

Effect of Large Class on Teachers' Lesson Delivery and Students' Classroom Participation in Junior Secondary Schools

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Abstract:- This study was concerned with effect of large class on teachers' lesson delivery and students' classroom participation in junior secondary schools. The instruments for data collection were two instruments known as relationship between large class size to standard class size questionnaire (RBLCSSCSQ) and challenges of large class size on teachers' lesson delivery questionnaire (CLCSTLDQ). The questionnaires were developed by the researchers, validated by three experts and used for collecting data from respondents. Fifty (50) junior secondary school teachers from five government junior secondary schools at Abuja Municipal Area Council of Federal Capital Territory in Nigeria formed sample of the study. Two research questions were answered and two null hypotheses were tested. The data were analysed using mean percentages and bar charts to answer the research questions. One of the cogent findings of the study was that large classes dominated junior secondary schools and teachers were faced with different problems and challenges while delivering lessons to students in large classes. Other findings of the study established that 90% of teachers found it difficult to achieve classroom control and management, 68% of teachers found it difficult to start lessons on time, 96% of teachers found it difficult to attend to individual students' need, 86% of teachers found it difficult to notice student absenteeism, 78% of teachers found it difficult to end lessons on time, 54% of teachers found it difficult to identify students by name, 88% of teachers found it difficult to evaluate students at the end of the lesson, 92% of teachers found it difficult to assess students at the end of the lesson, 70% of teachers found it difficult to instil discipline on stubborn students during lesson and 94% of teachers found it difficult to walk round the classroom space during lesson. The paper concluded with various relevant recommendations such as adoption of 30 students per teacher policy and establishment of new junior secondary schools.

Key words:- Effect, Large classroom, Challenges, Teachers, Students.

I. INTRODUCTION

Education is the total experience and knowledge acquired by a learner or individual in a formal or an informal way, which transforms to a strong foundation for socio-economic development of a nation. Consequently, governments of all levels are placing a lot of importance on educational development as a worldwide endeavour. It is in line with this assertion that serious needs arise to checkmate the effectiveness of teaching and learning alongside the

teachers' ease of lesson delivery and learners' effective participation.

Classroom size can be defined as the population of a particular class in terms of number of students per teacher. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), lower secondary student - teacher ratio is the average number of students per class in lower secondary schools. Mokobia & Okoye (2011) stressed that educators all over the world identify class size as a desirable element of the educational system.

What constitutes a standard class means different things to different nations. According to Mokobia & Okoye (2011), countries like Australia, Canada, Romania, Czech Republic, United States of America and Slovenia have less than 30 students recommended for a standard class and countries like Norway, Turkey and Netherlands recommended 20 or less than 20 students for a standard class while Japan and Singapore have above 30 students recommended for a standard class. The United Nations Educational, Scientific and Cultural Organization (UNESCO) puts student- teacher ratio in lower secondary school at 42 as of 2004 and puts it at 31 as of 2010 while its lowest value was 25 in the year 2008. Therefore, in this study, class size with 1 - 30 students per teacher will be regarded as small or standard class size while class size with 31 and above students per teacher will be considered as large class size following the order of countries like Japan and Singapore and partially alongside the UNESCO (2010) recommendation.

Ajayi, Christiana & Ajayi (2017) claimed that effective teaching is difficult in overcrowded classes and majority of teachers are faced with instructional, physical, discipline and evaluation problems in large classes. There are reasons why smaller classes may lead to students' improved classroom participation and teachers' improved lesson delivery than large classes. Reasons such as easier and regular discussions with students, timely and frequent feedback to students and active problem solving were pointed out by Davies (Davies 2000). However, large class size was identified by Ajayi, Christiana & Ajayi (2017) as one of the major causes of students' ineffective classroom discipline, engagement and communication and they also stressed that insufficient or dilapidated classrooms, insufficient teaching staff, inadequate infrastructural facilities, budgetary constraints ranked the major causes of large class size in senior secondary schools.

In order to solve these problems, it is expected of schools to plan for future increase of students' enrolment

and such plans entail purchasing of additional teaching and learning resources, recruiting additional teachers, purchasing classroom furniture and building more classrooms for establishment of quality educational system. The impact of overcrowded classrooms on students' classroom participation is of interest to educators in particular and even to the parents.

