

## Class Size as Correlate of Effective Teaching and Learning Process in Secondary Schools in Ekiti State, Nigeria

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### Abstract

*The issue of quality in education delivery is of great concern to stakeholders because it is a fact that no educational system can rise above the quality of its' teachers, hence the class size and effectiveness of teachers' performance and students learning capability is a collaborative action required in the secondary schools in Ekiti State and Nigeria in general. The study was designed to examine the implications of class size as correlate to ensure effectiveness of the teaching and learning process in ekiti state secondary schools. Relevant literature was reviewed, the study adopted a descriptive survey research design using researchers modified likert questionnaire titled Class size as Correlate of Effective Teaching and Learning Process (CSCETLP) to collect relevant data. The instrument was validated to ensure its' reliability, the coefficient of reliability found was 0.87. Three research questions were raised to guide the study. The findings revealed that Class size has effect on teachers' attitude to teaching among secondary schools in Ekiti State, also that class size has effect on teacher-student contact during teaching and learning activities among secondary schools in Ekiti State and that class size has effect on academic performance of secondary school students in Ekiti State. It was recommended that School management and authorities should ensure that classes are set at a normal size so as to improve teachers' attitude to teaching, secondary school classes should be put at an approved and accommodated number of students, so as to enhance improved teacher students contact and that management of secondary schools should also ensure that secondary school classes are not over-populated so as to improve students' academic performance.*

**Keywords:** Class-size, Secondary school, Teaching, Learning, Academic performance, Rural / Urban Schools.

### Introduction

Class-size is an educational tool that can be used to describe the average number of students per class in a school. Hoffman (2008) described it as the number of students per teacher in a class. In the opinion of (Kedney, 2009) class size is seen as a tool that can be used to measure the performance of the education system. In relation to size, (Stepaniuk, 2006) reported that the rational utilization of classroom space depends upon class-size. This in turn would depend upon the area of the classroom. He argued that there are approved norms of class-size, 40 pupils per class for grades 1 to 8 and 35 pupils per class for the senior classes; while the standard allocation of class space per pupil is 1:25 square meters.

In this regard, (Dean, 2004) compared class-size in some countries and found that Turkey, Norway and Netherlands had class-sizes of 20 or more; the UK, USA, Japan, Canada and Ireland had class-sizes of between 15 and 20 while France, Sweden, Denmark, Austria, Italy, Luxembourg and Belgium had class-sizes of below 15. In Nigeria, the numerical strength of class size by the 2014 edition specified 20 in pre-primary, 30 in primary and

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maximum of 40 in secondary schools. (Okoro, 2005) reported that the class-size in secondary schools’ ranges between 35 or 40 students. (Toth and Montagna, 2002) reported that the increase in enrollment in many schools has become major concerns of students that could definitely lead to an increase in class size. (Commeyras,2003) also argued that effective teaching seems impracticable for teacher educators having large class sizes of 50, 75, 100 or more.

Large class size and over populated schools have been found to affect the quality of teaching and instruction delivery. Overcrowded classrooms have increased the possibilities for mass failure and make students to lose interest in school. This is because large class size may not allow individual student to get attention from teachers which invariably lead to low reading scores, frustration and poor academic performance (Owoeye, 2000). The relationship between class size and academic performance has been a perplexing one for educators. Studies have found that the physical environment, class overcrowding, and teaching methods are all variables that affect students’ achievement (Molnar,Zahorik, Palmer, Halbach and Ehrle, 1999). Other factors that affect student achievement are school population and class size (Gentry, 2000; and Swift, 2000).

Large class size on the other hand is often impersonal, having broader curricula with teachers being given wider support, while students may suffer discipline problems as teachers cannot get to know their students very easily. They find it easy to stream students according to ability while commitment to work may stand a test of time. With the need to improve teaching and learning in secondary schools in Ekiti State, the study therefore seeks to evaluate the effect class size has on effective teaching and learning among secondary schools in Ekiti State.

**Statement of the Problem**

The issue of poor teaching and learning of students in Ekiti State has been of much concern to all stakeholders. Since the academic success of students depends largely on the school environment, it is imperative to examine the impact variables of class size and school population on the academic performance of students in secondary schools in Ekiti State.

Students no longer have confidence in writing exams on their own without examination malpractice (Mgbekem, 2004). This is consequent upon the fact that large class sizes do not encourage conducive teaching and learning environment. The need to improve teaching and learning in secondary schools in Ekiti State through ascertaining the effect of class size on teaching and learning hence the need for this study.

