

## EFFECTS OF OVERCROWDED CLASSROOMS ON THE ACADEMIC PERFORMANCE OF STUDENTS IN JUNIOR SECONDARY SCHOOLS: YENAGOA LGA IN BAYELSA STATE AS A CASE STUDY

<sup>1</sup>Ebi-bulami B. NEMINE, PhD

*bridget.ebi1@gmail.com*

+2348037415255

&

<sup>2</sup>Joyce KILLETE

+2348135974063

<sup>1&2</sup> Faculty of Education, Niger Delta University  
Wilberforce, Island, Bayelsa State.

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### Abstract

*This research on the effects of overcrowded classrooms on the academic performance of students in Junior Secondary Schools in Yenagoa Local Government Area in Bayelsa State, Nigeria. The descriptive survey design was adopted for the study based on four research questions. The population of the study comprised of all students and teachers of selected junior secondary schools located in Yenagoa Local Government Area made up of five hundred and twelve (512) students and thirty-five (35) teachers. A sample size of hundred (100) respondents were used comprising of seventy (70) students and thirty (30) teachers from the selected schools. A sixteen item structured questionnaire with a reliability quotient of 0.80 was used to elicit responses from the sample size. Of all the factors considered in the study, lack of funding is the most influential factor leading to overcrowding in classrooms in Junior Secondary Schools in Yenagoa Local Government Area and that smaller classrooms will lead to better academic performance among students. It was, therefore, recommended that government should plan and enforce strict rules and policies regarding optimum population in classrooms and provide sufficient budget to Education Ministry for proper funding of schools.*

**Keywords:** *Overcrowding, Classroom, Funding, Academic Performance*

### Introduction

Education simply put is the transfer of skills, values and knowledge and the right attitudes held by human society from one generation to another in order to prepare the individuals for positive and useful contributions to themselves and their society and also to help the individuals attain their desired potentialities. Thus education is not only a fundamental human right, but it is also very necessary and indispensable for the exercise of all other rights. It is a focal point on the economic, industrial, technological, social development etc of any society. However, none of the goals and objectives of education will be properly achieved for learners if they are not in a suitable environment.

The learning environment is the thread that connects the multitude of activities in the school. The learning environment comprises both the natural and the provided setting where teaching and learning takes place (Meador, 2019). In this study, environment consists of all the external

conditions and influence in the school that affect the academic achievement of the student such as learning facilities, qualified teachers, furniture, school building, good administrative management, teacher pupil relationship and school location among others. Over-crowding is over population of the classroom and signifies that the demand for western education far exceeds the capacity of the schools' plants as well as the instructional materials (Ike, 2006).

The growth in human population affects not just the economy and environment but transcends to all other spheres of life and this has taken its toll on the education sector as well. Houstonsenem (2011) views over-crowding of classrooms in terms of overpopulation of students or learners in an academic environment called the 'classroom'. This implies the presence of more students for learning in a classroom than the available resources i.e. teacher, infrastructure and instructional materials.

One point quite clear is that over population and overcrowding of classrooms is not far from one another. Over population is looking at the number of people in a society or state in relationship to the available resources there while overcrowding of classrooms concerns itself with the number in classroom environment. Olaleye, Ajayi & Oyebola (2017) examined the impact of crowded classroom on academic performance of public secondary school students in Lagos State and the result revealed that 97.3% of the respondents were of the opinion that there was shortage and inadequacy of infrastructural facilities due to overcrowding of the learning environment. The analysis indicated that overcrowding of classroom negatively affected academic performance of students being the major factor responsible for poor performance of students in public schools.

Also Ndubueze & Oboshi (2021) in their influence of overcrowding classroom on Pupils Academic Achievement in Public Primary School in Idemili South Local Government Area of Anambra, Nigeria showed that overcrowded classrooms have negative influence on the pupils' academic performance and that inadequate school facilities is also a negative factor influencing profits academic achievement and recommend that school management should adhere strictly to the ideal 'learners-teachers' ratio and concluded that class size is an important factor in determining pupils academic achievement in the classrooms.

### **Statement of the Problem**

There are several problems confronting Nigerian's educational system and this in turn affects the learning environment. Cortes, Moussa & Weinstein (2012) maintains that the learning environment plays vital role in determining how students perform or respond to circumstances and situations around them. This implies that no society is void of environmental influences. The learning environment determines to a large extent how a student behaves and interacts, that is to say that the environment in which we find ourselves tend to mould our behaviour so as to meet the demands of life whether negatively or positively.