II. NEGATIVE IMPACTS OF LARGE CLASS ON STUDENTS' LEARNING PARTICIPATION

Large class sizes affect quality learning. For instance, Earthman (2002), Yaman & Uygulamada, (2009) claimed that overcrowded classroom conditions hinder teachers' attention to individual students and slows down the progress of students' learning. Teachers only have time to cover the basic lessons and could not spend extra time with slow learners as pointed out by Earthman (2002, p. 11). Consequently, teachers have limited time to spend on slow learners in large class and they are unconsciously forced to neglect them because of the limited time allocation for each learning delivery.

Lesson delivery in large classes seems difficult because of the tendency of the teachers to pay attention on centred lessons alone. Researchers like Yaman & Uygulamada (2009) pointed out that large classes can force teachers to dump student centred learning and focus more on teacher centred lessons. As a result of this, teaching strategy then becomes the culture of teaching. Large class sizes influence students to exhibit learning behaviours such as not responding to the teacher's question and waiting on the teacher to provide most answers to questions on worksheets and exercises. Also, Earthman (2002), Yaman & Uygulamada (2009) revealed that large classes are obstruction to achievement of learning objectives and they also reduce the completion of learning activities. In such situations, achieving quality lesson delivery may be difficult for the teachers and quality learning may not take place.

III. POSITIVE IMPACTS OF SMALL CLASS ON STUDENTS' LEARNING PARTICIPATION

According to Yaman & Uygulamada (2009), small class was found to have enhanced students' effective learning and academic success, and there is a relationship between the number of students in a class and their academic success. They also claimed that the quality of learning and academic success is higher in small classes than in large classes and that small class can also enhance the quality of support for individual students. This can have a positive impact on their overall academic performance.

Various researchers like Green & Doran (2000) have also shown that the reduction of class size especially in the early grades can improve long-term high student academic performance. In addition, different factors have been identified by Onwu & Stoffels (2005) as factors affecting learning environment in large classes, these include:

- Lack of physical space due to overcrowding.
- Diminished opportunities for all learners to participate actively in the learning process.

- The impersonalizing of teaching.
- Teachers resorting to predominantly teaching and teacher demonstrations.
- Excessive workload and a long homework assignment turn around.
- Limited opportunities to meet individual student needs for self-activity and inquiry, motivation, discipline, safety and socialization (Onwu and Stoffels, 2005, p.79).

IV. STATEMENT OF THE PROBLEM

With fast growing population and increase in students enrolment in junior secondary schools, large classes have become like the standard classes in Nigeria especially in the cities like Abuja where people of all kinds migrates to. Therefore, this study is channelled towards finding out the effect of large classroom size on teachers' lesson delivery and students' classroom participation in junior secondary schools. Hence, the problem of this study is therefore presented as a question; what is the effect of large classroom size on teachers' lesson delivery and students' classroom participation in junior secondary schools?

V. PURPOSE OF THE STUDY

The purpose of this study was to determine the effect of large class size on teachers' lesson delivery and students' classroom participation. The study specifically determined the:

- Relationship between large class size and standard class size.
- Problems and challenges teachers are faced with in delivering lessons to students in large class size?

VI. RESEARCH QUESTIONS

The following research questions guided and directed this study:

- What is the relationship between large class size and standard class size in schools?
- What problems and challenges do teachers face in delivering lessons to students in large class size?

VII. STATEMENTS OF HYPOTHESES

In order to guide this study, the following null hypotheses were formulated.

- H_{01} : There is no significant relationship between large class size and standard class size in schools.
- H_{02} : There is no significant effect of large class size on problems and challenges encountered by teachers during lesson delivery.

VIII. METHODOLOGY

A. Research Design

This study made use of a descriptive survey research design. The descriptive survey research design was considered appropriate due to the fact that the design required obtaining information that discloses existing phenomena and happenings by asking individual about their perceptions, attitude, behaviour or beliefs towards large

class size as pertaining to teachers' lesson delivery and students' classroom participation.

B. Area of study, Population, Sample and Sampling

This study was carried out at five randomly selected junior secondary schools in Abuja Municipal Area Council of Federal Capital Territory, Nigeria. The population of the study consists of fifty (50) junior secondary school teachers from five government junior secondary schools in Abuja, Nigeria. The sample size of this study is made up of fifty (50) junior secondary school teachers from five government junior secondary schools in five different locations in Abuja Municipal Area Council of Federal Capital Territory. A simple random sampling technique was used to sample five locations out of twelve different locations in Abuja Municipal Area Council of Federal Capital Territory. From the five locations selected, five government secondary schools were randomly selected, one from each randomly selected locations using the same sampling technique. From the five schools selected, a simple random sampling was used to select fifty (50) junior secondary school teachers who participated in the study.