**Purpose of the Study**

The main purpose of this study is to determine the effect of class size as a correlate of effective teaching and learning process in secondary schools in Ekiti State this is guided by:

1. To determine the effect of class size on teachers’ attitude to teaching in Ekiti secondary schools
2. To determine the effect of class size on teacher-student contact in Ekiti secondary schools.
3. To determine the effect of class size on student performance in Ekiti secondary schools.

### Research Questions

1. Does class size have any effect on teachers’ attitude to teaching in Ekiti secondary schools?
2. Does class size have any effect on teacher-student contact in Ekiti secondary schools?
3. Does class size have any effect on student academic performance in Ekiti secondary schools?

### Significance of the Study

The findings of this study would be of immense benefit to students, teachers, principals, policy makers/government and researchers.

The research work should be of immense benefit to students by helping student understand how class size management can help improve their learning activities in schools.

The research work would help teachers to understand effect of class size on teaching among secondary schools in Ekiti so as to enhance measures to improve teaching and learning activities in schools.

### Review of Related Literature

The most crucial factor that affects the teachers' attitudes as a result their actions is the context where teaching takes place. Teaching in large classes as a contextual issue is the issue that nowadays many school teachers complain about. Size of the class or the number of students accommodated in, affects the way teachers cope with it. The issues raised by teaching in large classes are rarely addressed and teachers who have to cope with classes that contain 50 or more learners are often ill prepared to deal with the situation in which they find themselves in schools (Hayes, 1997). Most teachers tend to view teaching in large classes rather negatively. They often associate large classes with disorderliness, lack of control, lack of students' attentiveness, lack of teacher –student interactions, and lack in efficiency and effectiveness (Xu, 2001). There are three problems associated with teaching in large classes as identified by Xu, (2001) to include; Physical, Psychological, and Technical.

Among the variables pertinent to classroom setting, classroom size in terms of the number of the learners accommodated in it seems to create different atmosphere. Most teachers are not physically prepared for a large class size most especially at the training schools where teachers are taught to plan teaching in classroom with class activities. The psychology morale of teachers is affected when teachers are given class that is more than the average size class. Technical skills teachers adopted in classroom will also be affected when teachers is having more troubled students in an overpopulated classroom (Masoud, Masoud, & Sohrab, 2013).

### Effect of class size on teacher-student contact

The effect class size has on classroom process is also related to individualization of teaching (Betts & Shkolnik, 1999; Ehrenberg et al., 2001; Molnar et al., 1999). Results from the CSPAR systematic observation studies (Blatchford, 2003b; Blatchford et al., 2005) showed that although there was a heavy reliance on whole class teaching and individual work in schools, students in small classes were more likely to experience one-to-one teaching and were more often the focus of a teacher’s attention. Anderson (2000) argued that small classes encourage a more personalized and appropriate curriculum for individual learners.

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Studies in the USA (Finn & Achilles, 1999; Molnar et al., 1999) and the UK (Blatchford et al., 2003) also suggest that Class Size Ratio (CSR) tends to benefit lower attaining and disadvantaged pupils, and it might be expected that more individual support in smaller classes will be targeted at the lowest attaining learners. However, it might be expected that as learners progress through primary into secondary school, the more structured and centralized curriculum, and the preparation for public examinations, will reduce any effect of smaller classes on individualized attention.

**Effect of class size on student academic performance**

The effects of class size on students' performance has been researched in various fields and the results of this research show mixed effects of class size on students' performance. McKeachie (2000) has summarized the theory of the effects of class size on learning, focusing on how instructors and students behave differently in large and small classes. It is noted that discussion time becomes fragmented among students in large classes and instructors may rely on passive lecturing, assign less written homework or fewer problem sets, and may not require written papers. In addition, instructors may find it difficult to know each student personally and tailor pedagogy to individual student needs in a large class. McKeachie's (2000) survey of the education literature, also suggests that learning is not affected much by class size largely because instructors do not adjust their teaching methods to class size.

Hancock (2006) indicated that strong conventional wisdom indicates that class size affects students' learning. Papo (1999) found that the size of the class taught does not have an impact on teaching effectiveness and the selection of teaching strategies by instructors. He concluded that teaching in large classes is not seen or perceived as a problem by students since the teaching and learning success may depend, in part, on what is taught. What the optimal size of class is for a particular course and teaching task remains a problem for continued research.

Okpala, et al. (2000) used the concept of the 'education production function' to analyze the effects of students' study habits and academic effort on students' performance in a Principles of Macroeconomics course. It was found that academic effort and study habits were significant in explaining academic achievement in four different sections of the course taught by the same instructor.

