

INFLUENCE OF LARGE CLASS SIZE ON BUSINESS EDUCATION TEACHERS' AND STUDENTS' EFFECTIVE TEACHING AND LEARNING OF PRACTICAL-BASED COURSES IN COLLEGES OF EDUCATION IN SOUTH-WEST, NIGERIA

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Abstract

The disparity between the rate of admission in Nigeria's higher institutions of learning and the available facilities has been a longstanding issue in the country's education system. The situation is persistent, and it becomes worrisome as it affects both students and teachers, especially when it comes to practical-based courses. The study examined the influence of large class size on business education teachers and students' performance in practical-based courses in colleges of education in south-west Nigeria. A descriptive survey research design was adopted. Two research questions guided the study; two null hypotheses were formulated and tested at a 0.05 level of significance. The population consisted of 1,403 business education students and 33 teachers in two Federal Colleges of Education in Oyo and Ondo states respectively representing Federal Colleges of Education offering Business Education in South-west, Nigeria. One hundred and forty students were randomly sampled, and the entire 33 business education teachers were the respondents for the study. A structured questionnaire with 20 items which was duly validated by three experts in business education with a Cronbach Alpha reliability coefficient of 0.87 was used to generate data from the respondents. Mean was used to analyze the data collected to answer the research questions while the hypotheses were tested using independent t-test statistics at a 0.05 level of significance. The study found that large class size has a great negative influence on business education teachers and students' performance in practical-based courses in colleges of education as teachers find it difficult to move around the class, have difficulty in assessing students in large classes due to work overload and they are more prone to high rate of stress and health issues. The study concludes that large class size has a significant detrimental influence on both the teachers and students of business education, especially when it comes to practical-based courses. Based on these findings, it was recommended among others that adequate facilities most especially laboratories and computer systems be provided to ease the teaching/learning process in practical-based courses and that an appropriate teacher-student ratio be maintained in the colleges of education to relieve the teachers of excess workload and enhance students' academic performance.

Keywords: Large class size, Business education teachers, students, practical-based courses.

Introduction

The issue of large class size confronting business education nowadays continues to bother researchers and business educators in particular. Business education being a skill acquisition programme, requires the teacher to monitor the students during practical classes to ensure proper and active participation of the students and know the strengths and weaknesses of each student to know how to assist the individuals in getting the appropriate skills.

A class consists of a homogenous group of pupils, who work and progress through well-supported learning environments. Classroom size can be defined as the population of a particular class in terms of the number of students per teacher (Odeyale, Gokum, & Odeyale, 2018). The Glossary of Education Reform (2018) refers to class size as the number of students in a given course or classroom, specifically, either the number of students being taught by individual teachers in a course, or the average number of students being taught by teachers in a school, district or education system. Ayeni and Olowe (2016) view class size as the actual number of students in a given course or classroom, specifically either the number of students being taught by individual teachers in a course or classroom, or the average number of students being taught by teachers in a school or educational system. It is the total volume of a classroom. By implication, the class is a determinant factor of students' progress and academic achievement.

A classroom may be undersized, moderate (small) or oversized (large). When the ratio of teacher in a class to student is lower than required (for instance 1:5), such a class is undersized. When the ratio of teacher in a class to student corresponds with the requirement (for example 1:30), the class is moderate and when the ratio of teacher to student in a class is excessively higher than required (for instance 1:50 and above), the class is large (National Commission for Colleges of Education - NCCE, 2020). Epri (2016) stresses that an overcrowded classroom has more students assigned to a classroom building than the number of students it was designed to accommodate. When the capacity of the classrooms is exceeded, it places greater demand on the schools' existing resources and infrastructure that need to be used for effective learning. Not only the building, the teacher and other teaching-learning resources are also affected by populous classes.

The classroom is the heart of any educational system. No curriculum planning is complete without the implementation and evaluation of the curriculum outcome in the classroom where most of the class learning activities take place hence, the classroom environment should be suitable for the teaching-learning process to take place effectively and efficiently. The classroom environment becomes an important aspect of learning for students. Hall (2012) opines that friendly and welcoming classroom environments are vital to efficient student performance. When schools do not have enough facilities such as classrooms, lecture theatres, halls, and laboratories to mention but a few, to accommodate increasing numbers of students, there is a tendency for large class sizes to be created. Business education classes are crowded.