C. Instrumentation

Two instruments known as relationship between large class size to standard class size questionnaire (RBLCSSCSQ) and challenges of large class size on teachers' lesson delivery questionnaire (CLCSTLDQ) were developed by the researchers. These instruments were validated by three experts, one in the department of science education and two in the department of measurement and evaluation, Nasarawa State University, Keffi. RBLCSSCSQ and CLCSTLDQ contained two sections. Section "A" contained demographic information of the respondents,

while section "B" contained a 10 item questionnaire which was intended to help respondents express their perceptions on the relationship between large class size and standard class size in schools and challenges of large class size on teachers' classroom lesson delivery. In CLCSTLDQ, each item has 4 response options. The options are Very Difficult (VD), Moderately Difficult (MD), Minimally Difficult (MD) and Not Difficult (ND).

IX. RESULTS AND TABLES

Data were analysed using frequency counts and mean. Bar charts were used to present results of findings.

A. Research Question One:

- What is the relationship between large class size and standard class size in schools?
- The answer to research question one is contained in Table 1 and Figure 1:

S/N	Item	School 1	School 2	School 3	School 4	School 5
1	Mean number of students per class	106	84	92	108	102
2	Mean number of subject teacher per class	1	1	1	1	1
3	Mean number of assistant teacher per class	0	0	1	0	0
4	Total number of teacher per class	1	1	2	1	1
5	Mean number of students per teacher	106	84	46	108	102

Table 1. Profile of Students - Teacher Ratio
Source: Authors' field data (2018).

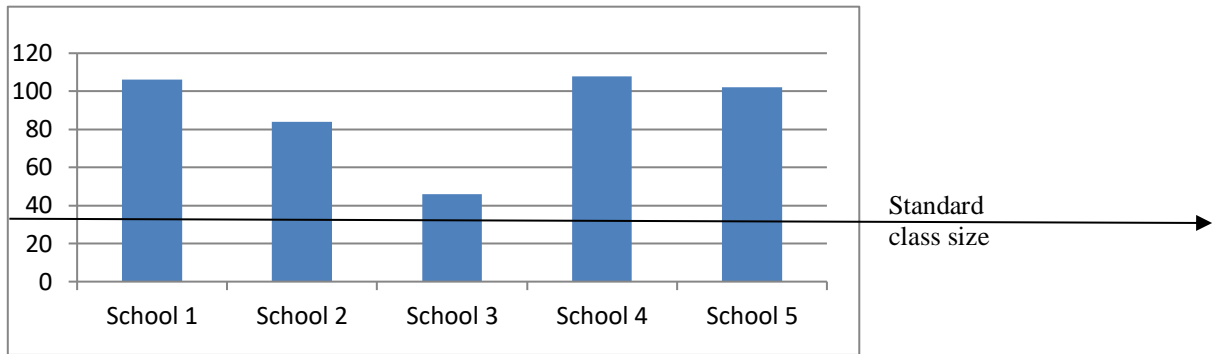


Fig 1:- Number of Students per Teacher in Schools.

Table 1 and Figure 1 show that all schools fall far above the small class size except school 3 that is slightly above the standard class size. It is only in school 3 that the number of students per teacher is not equal to double of standard class size.

School 1, School 4 and School 5 have 106, 108 and 102 students respectively per teacher which can be divided into four classes if standard class size would be maintained.

B. Research Question Two:

- What problems and challenges do teachers face in delivering lessons to students in large class size?
- The answer to research question two is contained in Table 2 and Figure 2:

S/N	Items	Difficult			%	Not difficult	%
		Very difficult	Moderately difficult	Minimally difficult			
1	Classroom control and management	25	12	8	90%	5	10%
2	Starting lesson on time	22	7	5	68%	16	32%
3	Attending to individual student's need	31	6	11	96%	2	4%
4	Ability to notice student absenteeism	29	9	5	86%	7	14%
5	Ending lesson on time	19	13	7	78%	11	22%
6	Identification of students by name	15	8	4	54%	23	46%
7	Evaluation of students at the end of the lesson	30	5	9	88%	6	12%
8	Assessment of students at the end of the lesson	29	7	10	92%	4	8%
9	Instilling discipline on stubborn students during lesson	25	3	7	70%	15	30%
10	Ability to walk round the classroom space during lesson	30	11	6	94%	3	6%

Table 2. Problems and Challenges of Large Class expressed in percentages

Source: Authors' field data (2018).