**Theoretical Framework of class size on effective teaching and learning process**

This study is anchored on the Gestalt (field) theory by Kurt Lewin, a Gestalt psychologist, in the 1940s.

**Effect of Gestalt (Field) Theory on class size**

The field theory is a psychological theory propounded by Kurt Lewin in the 1940s. The theory examines patterns of interaction between the individual and the total field, or environment. The concept first made its appearance in psychology with roots to the holistic perspective of Gestalt theories.

Gestalt learning principles includes the following;

1. Teachers should try to develop into children an integrated approach to learning and the solution of problems, learning will be more meaningful if children can establish a relationship among different aspects of knowledge.

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2. Children should be encouraged in order to facilitate their interaction with the environment.
3. The learner should be encouraged to set their own goals of learning.
4. Divergent as well as convergent thinking should be present among children
5. The learner should be presented with the figure ground relations so that we can see the inter-relatedness among phenomenon.

Educational relevance of Gestalt Theory indicates the need for considering the whole but also the detail with the environment. This implies that in understanding the academic performance of a student, the environment which stimulates certain study habit, study skills, use of instructional material, teaching method and teacher attitude should be considered to know the perception and understanding of a lesson by students. Hence, appropriate class environment, teaching methods, good questioning techniques, practical teaching and relevant instructional materials are necessary for development of study habits and improved academic performance (Ugboaja, 2004).

Secondly, the role of teachers to assist the student is emphasized. A teacher collects academic data from students such as; pupil scores on academic achievement, study habits, special academic talents, learning difficulties, class attendance and educational theory may be necessary for insight or perceptual process of learning through improved teacher student contact.

Another relevance of Gestalt theory is that knowledge should be graded hierarchically to enable children at least obtain some glimpse of the problem, before they mature to find out the whole solution. Learners should be introduced from simple to complex problems to facilitate learning (Iyang-Abia, 2002). Gestalt theory takes into account factors such as motivation, maturation level of student experience, background of the learners, the learners' intelligence and interest. The above factors explain the degree to which class size can influence teaching and learning among secondary schools.

### **Implication of Empirical Studies on class size**

Studies reviewed include study by Adeyemi (2008) who discovered in his findings on the influence of class size on the quality of output in secondary schools revealed that schools having an average class- size of 35 and below obtained better results in the secondary school certificate examination (SSCE) than schools having more than 35 students per class.

Fabunmi, Brai-Abu, and Adeniji (2007) study on class factors as determinants of secondary school student's academic performance in Oyo State, Nigeria adopted the use of ex-post factor under a descriptive survey research design, 200 out of the 336 secondary schools in the state were randomly selected for the study. The multiple regression analysis and one-way analysis of variance were used to analyze the data. The two research hypothesis which guided the study was tested at 0.05 level of significance. Findings revealed that the three class factors (Class size, student classroom space and class utilization rate), when taken together, determined significantly secondary school students' academic performance in Oyo state between 1997 and 2002. These factors, when taken separately, also determined significantly secondary school student's academic performance in the state.

Ngoboka and Schultz (2002) study investigates the possible effects of class size on student academic performance in a Principles of Microeconomics course taught at UW-River Falls during Spring Semester 2001. The study utilizes data from a student survey conducted at the beginning of the semester, along with University records, instructors' grades, and

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attendance records to estimate a multiple regression model. The estimated model includes a measure of student academic performance (total exam points) as the dependent variable, with selected independent variables that are important predictors of student learning, plus a measure of class size. Statistical analyses were carried out to test the hypothesis that student academic performance is higher in the normal (‘small’) class size, controlling for the other predictors of student learning. Results from the estimated model do not show any negative and significant effect of class size (SECTION) on student academic performance (TEP). Thus, there is no evidence to support the hypothesis that academic performance is higher for students enrolled in the 'normal' section rather than the 'large' section.

Yara (2010) in his study on class size and academic achievement of student found out that the performance of students in large classes was very low (23%) compared to those students in smaller classes (64%).

Oguntoye (2011) in his own study found that class-size had negative coefficient with student’s academic performance in examination. Earthman (2002) revealed that comfortable classroom temperature and smaller classes enhance teachers’ effectiveness and provide opportunities for students to receive individual attention, ask more questions, participate fully in discussion, reduce discipline problems and perform better than students in schools with larger classes. Fafunwa (2010) postulated that there is a gap in the quality of students in crowded classrooms, using inadequate and absolute equipment, disillusioned teachers. These combined deficiencies perhaps affected the student’s academic performance. Adeyela (2000) found in her study that large class size is not conducive for serious academic work. Similarly, Seweje & Jegede (2005) pointed out that an alarming class- size of 100 or more students in the secondary schools leave the teacher overworked and therefore unable to exercise patience and positive attitude. They are also reluctant to offer extra time to build and help the intellectually ill students. Ojoawo (2008) in one of his major findings revealed that the class size was found to be negatively related to school academic performance.