According to the recommendations of the United Nation Educational Scientific and Cultural Organization (UNESCO) a classroom is a designated place for educational activities. In the formal school community, the teacher to pupils/students ratio of 1:25 is expected and regarded

as the ideal (UNESCO, 2017). In spite of this recommendation, most schools in Nigeria operate on between 1:50, to 1:70 'teachers to student' ratio, as a result of overcrowding in the classroom. Most schools in Nigeria are overcrowded because of increased in population of school age children and due to limitation of the economic resources and budget constraints. Presently it is becoming one of the problems in our educational system. This phenomenon has resulted in inadequacy of infrastructure, books, instructional materials and other useful items needed for effective teaching and learning. In the light of the above, academic standard has been compromised. The problem, which this study is set to investigate is the effect of overcrowded classrooms on the academic performance of students in junior secondary schools in Bayelsa State, a case study of Yenagoa in local government area of Bayelsa State.

### **Purpose of the Study**

The main purpose of the study is to determine the effects of overcrowded classroom on the academic performance of students in junior secondary schools. Specifically the study is designed to

- a. identify the factors responsible for crowded classrooms in junior secondary schools.
- b. examine the effects of overcrowded classrooms on the academic performance of students in junior secondary schools.
- c. determine the differences between the academic performance of students in overcrowded classrooms and smaller classrooms in junior secondary schools.
- d. identify possible ways of improving the overcrowded classrooms in junior secondary schools in Yenagoa Local Government Area of Bayelsa State.

### **Research Questions**

The following research questions guided the study:

- i. What are the factors responsible for overcrowded classrooms in junior secondary schools?
- ii. What are the effects of overcrowded classrooms on the academic performance of students in junior secondary schools?
- iii. What are the differences between the academic performance of students in overcrowded classrooms and smaller classrooms in junior secondary schools?
- iv. What are possible ways of improving overcrowded classrooms in junior secondary schools in Yenagoa, Local Government Area?

### **Significance of the Study**

The researchers hope that this study will help school principals to identify the problems faced by teachers in overcrowded classes, in order to find solutions and to decrease the effect of these problems on the level of teachers' participation and student's achievement. Secondly the findings will help government and policy makers in formulating effective planning and implementation policies and programmes for improved school academic activities. Thirdly, it will also provide policy makers with intelligent forecast and analysis of future needs of the schools in the areas of building and facilities. Finally, it will be of benefit to the student researchers as it will provide a valid document or literature in investigating other areas not covered by this study. Thus it will serve as a point of reference to future researches in the field.

## **Method**

The descriptive survey research design was used to examine the effect of overcrowded classrooms on the academic performance of students in junior secondary schools. The population of the study comprised all students and teachers of all junior secondary schools level 3 (JSS 3) located in Yenagoa Local Government Area. The total population of the students is five hundred and twelve (512) and the total number of teachers is thirty-five (35). The simple random sampling using the lottery technique was used to select five (5) junior secondary schools for the study. This procedure provided unbiased selection of a cross section of the population for the study. A total number of seventy (70) students and thirty (30) teachers from the selected junior secondary schools (JSS 3) in Yenagoa local government area of Bayelsa State were used. Thus the sample size was one hundred (100) respondents.

A structured questionnaire titled '*Effects of Overcrowded Classrooms on the Academic performance of Students Questionnaire*' (EOCAPSQ) was used. The questionnaire was divided into two sections, section A was used to gather the demographic information about the respondents while section B was made up of sixteen (16) stems items (4 items for each research question) used to elicit information from the respondents. A modified four (4) point Likert – scale method comprising strongly agree (SA), Agree (A), Disagree (D) and strongly Disagree (SD) was the main instrument used to elicit responses by the researchers. The content of the questionnaire was subjected to face and content validity by three experts of Test and Measurement in the Department of Educational Foundations, Niger Delta University, Wilberforce Island, Bayelsa State. The Pearson Correlation Co-efficient with a reliability result of 0.80 was obtained making the instrument reliable.

The instrument questionnaires were administered personally by the researchers. One hundred (100) copies of the questionnaire were printed and distributed to seventy (70) students and thirty (30) teachers in the selected junior secondary schools. All questionnaires were retrieved representing a 100% return to all administered questionnaires.

