Variance for the Post-Test Scores of Groups A, B and C

Source of variation	Sum of squares	Df	Mean squares	S
Between group	44871	2	22435.5	
Within group	6025	177		*669.1
Total	50896			

*S = Significant at p < 0.05 (2.99) < 669.1

Table 2 shows the summary of the one-way analysis of variance of the post-test score of the three groups. This table shows that the variation in terms of performance scores between the groups is more than that of the post-test scores within groups. It indicates that the increase in observed post-test score is as a result of strategy (class size). The obtained F-ratio indicates that there is a significant difference among the three group mean, thus the hypothesis (Ho) was rejected.

Table 3: Post-hoc Multiple Comparison Test

Groups compared	F. Value
A and B	2.115%
A and C	3.725
B and C	5.033

NS = Not significant at p = 0.05

The post-hoc multiple comparison test was administered on the group mean to find the faction of statistical significance, using the Scheffe’s statistics. Results indicated that comparison between group (A and C) and (B and C) was statistically significant while group A and B were found not to be significant.

Discussion

The study investigated the effect of class size on students’ academic performance in social studies education. The finding of this study showed that significant difference exists between the mean performance scores of students in small and large class sizes.

The findings were in agreement with the work of Allen, Gregory, Mikami, Lum, Hamre & Pianta (2013) ^[3], Robinson (2000), Shapson (2001) ^[10], Ale (2010) ^[2], & Adeyemi (2008) ^[2].

In a smaller classroom, frequent and effective interactions between the teacher and student could enhance greater achievements in social studies instruction but large class size might be detrimental to student performance as a result of overcrowding, noise, distraction, pressure on facilities and instructional materials.

The post-test multiple comparison analysis on group A and C and group B and C was found to be significant while that of A and B were not statistically significant. The implication of this result is that 60 could be the limit for a normal class size but then, contrarily to the recommendation of 35 students to one teacher at the Junior Secondary Education Level, by the National Policy on Education (2004) ^[10]. However, this could be an open door for further findings so as to enhance quality instruction in social studies education.

Conclusion

This paper had established that large class size has significant effect on the performance of students in social studies. It is imperative therefore, that social studies students will not only be improved in academic performance, but also in their future careers if the entire society can look inwardly into the issue of large class size.

Recommendations

In the light of the findings of this study, the following recommendations have been put forward:

1. Government and policy makers should embark on the building of more classrooms that can accommodate the over teeming students' population among school children.
2. Social studies teachers should be encouraged to use innovative teaching methods or strategies.
3. More classrooms, learning facilities and instructional materials should be provided for schools by Government and School Management Boards.
4. Effective recruitment of more social studies teachers should be conducted and distributed based on the areas of need.
5. Students should be admitted to schools based on the recommendations put forward by the National Policy on Education 2004, Revised Edition.

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