Coleman (2002) pointed out that for enthusiastic teachers, “If classes are very large, it is important that as far as possible, the learners should be constantly busy and the tasks should function continuously without repeated intervention from the teacher”. Broozer and Rouse (2001) considered finance, class size, teacher quality, length of school year and technology as factors that can improve student’s academic outcomes. They suggested that money is crucial when it comes to public schools’ matters and that small class size yield better achievement.

In many cases, the quality of the learning environment was strongly correlated with pupils’ achievement in mathematics (Carron & Chau, 2006). Two aspects of school climate which are commitment to school and positive feedback from teachers have been shown to affect students’ learning gain in Mathematics (Hoge, Asimeng, Boahene, 2000).

Hancock (2006) in a study involving nine sections of a college statistics course (6 'normal' sections and 3 'mega sections' averaging 118 students) found no evidence that grade distribution was affected by class size, supporting the hypothesis that achievement was independent of class size.

Hill (1998) investigated the effect of large sections (120 students) on student performance in an accounting course and found that the size of the class did not have a significant effect on student performance. Contrary to expectations, the large class outperformed the small classes when controlling for attendance and university GPA. Hill

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concluded that large class size may be more of an expectations issue rather than a performance issue, since students reported that they felt the class size was too large.

Literatures reviewed for the study under three major headings which include the conceptual framework, theoretical framework and empirical studies.

The conceptual framework includes the meaning of terms as used in the study. Class size is seen an administrative measure typically defined as the number of students for whom a teacher is primarily responsible during a school year. Teaching is seen as the activity carried out by teachers towards passing knowledge to students. Learning is seen from the study as the means of students acquiring knowledge from class activities. Effect of class size on teachers' attitude also shows that teachers complain about large class size. Effect of class size on teacher-student contact also shows that class size has effect on individualization of teaching. Class size effects on students' performance also show mixed effects of class size on students' performance.

Theory guiding the study is the Gestalt (field) theory by Kurt Lewin, a Gestalt psychologist, in the 1940s. The theory examines patterns of interaction between the individual and the total field, or environment.

Educational relevance of Gestate Theory indicates the need for considering the whole (class size) but also the detail with the environment (teaching and learning activities).

Studies reviewed include study by Adeyemi (2008) who focused on the influence of class size on the quality of output in secondary schools. Fabunmi, Brai-Abu, and Adeniji (2007) study was also conducted on class factors as determinants of secondary school student's academic performance in Oyo State, Nigeria. Oguntoye (2011), Yara (2010), Ngoboka and Schultz (2002) study investigates the possible effects of class size on student academic performance. Coleman (2002) focused on class size effect on teacher student contacts. From all studies reviewed it is clear that no known study to the researcher has been carried out on the effect of class size on teaching and learning as it pertains to secondary schools in Ekiti State, the study therefore intends to fill this gap with the findings of this study.

### **Methodology**

The research adopted the descriptive survey design for this study. This design was adopted because it involves collection of information from a sample selected as a representative of a particular group, population of subject. The selected samples are usually large while the variables are limited (Akuezilo & Agu, 2003).

According to Ali (2006), a Descriptive survey is a study which seeks or uses the sample data of an investigation to document, describe and explain what is in existence or non-existent on the present status of a phenomenon being investigated. This design is suitable for this study because it was used to investigate the effect of class size on teaching and learning among secondary schools in Ekiti State.

### **Area of the Study**

This study was carried out among all the public secondary schools in Ekiti State. The state is known as the educationally advantaged states with 16 local government areas which are Ado-Ekiti, Ikere, Oye, Aiyekire (Gbonyin), Efon, Ekiti East, Ekiti South-West, Ekiti West, Emure, Ido-Osi, Ijero, Ikole, Ilejemeje, Irepodun/Ifelodun, Ise/Orun, and Moba.

### **Population of the Study**

The population comprised all the teachers of the 170 secondary schools in Ekiti State, Nigeria. This population was made up of teachers in 97 rural and 73 urban schools.

### **Sample and Sampling Techniques**

The sample for the study comprised 180 teachers, randomly selected from twelve selected public secondary schools using the multi-stage sampling technique. The first stage involved the random selection of two local governments from the three senatorial zone in Ekiti State while the second stage involved the selection of two secondary school from each selected Local Government Area using the purposive sampling technique. The final stage involved the selection of 15 teachers each from the selected schools, using the stratified randomly sampling technique.