## **Data Analysis**

### **Analysis of Demographic variables of respondents**

**Table 1** Frequency Distribution of the Respondents by Sex

<b>Gender</b>	<b>Frequency</b>	<b>Percentage %</b>
Male	50	50
Female	50	50
<b>Total</b>	<b>100</b>	<b>100</b>

**Table 2: Distribution According to Teacher's Educational Qualification**

Gender	Frequency	Percentage %
WAEC/SSCE	3	10
Diploma	2	6.7
HND	15	50
B.Sc /BA /Bed	10	33.3
MA/MSc/PhD		0
Total	30	100

*Table One* on gender distribution showed that 50 male and 50 female as respondents representing 50% male and 50% female. This was done to eliminate any disparity between both sexes by giving them equal representation. The table shows the educational background of the respondents, in which 10% were secondary school certificate holders, 6.7% have Diploma, 50% are HND holders, and 10 respondents representing 33.3% of the total population and holders of B.S/BA/B.Ed certificates. The above indicates that majority of the teachers are graduates of tertiary institutions.

**Table 3: Mean Scores of the Factors Responsible for Overcrowded Classrooms**

Items	SA 4	A 3	D 2	SD 1	Mean Score	Design
1 Inadequate funding	272	90	40	0	3.66	A
2 Lack of physical facilities	188	99	26	7	3.20	A
3 Rural-urban migration	308	60	6	0	3.74	A
4 Lack of available teachers	40	42	72	38	1.92	D

*Table 3* shows that the mean scores of items 1, 2, and 3 are above 2.50 while item 4 has a mean score below the cut off mean. The table has an overall mean of 3.37 which is greater than the cut-off mean of 2.50. It, therefore, depicts that the above are all factors responsible for overcrowded classrooms in junior secondary schools in Yenagoa local government area of Bayelsa state except lack of available teachers.

**Research Question Two:** *What are the effects of overcrowded classrooms on the academic performance of students in junior secondary schools?*

**Table Four: Mean Scores on the Effects of Overcrowding Classrooms**

Items	SA 4	A 3	D 2	SD 1	Mean Score	Design
5 Teachers use poor teaching methodology in teaching students in overcrowded classrooms and this affects their academic performance negatively.	132	111	54	3	30	A
6 There are increases in cases of indiscipline among students in overcrowded classrooms as most students are distracted and didn't pay attention to instructions.	194	219	4	2	329	A
7 Teachers interact poorly with their students in overcrowded classrooms and cannot help students individually.	188	99	26	7	3.20	A
8 Teachers cannot evaluate students in an overpopulated classroom effectively and may grade students poorly.	240	69	20	91	3.6	A

**Table 4** shows that the mean scores of items 5, 6, 7 and 8 are above 2.80. The overall means of 3.07 was therefore above 2.50. Thus, it can be interpreted that the above are effects of overcrowded classroom on the academic performance of students in junior secondary school in Yenagoa local government area. From the findings of the research, it can be interpreted that the effects of overcrowded classrooms on the academic performance of students is mostly negative.

**Research Question Three:** *What are the differences between academic performance of students in overcrowded classrooms and smaller classrooms in junior secondary schools?*

**Table 5 Mean Score on the Differences Between the Academic Performance of Students in Overcrowded Classrooms and Smaller Classrooms**

Items	SA 4	A 3	D 2	SD 1	Mean Score	Design
9 Teachers interact individually with students in smaller classrooms than overcrowded classrooms and therefore their academic performance is better.	306	60	4	2	3.70	A
10 Students in smaller classroom experience less disruption in learning than students in overcrowded classrooms	112	66	50	25	253	A
11 Students in smaller classrooms are more cooperative than students in overcrowded classrooms and therefore perform better academically.	52	201	28	6	2.87	A
12 Teachers employ better teaching strategies and methods in smaller classrooms than overcrowded classrooms.	112	66	50	25	3.53	A

**Table 5** above shows that questionnaire item 9, 10, 11 and 12 all had mean score above 2.50. The pooled mean was 2.91. The findings show an overwhelming acceptance that there are differences between the academic performance of students in overcrowded classrooms and smaller classrooms is better than the academic performance of students in overcrowded classrooms.

**Research Question Four:** *What are possible ways of improving overcrowded classrooms?*

**Table 6 Mean Scores on the Possible Ways of Overcrowded Classrooms**

Items	SA 4	A 3	D 2	SD 1	Mean Score	Design
13 Pairing and grouping students together for group activities	304	60	4	2	3.7	A
14 Using good teaching methodology for appropriate lessons.	108	129	54	3	2.97	A
15 Good classroom management and discipline	112	66	50	25	2.53	A
16 Division of adequate funds to build better classrooms and other physical facilities.	240	69	20	7	3.36	A

**Table 6** above shows that item 13, 14, 15 and 16 all had mean scores above 2.50. The overall mean of 3.14 is, therefore, above the cut-off mean. This indicates that the above mentioned ways are possible techniques and strategies for improving academic performance in overcrowded classrooms in junior secondary schools in Yenagoa Local Government Area of Bayelsa State.