In the opinion of Martirosyan (2015), pedagogical researchers have applied the construct of satisfaction to the educational setting, recognizing the need to monitor student satisfaction as a means of assessing the overall performance of higher education institutions. Similarly, Plank and Candliffe (2011) submit that good classroom organization provides a strong foundation for quality learning. Their research found that learning outcomes are higher in less noisy schools than in high-noise-level schools. Students in large class sizes generally tend to make more noise than students in small class sizes. Students need a quiet environment to achieve quality learning and be able to hear clearly and understand what is being spoken to perform a given task well. When this ability is diminished through unnecessary noise, students do not perform well. As Earthman in Epri (2016) testifies that overcrowded schools are noisier, create more non-instructional duties and paperwork, and hinder learning.

In a study carried out by Wang and Calvano (2022), it was discovered that students perceive lower levels of teacher interaction and satisfaction in larger classes. Christopher (2013) also laments that a high teacher-student ratio affects the quality of delivery of practical courses like word processing, data processing, shorthand and others. In essence, the academic performance of students is a function of class size. Ayeni and Olowe (2016) opine that large class size affects students' assimilation, leads to a high rate of examination malpractice and there are not enough facilities to enhance learning. The authors further stress that large classes encourage regular lateness to lectures and some students are less attentive. Corroborating these views, Zyngier (2014) and Epri (2016) state that as class size increases, achievement decreases; the facilities and teaching/learning resources are also overstretched. In other to ensure that half-baked graduates are not produced in business education, the issue of large class size should be addressed urgently in the Nigerian institutions of higher learning.

Statement of the Problem

The rate of admission in Nigeria's higher institutions of learning is not commensurate with the available facilities. The carrying capacity of available facilities such as lecture theatres, classrooms, laboratories and even personnel are overstretched. It has been observed in a few institutions offering business education programme in Nigeria that teachers are overloaded with work and the classrooms/lecture theatres are overstretched hence, the desired results are not being achieved. For instance, in practical-based courses such as word processing/keyboarding, shorthand and others, there is the need for the teacher to move around and supervise the students at work for easy guidance.

It is quite challenging when a teacher has a large number of students to handle and no sufficient space to move around in the classroom. When teachers deal with a smaller number of students, the teacher to students' learning is more effective and one can monitor the students' academic performance fairly well but, in a situation where the teacher has a larger number of students in one class, the teacher would be compelled by circumstance to focus more on the brilliant students. Some of the students might not understand what they are taught, because it is strenuous to check exercises, and there is excessive work to do.

It is expected of business education students, most especially those in the colleges of education to be able to produce advanced display work and tabulations, literary work, apply graphics in textual documents, possess accurate keyboarding skills, type assignments, office correspondence and even produce their final projects themselves. On the contrary, it is disheartening to say that these students are performing below expectations to the extent that they are fond of contracting out the work that is meant for them to untrained computer operators at the business centres. The question agitating the mind of the researchers is: can the product of business education acquire adequate skills in school and compete favourably with other global workers if the issue of large class size is not addressed? Also, to the best knowledge of the researchers, no study has been conducted to combine large class size, business education teachers and students' performance in practical-based courses, hence the dire need to carry out this study.

Research Questions

- i) What is the influence of large class size on business education students' performance in practical-based courses?
- ii) What is the influence of large class size on business education teachers in practical-based courses?

Hypotheses

- H₀1:** There is no significant difference between the mean responses of business education teachers and students regarding the influence of large class size on students' performance in practical-based courses.
- H₀2:** There is no significant difference between the mean responses of business education teachers and students regarding the influence of large class size on teachers in practical-based courses.