### **Instrument for Data Collection**

The instrument for data collection for this study was a close ended structured questionnaire. The instrument was titled “Class Size as Correlate of Effective Teaching and Learning Process (CSCETLP)”. The instrument contained an 18-item divided in into three sections, each eliciting data on research questions guiding the study. The questionnaire is structured in four-point scale of Strongly Agree (SA) 4 point, Agree (A) 3 point, Disagree (D) 2 point and Strongly Disagree (SD) 1 point.

### **Validation of Instrument**

The instruments for data collection pass through both face and content validity by two lecturers in Faculty of Education, Ekiti State University, Ado-Ekiti. Lecturers that validate the questionnaire include; one lecturer from Educational Management and Policy, and one Lecturer of Measurement and Evaluation from Ekiti State University, Ado-Ekiti.

### **Reliability of the Instrument**

To establish the reliability of the instrument, the researcher adopted the use of test re-test technique by administering the questionnaire on five (5) teachers in a secondary school in Ondo State which was not part of the State under study. The instrument was re-arranged and re-administered on the same teachers after 14 days. The reliability of the instrument was established using Pearson Moment Correlation Coefficient which gave a value of 0.87 which is high enough to for the instrument validity.

### **Procedure for Data Collection**

The data for the study was collected from the sampled school by the respondents with the aid of two (2) trained research assistants on how the respondents is selected and time to retrieve the administered questionnaire from the respondents. A total number of 180 questionnaires were administered to the respondents which were administered on instant basis. Out of the 180 questionnaire administered only 151 were recovered completely and properly filled. These were used for analysis of the study.

### **Data analysis technique**

Data collected was analyzed with the aid of mean analysis. This tool is adopted so as to have average opinion of all the respondents in forming a basis for the study.

**Decision Rule**

The mean was accepted at an average point of the weight of the responses as shown below:  
SA (4), A (3), D (2), SD (1)

$$\text{Acceptance region} = \frac{4 + 3 + 2 + 1}{4} = \frac{10}{4} = 2.50$$

The mean responses approximate to 2.50 and above were accepted while, mean below 2.50 was rejected.

**Analysis of Data**

**Research Question 1:** Does class size have any effect on teachers’ attitude to teaching in Ekiti secondary schools?

**Table 1:** Mean Analysis of class size effect on teachers’ attitude to teaching in secondary schools in Ekiti State.

S/N	Items	S	A	A	D	S	D	Mean	Decision
1	Normal class size encourage teachers to give quality teaching	5	0	6	8	2	5	8 3 . 0 6	Accepted
2	Normal class size encourage teacher to give class works	9	0	5	6	3	2	3 . 5 5	Accepted
3	Normal class size encourage teacher to give assignments	3	9	6	8	2	5	1 9 2 . 8 4	Accepted
4	Normal class reduces teachers distractions while teaching	7	1	5	6	1	1	1 3 3 . 2 3	Accepted
5	Normal class size encourage teachers to class discussion	4	9	6	8	2	6	8 3 . 0 5	Accepted
	T o t a l							15.73	
	A v e r a g e M e a n							3 . 1 5	Accepted

Findings on table 1 above shows items 1 – 5 with mean value of 3.06, 3.55, 2.84, 3.23, and 3.05 all fall with the acceptance region which indicated the effect of class size on teachers’ attitude. From the average mean point of 3.15, it can be concluded that class size has effect on teachers’ attitude.

**Research Question 2:** Does class size have any effect on teacher-student contact in Ekiti secondary schools?

**Table 2:** Mean Analysis of class size effect on teacher-student contact in secondary schools in Ekiti State.

S/N	Items	S	A	A	D	S	D	Mean	Decision
6	Normal class size encourage one-on-one time with each student	7	4	5	9	1	5	3 3 . 3 5	Accepted
7	Normal class size encourage teachers to give different instructions in carrying out task	5	7	5	8	1	8	1 8 3 . 0 2	Accepted
8	Normal class size give teachers more time to meet individual students needs	3	9	6	8	2	7	1 7 2 . 8 5	Accepted
9	Normal class size enhance teachers to better monitor student class behavior	4	1	5	1	2	1	3 8 2 . 6 3	Accepted
10	Normal class size reduces teacher student conflict	8	5	6	4	1	1	3 . 5 4	Accepted
11	Normal class size encourage stronger relationship of teachers with students	5	6	6	1	1	7	1 7 3 . 0 3	Accepted
	T o t a l							18.42	
	A v e r a g e m e a n							3 . 0 7	Accepted

Findings on table 2 shows that items 6 – 11 with mean value of 3.35, 3.02, 2.85, 2.63, 3.54, and 3.03 all fall within the acceptance region. Also considering the average mean score of the

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items which shows a value of 3.07 also within the acceptance region, it can thus be concluded that class size has effect on teacher-student contact among secondary schools in Ekiti State.