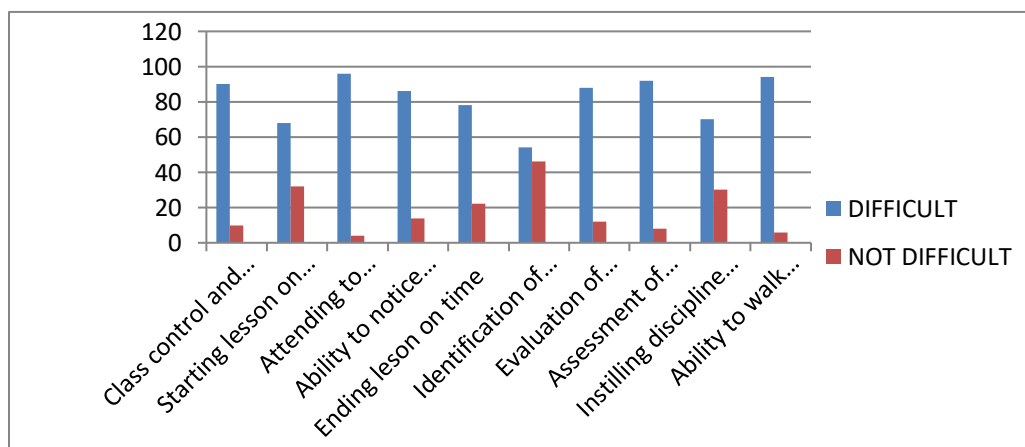


Fig 2:- Problems and challenges teachers are faced with in large classes expressed in percentage

Table 2 and Figure 2 show percentages of difficulties faced by teachers in delivering lessons to students in large classes. They indicate that identification of individual students by name among perceived problems and challenges faced by teachers in large class is not as difficult as others with 48%. Also, Table 2 and Figure 2 indicate that 90% of teachers find it difficult to control and manage their large classes while only 5% find it not difficult; 68% of teachers find it difficult to start lessons on time in large classes while only 5% find it not difficult; 96% of teachers find it difficult to attend to individual student's need in large classes while only 4% find it not difficult; 86% of teachers find it difficult to notice students who are absent in large classes while only 14% find it not difficult; 78% of teachers find it difficult to end lesson on time in large classes while only 22% find not difficult; 54% of teachers find it difficult to identify students by name while only 46% find it not difficult; 88% of teachers find it difficult to evaluate students at the end of the lesson while only 12% find it not difficult; 92% of teachers find it difficult to assess students at the end of the lesson while only 8% find it not difficult; 70% of teachers find it difficult to instil discipline on stubborn students during lesson while only 30% find it not difficult; 94% of teachers find it difficult to walk round the classroom space during lesson while only 6% find it not difficult.

X. CONCLUSION

Public junior secondary schools in the federal capital territory are overwhelmed with large classroom size. This poses threat to effective and quality teachers' lesson delivery and it deprives students of effective classroom participation. Awareness on how to cope with large classes has started gaining popularity among stakeholders and one wonders if that is the way to go. This study has revealed that majority of junior secondary school teachers have been faced with different problems and challenges while delivering lessons to students in large classes. This in turn has posed negative impacts on students' classroom participation in particular and students' academic performance in general.

XI. RECOMMENDATIONS

Based on the findings of this study and their implications, the following recommendations were made.

- Instead of organising seminars that train teachers on how to cope with large classes, Ministry of Education should adopt '30 students per teacher' policy as a strategy to address overcrowding in junior secondary schools.
- Where good infrastructures already exist, state and federal government should recruit more qualified teachers to balance the student-teacher ratio.
- New schools should be established and furnished by government with relevant and sufficient instructional materials. Non-governmental organization and parent-teacher association should be encouraged to erect blocks

of classroom in both newly established and existing schools.

- Major educational stakeholders like universal basic education board should make the actual population of students in junior secondary schools known to the federal government for effective planning for overcrowding in schools rather than conceal it.

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