Methods

For this study, a descriptive survey research design was adopted. The population consisted of 1,403 business education students and 33 teachers: 766 students and 18 teachers from Federal College of Education (Special), Oyo, Oyo State and 637 students and 15 teachers from Adeyemi College of Education, Ondo, Ondo State, respectively, representing Federal Colleges of Education offering Business Education in South-West Nigeria. One hundred and forty students were randomly sampled and the entire 33 business education teachers. A 20-item structured questionnaire tagged Large Class Size and Business Education Teachers/Students' Performance in Practical-based Courses (LCSBETSAPC) generated from the research questions after an extensive review of related literature was the instrument used for data collection. A four-point modified Likert rating scale was adopted. The responses were weighted on the following: Strongly Agree (SA) - 4 points, Agree (A) - 3 points, Disagree (D) - 2 points and Strongly Disagree (SD) - 1 point. The instrument was duly validated by three experts with a Cronbach Alpha reliability coefficient of 0.87.

A total of 173 copies of the questionnaire were distributed by the researchers and 2 research assistants, out of which 166 were returned representing 96% return rate. The data collected to answer the research questions were analyzed using mean scores. The hypotheses were tested using independent t-test

statistics at a 0.05 level of significance. The decisions on research questions were taken using the following interval limits: 1.00 - 1.74 Strongly Disagree, 1.75 - 2.49 Disagree, 2.50 - 3.24 Agree, and 3.25 - 4.00 Strongly Agree. For the hypothesis, if the observed p-value is less than or equal to the fixed p-value, the hypothesis was rejected, if otherwise the hypothesis was not rejected.

Results

Research Question 1: What is the influence of large class size on business education students' effective learning of practical-based courses?

Table 1: Respondents' mean ratings on the influence of large class size on business education students' effective learning of practical-based courses

S/No	Items	Students		Teachers	
		Mean	Remark	Mean	Remarks
1	Getting a suitable venue for practical lectures is a great problem affecting students' learning in large classes, especially in practical-based courses.	3.31	Agree	3.73	Strongly agree
2	Large classes affect the assimilation rate of students negatively in practical-based courses.	3.01	Agree	3.15	Agree
3	The majority of students are always less attentive in large classes which affect their learning of practical-based courses.	3.09	Agree	2.42	Disagree
4	There is difficulty for students in hearing the teachers well which affect them in taking proper instructions in practical-based courses.	3.05	Agree	3.23	Agree
5	Students learn theoretical works more than practical in large classes which makes it challenging for them to acquire practical skills.	3.06	Agree	3.69	Strongly agree
6	Teachers are not able to demonstrate practical skills in large classes, this makes it difficult for students to acquire the right practical skills.	2.96	Agree	3.08	Agree
7	In larger classes, students' academic achievement tends to be lower, which discourages their participation in practical-based courses that are also large.	3.00	Agree	2.04	Disagree
8	Participation of students in large classes is very low which affect their learning in practical-based courses.	2.81	Agree	2.04	Disagree
9	Lateness and absenteeism are encouraged in large classes making it difficult to learn practical-based courses.	2.89	Agree	3.27	Agree
10	The examination malpractice rate is high in large classes, which makes students to develop a lazy attitude towards practical courses.	2.94	Agree	3.58	Agree
Weighted Mean		3.01	Agree	3.02	Agree

Source: Field Survey, 2022

Table 1 shows students' perception of the influence of class size on business education students' performance in practical-based courses. Respondents attest to items 1-10 positively with mean scores ranging from 2.81 to 3.31 meaning that large class size influences business education students' performance in practical-based courses negatively.

Table 1 also shows teachers' responses on the influence of class size on business education students' performance in practical-based courses. Their responses were positive on items 1, 2, 4, 5, 6, 9 and 10 with means ranging from 3.08 to 3.73 while they disagreed with items 3, 7 and 8 with mean scores ranging from 2.04 to 2.42. However, the cluster mean of 3.02 confirms the respondent's agreement that

large class size have a great negative influence on business education students' performance in practical-based courses.

Research Question 2: What is the influence of large class size on business education teachers in practical-based courses?