**Research Question 3:** Does class size have any effect on student academic performance in Ekiti secondary schools?

**Table 3:** Mean Analysis of class size effect on student academic performance in secondary schools in Ekiti State.

S / N	Item	S	A	A	D	S	D	Mean	Decision
1 2	Large class size does not allow all students to participate in class lesson activities.	6	9	55	15	1	2	3 . 2 0	Accepted
1 3	Quiet students often get neglected in large class size	5	6	59	16	2	0	3 . 0 0	Accepted
1 4	Large class size encourages only brilliant students to answering questions in class.	1	0	42	2	3		3 . 6 4	Accepted
1 5	Teachers' cannot set individual questions for large class size during teaching activities	8	1	60	4	6		3 . 4 3	Accepted
1 6	Teachers' movement is restricted to the front of the class in large class size because students' lockers taking much space in the classroom	5	7	54	16	2	4	2 . 9 5	Accepted
1 7	Large size encourage student to cheat during test and examinations	7	5	64	10	2		3 . 4 0	Accepted
1 8	Students taught in large class size perform poorly in external examinations	7	6	63	10	2		3 . 4 1	Accepted
	<b>T o t a l</b>							<b>24.03</b>	
	<b>A v e r a g e m e a n</b>							<b>3 . 4 3</b>	<b>Accepted</b>

Findings on table 3 shows a mean value for items 12 – 18 as 3.20, 3.00, 3.64, 3.43, 2.95, 3.40, 3.41 all fall within the acceptance region. The average mean value of 3.43 also helps to ascertain that class size has effect on academic performance of secondary school students in Ekiti State.

**Summary of Findings**

1. Class size has effect on teachers’ attitude to teaching among secondary schools in Ekiti State.
2. Finding also shows that class size has effect on teacher-student contact during teaching and learning activities among secondary schools in Ekiti State.
3. Finally, finding shows that class size has effect on academic performance of secondary school students in Ekiti State.

**Discussion on Findings**

Findings from the study which shows that class size has effect on teachers’ attitude to teaching among secondary schools in Ekiti State is as a result of normal class size encouragement of teachers to give quality teaching, give class works, give assignments, reduction of teachers’ distractions while teaching and encouragement of teachers to class discussion. This finding is consistent with the discovery of Masoud, et al., (2013) who noted that psychology morale of teachers is affected when teachers are given class that is more than the average size class.

Class size effect on teacher students contact among secondary schools in Ekiti State is also as a result of teachers’ perception of normal class size encouragement of one-on-one time with each student, give different instructions in carrying out task, give teachers more time to meet individual students’ needs, enhance teachers to better monitor student class

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behavior, reduction of teacher student conflict, and encouragement of stronger relationship of teachers with students. This finding also supports Blatchford, (2003b); Blatchford et al., (2005) finding that showed that students in small classes were more likely to experience one-to-one teaching and were more often the focus of a teacher’s attention. Anderson (2000) in the opinion also supports the finding from the position that small classes encourage a more personalized and appropriate curriculum for individual learners.

Final findings also show that class size affects student class lesson activities, quiet students often get neglected, encouragement of only brilliant students to answering questions in class, limiting teachers from setting individual questions for large class size during teaching activities, restriction of teachers' movement to the front of the class in large class size, student to cheating during test and examinations in large classes, as poor performance of students taught in large class size. This finding varies from the discovery of Ngoboka and Schultz (2002) who found no evidence to support class size effect on student academic performance. Findings from study of Yara (2010) in his study on class size and academic achievement of student found out that the performance of students in large classes was very low (23%) compared to those students in smaller classes (64%).

### **Conclusions and Recommendations**

From the discovery of the study, it is therefore concluded that class size has effect on teachers’ attitude to teaching among secondary schools in Ekiti State, as well as teacher-student contact during teaching and learning activities, and academic performance of secondary school students in secondary schools in Ekiti State.

The implication of the findings is that to improve teaching and learning among secondary schools in Ekiti States, there is need to ensure that class sizes are set its’ an average and standard limit that will encourage effective teaching and learning among secondary schools in Ekiti State.