### Discussion of Findings

The result of the data analysis of **Table 3** agrees that the factors stated in the table are all factors responsible for overcrowded classrooms in junior secondary schools in Yenagoa local government area of Bayelsa State. This was revealed by a pooled mean of 3.37 which is above the cut-off mean of 2.50. This is in agreement with the position of Olaleye, Ayayi & Oyebola (2017) that inadequate funding of the education sector has been a major challenge facing the sector. The general conditions of infrastructure as well as school materials in some educational institutions are poor.

The findings of the data of **Table 4** show that the effects of overcrowded classrooms on the academic performance of students are mostly negative. The findings show that respondents agree to all the items in the questionnaire, this is revealed by the pooled mean of 2.87 which is above the cut of mean of 2.50. These findings are at variance with the findings of Ijaiya (2007), who in her research opined that a large class-size offers nothing but noise making, restriction of teacher's movement to the front of the class and inadequate participation in the lesson by students sitting at the back. She added that the increase in examination malpractices could not be divorced from poor seating arrangement in classrooms. She also stressed that the quantity and quality of interaction are likely to be adversely affected due to lack of space for moving around the class and the overwhelming number of students that the teacher have to deal with within a ninety-minute lesson.

**Research Question 3** sought to know the differences between the academic performance of students in overcrowded classrooms and smaller classrooms in junior secondary schools. The result in **Table 5** shows that the academic performance of students in smaller classroom is better than the academic performance of students in overcrowded classrooms. Research conducted by Cortes, Mous & Weinstein (2012) highlighted the fact that class size affects students' performance, due to misbehaviour and other disciplinary problems in large classes. The learners in the small classes in general, earn much higher marks than those in the large classes. According to these researchers, teachers, taught better and learners in smaller class learnt more as they did not experience disruption during lessons. Participation in learning activities and group work in smaller classes contributed towards the higher scores, and resulted in sound discipline, whereas in the large classes, learners scored lower marks, and disruptive behaviour made it difficult for teachers to manage these classrooms (Ndubueze & Oboshi, 2021).

The findings of **Table 6** show that the items mentioned in the table are the possible ways of improving overcrowded classrooms in junior secondary schools in Yenagoa local government area of Bayelsa state. This was revealed in the table by a pool mean of 3.14 which is above 2.50. These statements are in agreement with numerous research findings in the literature review like Xu (2007) who argued that when we consider a large class as a better opportunity for the teacher, we take only the positive aspects of such a class. Teaching practice and experience of many who have ever been teaching in large classes show that it is not only possible to build up a good learning atmosphere in large classes, but also feasible to take advantage of the large class size. Moreover, Richards & Rodgers (2001) had stated that a teacher should communicate, discuss and share regularly the classroom management techniques with other teachers who are involved in large class teaching.

### **Summary**

The study was on the effect of overcrowded classrooms on the academic performance of students in junior secondary schools in Bayelsa State. A case study of Yenagoa local Government Area in Bayelsa State. The study was based on four research questions. The descriptive survey design was adopted for the study. The population of the study comprised of all students and teachers of all junior secondary schools located in Yenagoa Local Government Area with a total number of five hundred and twelve (512) students, and thirty five (35) teachers. A sample size of 100 respondents comprising several (70) students and thirty (30) teachers from the selected junior secondary schools in Yenagoa Local Government were selected using simple random sampling technique.

### **Conclusion**

On the basis of the findings, this study concludes that most classrooms in Yenagoa Local Government Area of Bayelsa State are overcrowded and the overcrowding has a negative effect on students' academic performance. That there are several factors in the Yenagoa Local Government Area that have led to the overcrowding of the classrooms in the area. Of all the factors considered in the study, lack of funding is the most influential factor leading to overcrowding in classrooms in junior secondary schools in Yenagoa Local Government Area. The study of the view that smaller classrooms will lead to better academic performance among students.

### Recommendations

Based on the above findings, the following recommendations were made. That

- a. the number of students to be in each class should be limited to 35-40 students;
- b. government should plan strict rules and policies regarding optimum population in classrooms and provide sufficient budget to education department for providing better facilities in schools;
- c. proper planning is needed in order to control population because over population in our country is also a main factor leading to overcrowded classrooms in the country's education system; and
- d. Proper training programmes should be arranged for the teachers in order to help them on how to handle the overcrowded classrooms pending when it will be completely eradicated.

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