Table 2: Respondents' mean ratings on the influence of large class size on business educators effective teaching of practical-based courses

S/No	Items	Students		Teachers	
		Mean	Remarks	Mean	Remarks
11	Teachers are not able to interact with students personally because the practical-based classes are too large	3.13	Agree	3.81	strongly agree
12	Large practical classes are too noisy making it difficult for teachers to teach effectively.	3.06	Agree	3.50	strongly agree
13	Teachers find it difficult to give and mark many assignments because of the number of students.	2.77	Agree	3.08	Agree
14	Large classes affect the allocation of time for teaching/learning especially for large classes.	2.86	Agree	3.00	Agree
15	It is always difficult to get continuous assessment scores before the examination because teachers have to deal with many scripts.	2.93	Agree	2.69	Agree
16	In large practical classes, a teacher-centered method of teaching is consistently employed as it's deemed easier compared to other methods by the instructors.	2.91	Agree	1.96	Disagree
17	The facilities intended to improve teaching and learning in large practical-based classes cannot go round the students, which makes the teacher's job more challenging.	3.13	Agree	3.46	strongly agree
18	Inadequate availability of computers for hands-on learning among a large number of students makes it difficult for the teachers to be effective.	3.11	Agree	3.04	Agree
19	Teachers are prone to high rates of stress in large practical classes because they have to attend to each student.	2.93	Agree	3.31	strongly agree
20	Communicating effectively with each student to ensure understanding and clarity during practical demonstrations is hindered in class size.	2.85	Agree	1.69	Strongly disagree
Cluster Mean		2.97	Agree	2.95	Agree

Source: Field Survey, 2022

Table 2 reveals students' responses on the influence of class size on business education teachers in practical-based courses. Respondents agreed with all the items with mean scores ranging from 2.77 to 3.13 and a cluster mean of 2.97 which connotes a negative influence of large class size on business education teachers in practical-based courses.

Table 2 also shows teachers' responses on the influence of class size on business education teachers in practical-based courses. Their responses were positive on items 1 to 5 and 7 to 9 with mean scores ranging from 2.69 to 3.81 while they disagreed with items 6 and 10 with mean scores ranging from 1.69 to 1.96. Business education teachers opined that despite the high teacher-student ratio, different methods of teaching are still being introduced and teachers handling large classes still try their best to perform optimally. However, the cluster mean of 2.95 confirms that the respondents agreed that large class size have a great negative influence on business education teachers in practical-based courses as they find it difficult to move around the class, assessing students in large classes is very tasking and they are more prone to high rate of stress and health issues.

Hypotheses

H₀₁: There is no significant difference between the mean responses of business education teachers and students regarding the influence of large class size on students' performance in practical-based courses.

Table 3: Summary of independent t-test of the difference between mean responses of business education teachers and students on the influence of large class size on students' performance in practical-based courses

Group	N	Mean	SD	Df	t-cal	p-value	Decision
Business Education Students	140	30.13	8.11	164	0.059	0.953	Not Rejected
Teachers	26	30.23	7.78				

Source: field survey, 2023

The result in Table 3 shows that the degree of freedom of 164 has a t-value of 0.059 and a p-value of 0.953. Since the p-value of 0.953 is greater than the level of significance or alpha value of 0.05 the null hypothesis was not rejected. This indicates that there was no significant difference between the mean responses of business education teachers and students regarding the influence of large class size on students' performance in practical-based courses ($t_{164} = 0.059, p=0.953$).

H₀₂: There is no significant difference between the mean responses of business education teachers and students regarding the influence of large class size on business education teachers in practical-based courses.

Table 4: summary of independent t-test of the difference between mean responses of business education teachers and students on the influence of large class size on business education teachers in practical-based courses

Group	N	Mean	SD	Df	t-cal	p-value	Decision
Business Education Students	140	29.68	8.32	164	0.079	0.937	Not Rejected
Teachers	26	29.54	8.29				

Source: field survey, 2023

The result of the table above shows that the degree of freedom of 164 has a t-value of 0.079 and a p-value of 0.937. Since the p-value of 0.937 is greater than the level of significance or alpha value of 0.05, the null hypothesis was not rejected. This indicates that there was no significant difference between the mean responses of business education teachers and students regarding the influence of large class size on business education teachers in practical-based courses ($t_{164} = 0.079, p=0.937$).