From the findings and conclusions drawn from the study, the researcher therefore recommends that;

1. School management and authorities should ensure that classes are set at a normal size so as to improve teachers’ attitude to teaching.
2. Secondary school classes should be put at an approved and accommodated number of students, so as to enhance improved teacher students contact.
3. Management of secondary schools should also ensure that secondary school classes are not over-populated so as to improve student academic performance.

### **References**

- Adeyela, J. (2000). *Problems of teaching science in large classes at the junior secondary school level*. Implications for learning outcomes. Unpublished M.Ed Thesis University of Ibadan, Ibadan.
- Aluko, S. (2002). Nigeria: The Way Forward Lecture Obafemi Awolowo. *Foundation Dialogue*, 73-74.
- Adeyemi, T. O. (2008). The influence of class size on the quality of output in secondary schools in Ekiti State Nigeria. *American-Eurasian Journal of Scientific Research*, 3 (1), 7-14

---

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- Akuezilo, E. O. & Agu, N. (2003). *Research and statistics in education and social sciences: Methods and application*. Awka: Nuel Centi Publication and Academic Press
- Anderson, L. W. (2000). Why should Reduce Class Size lead to increased student achievement? In M. C. Wang, & J. D. Finn (Eds.), *How small classes help teachers do their best* (pp. 3e24) Philadelphia: Temple University Center for Research in Human Development.
- Betts, J. R., & Shkolnik, J. L. (1999). The behavioral effects of variations in class size: the case of math teachers. *Educational Evaluation and Policy Analysis*, 21(2), 193-213.
- Blatchford, P. (2003b). A systematic observational study of teachers' and pupils' behaviour in large and small classes. *Learning and Instruction*, 13(6), 569-595.
- Blatchford, P., Bassett, P., & Brown, P. (2005). Teachers' and pupils' behaviour in large and small classes: a systematic observation study of pupils aged 10/11 years. *Journal of Educational Psychology*, 97(3), 454- 467.
- Blatchford, P., Bassett, P., Goldstein, H., & Martin, C. (2003). Are class size differences related to pupils' educational progress and classroom processes? Finding from the Institute of Education Class Size Study of children aged 5-7 Years. *British Educational Research Journal*, 29 (5), 709-730.
- Bryk, A.S. & Dirscoll, M.E. (2008). *The high schools as community: Contextual influences and consequences for students and teachers*. Madison, W.I, National Centre on Effective Secondary Schools.
- Coleman, J. S. (2002). Equality of educational opportunities study–EEOS. Retrieved from [www.icpsr.umich.edu/icpsrweb/ICPSR/studies/06389](http://www.icpsr.umich.edu/icpsrweb/ICPSR/studies/06389)
- Commeyras, M., (2003). *Promoting a culture in reading*. The Comet Thursday, February 13, 32.
- Dean, C., (2004). *Large classes on the rise*. The Times Educational Supplement No 4079. September 2, 4.
- Ehrenberg, R. G., Brewer, D. J., Gamoran, A., & Willms, J. D. (2001). Class size and student achievement. *Psychological Science in the Public Interest*, 2(1), 1-30.
- Ekiti State Ministry of Education, (2015). *Secondary schools' statistics, Ado- Ekiti*: Planning, Research and Statistics Department, 2-4.
- Fabunmi, M., Brai-Abu, P., & Adeniji, I. A. (2007). Class Factors as Determinants of Secondary School Student's Academic Performance in Oyo State, Nigeria. *Journal of Social Sciences*, 14(3), 243-247.
- Fafunwa A. B. (2010). *Fafunwa's last interview: Remember me as somebody who promoted use of mother tongue in schools*. The Punch p 3
- Federal Government of Nigeria, (1998). *National policy on education*. Lagos, Federal Ministry of Education, 7, 16, 49.
- Finn, J. D., & Achilles, C. M. (1999). Tennessee class size study: Findings, implications, misconceptions. *Educational Evaluation and Policy Analysis*, 21(2), 97-107.
- Hancock, T. M. (2006). Effects of Class Size on College Student Achievement. *College Student Journal (Dec.)* 30(4), 479-482.
- Hayes, D. (1997). Helping teachers to cope with large classes. *ELT Journal*, 51(2).
- Hill, M. C. (1998). Class size and student performance in introductory accounting course: Further evidence. *Issues in Accounting Education*, 13(1), 47-65.
-

---

**"Class Size as Correlate of Effective Teaching and Learning Process in Secondary Schools in Ekiti State, Nigeria"**

---

- Hoffman, G. L., (2008). *Pupil-teacher ratios and academic performance: An experimental analysis*. Unpublished Ph.D. Thesis, University of Kansas USA. Dissertation Abstracts on CD Rom. Order No. AAC 8102015
- Kedney, R. J., (2009). *Performance measurement in non-advanced further education: The use of statistics*. Unpublished Ph.D. Thesis, University of Lancaster UK. British Dissertation Abstracts. 40-5155.
- Masoud, A., Masoud, H., & Sohrab, D. (2013). Relationship between EFL teachers' attitudes, teaching techniques and classroom (large and small). *Social and Behavioral Sciences* 93, 134 – 137
- McKeachie, W. J. (2000). Research on college teaching: The historical background. *Journal of Educational Psychology*, 82(2), (June), 189-200.
- Molnar, A., Smith, P., Zahorik, J., Palmer, A., Halbach, A., & Ehrle, K. (1999). Evaluating the SAGE program: a pilot program in targeted pupil-teacher reduction in Wisconsin. *Educational Evaluation and Policy Analysis*, 21(2), 165-177.
- Muraina, M. B. & Muraina, K. O. (2014). Class Size and School Climate as Correlates of Secondary School Students' Scholastic Achievement in Itesiwaju Local Government Area of Oyo State, Nigeria. *Global Journal of Human-Social Science: G Linguistics & Education*, 14 (3), 14-22.
- NCTE Guideline (2004). Statement on class size and teacher workload: College. Retrieved from <http://www.ncte.org/about/over/postions/category/class/107626.htm>
- NCTE, (1990). Students' rights should dictate class size. *The English Journal*, 88(5), 18 – 20.
- Ojoawo, A. O. (2008). Effects of differential distribution of resources on secondary school performance in WASC Examination in Oyo State Secondary Schools (1984-1987). Unpublished Ph.D. Thesis, Ibadan: University of Ibadan.
- Okoro, D. C. U., (2005). *Data need for educational planning*. Paper presented at the meeting of Educational Planners/Statisticians from Federal/ State Ministries of Education held at the Federal Ministry of Education, Lagos Nigeria. 27-28 November, pp: 14-25.
- Okpala, A. O; Okpala, C. O. & Ellis, R. (2000). Academic effort and study habits among students in principles of macroeconomics course. *Journal of Education for Business (Mar/April)*, 75(4), 219-225.
- Osim, R. O. (2009). *School quality, principals' administrative characteristics and secondary school teachers' task performance in Cross River State, Nigeria*. Unpublished Ph.D thesis, Faculty of Education, University of Calabar.
- Osim, R. O. (2009). School quality, principals' administrative characteristics and secondary school teachers' task performance in Cross River State, Nigeria. Unpublished Ph.D thesis, Faculty of Education, University of Calabar.
- Osim, R. O. (2011). Teacher quality: Its implication for task performance among secondary school teachers in cross river state Nigeria. *International Journal of Educational Administration, Planning and Resources*, 4 (2), 30-37.
- Owoeye, J. S. (2000). *A study of the relationship between class size and educational quality in Ondo State*. Unpublished M.Ed Thesis, University of Lagos. Oxford Review of Education. 34.1 (2007): 89-109
- Papo, W. D. (1999). Large class size teaching: Is it a problem to students? *College Student Journal*, (Sept.) 33(3), 354-358.
- Seweje, R. O., & Jegede, S. A. (2005). *Science education and science teaching method*. Lagos: Atlantic Associated Publishers.
-

---

**“Class Size as Correlate of Effective Teaching and Learning Process in Secondary Schools in Ekiti State, Nigeria”**

---

- Smith, V. (2002). The purposes of general education and implications for pedagogy. In M. Moseley (Ed.), *Proceedings from the Asheville Institute on General Education* (p. 56-61). (A program of the Association of American Colleges and The University of North Carolina-Asheville) Washington, D.C.: Association of American Colleges.
- Stepaniuk, V. I., (2006). *The use of classroom space in urban schools; the case of Ukraine” The Economics of Education in the USSR* (ed) and Translated by Harold J Noah, New York: Frederick A Praeger Publishers, 205.
- Toth, S. L. & Montagna, G. L. (2002). Class size and achievement in higher education: a summary of current research. *College Student Journal* June [http://www.findarticles.com/p/articles/mi\\_.OFCR](http://www.findarticles.com/p/articles/mi_.OFCR)
- Xu, Z. (2001). Problems and strategies of teaching English in large classes in the Peoples’ Republic of China. School of Languages and Intercultural Education, Curtin University of Technology and Applied Linguistics, Beijing University of Aeronautics and Astronauts.
- Yara, P.O. (2010). Class size and students’ mathematics achievement of senior secondary schools in Southwestern Nigeria. *The Social Sciences Journal (TSS)*, 5(2), 108 – 112.