Discussion of Findings

The study examined the influence of large class size on business education teachers and students' performance in practical-based courses in colleges of education in south-west Nigeria. From the findings on Research Question one and research question one which revealed that there was no significant difference between the mean responses of business education teachers and students on the influence of large class size on students' performance in practical-based courses, it was revealed that large class size influenced students' performance in practical-based courses negatively. This means that large class sizes affect students' concentration in the lesson, make it difficult to hear the teachers and not able to do practical right in the presence of the teacher. All these combined lead to negative perform of students in practical-based courses. This is in line with the views of Ayeni and Olowe (2016) that large class size affects student's assimilation, leads to a high rate of examination malpractice and there are no enough facilities to enhance learning. The authors further stress that large classes encourage regular lateness for lectures and some students are less attentive. Corroborating these views, Zyngier (2014) and Epri (2016) state that as class size increases, achievement decreases; the facilities and teaching/learning resources are also overstretched. Furthermore, Ajayi, Christiana and Ajayi (2017) emphasize that effective teaching is difficult in overcrowded classes and a majority of teachers are faced with instructional, physical, discipline and evaluation problems in large classes. These views were supported by Wang and Calvano (2022) that students perceive lower levels of teacher interaction and satisfaction in larger classes. It becomes imperative that interaction, management, organisation/instructional design, technology, content and pedagogical skills are highly needed for successful teaching (Mamman & Saba, 2022). This means that for one to be a successful teacher in a practical class, these skills must be acquired.

Results of Research Question two and hypothesis two which reveals that there was no significant difference between the mean responses of business education teachers and students regarding the influence of large class size on business education teachers in practical-based courses ($t_{164} = 0.079, p=0.937$). It was revealed that both business education teachers and students strongly agreed that large class size has a great negative influence on the teachers in practical-based courses. This means that large classes do not only affect students negatively, but also the teachers. Teachers are prone to high rates of stress/health issues and find it difficult to assess students in large classes. This is corroborated by Epri (2016) that teachers were overloaded because of the increase in class size, spending a lot of time on assessment and marking. Eunice in Mamman, Chadi and Jirgi (2015) support the view that learning occurs in proportion to class size as teachers find it difficult to manage large classes effectively.

Christopher (2013) also supports the view that a high teacher-student ratio affects the quality of delivery of practical courses like word processing, data processing, shorthand, and others. In essence, the academic performance of students is a function of class size. Attesting to these views, Epri (2016) notes that effective teaching was not possible in overcrowded classes and a majority of the teachers were facing instructional, discipline, physical and evaluation problems. The author states further that large class influences the amount of time spent on setting assessment tasks, marking and providing feedback: teachers could not move freely around the class and teachers were unable to assess the students individually, establish individual learning capabilities and unable to support students with special needs.

Conclusion

Based on the findings of the study which revealed that large class size negatively influences students' performance and business education teachers in practical-based courses, it was concluded that large class size has a significant detrimental influence on both the teachers and students of business education, especially when it comes to practical-based courses. The implication of this is that students may not be able to acquire adequate skills in practical-based courses that will enable them to compete favourably in the global workplace. It could also be implied from the findings that teaching/learning facilities are overstretched, teachers are overloaded with work, stressed up, faced with health issues and they might be unable to perform optimally. If nothing is done to ameliorate this situation, business education teachers are at risk of health challenges, leading to early death.

Recommendations

Based on the findings of the study, the following recommendations are made:

1. There is a need for lecturers to divide the practical class into smaller groups to encourage teamwork and collaboration. This approach allows students to actively participate in practical activities, share responsibilities, and learn from their peers. It fosters a sense of community and helps students support each other in their learning journey.
2. The management of colleges of education should employ more lecturers and teaching assistants for practical-based courses. The lecturers should enlist the help of teaching assistants to provide more personalized attention to students. TAs can assist during practical sessions, offer one-on-one support, and address individual questions or concerns. This additional support can significantly improve students' learning experiences.

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