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Contents **Page**

Strategies for Teaching and Managing Large Classes in University

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Abstract

Following extensive debate on management of large classes and its effectiveness, the current study sought to address (1) strategies used by lecturers to manage large classes; (2) required skills needed to effectively teach large classes by lecturers; and lastly (3) effective assessment practices used by lecturers in large classes. A structured questionnaire, which reached a reliability co-efficient of r=+0.87, was administered adopting a descriptive survey research design. One hundred and ten lecturers (N=110) were randomly selected out of 2205 lecturers in the four South African universities in Eastern Cape. The results showed that 'engaging students and developing a sense of belonging' is the best indicator with (Mean 8.6, SD = 12.264). This was followed by 'automate assessment tasks where possible' (e.g. online quizzes) with Mean 3.0, SD = .899 (effective assessment practices); and 'evaluating student understanding regularly through mini quizzes, short tests, class work or True/False responses' with (Mean 2.8, SD = .752 (managing and teaching large classes).

Background to the study

Teaching large classes is a challenge and difficult at times, but it can also offer many opportunities for lecturers to improve their teaching and to make it more enjoyable and rewarding for them and their students. A large class setting provides a lecturer the opportunity to

improve organizational and managerial skills by creatively arranging the class to create a comfortable learning environment and manage the many students within it. Large classes offer lecturers the opportunity to improve their interpersonal skills as they try different ways to get to know each student as an individual through class work or life outside the lecture room. Students will also equally enjoy getting to know their lecturer as an individual.

Large classes give a lecturer an opportunity to improve teaching and presentation skills. As mentioned above, constantly lecturing to a large class – or even a small one, can become boring and bothersome. The value of a large class is the diversity of students in it and the different learning styles it provides. One can use a variety of dynamic and entertaining ways of teaching. Furthermore, the cumulative knowledge, experiences, skills, and interests of many students, can be valuable starting points for planning lectures and activities so that learning becomes meaningful for other students. In addition, by involving families of students, the lecturer will also have greater access to resources for teaching and learning.

During the teaching of a large class, lecturers will be able to improve evaluation skills as they devise a variety of ways to tell whether the students have really learned the material, instead of relying only on short answer exams, which may seem necessary for large classes. For instance, lecturers can give students in-class and out-of-class assignments that ask them what they have learned and what questions they have about what they have learned. Rather than following students' failures, a lecturer can also track their successes, which are also successes in teaching. Lecturers will find also that involving students in their learning and in assessing how well they have done can save time and reduce workload. Students can also benefit from being in large classes. When there are many students in a class, they can share different experiences (UNESCO, 2006).

There is no single definition of a large class, which may generally include 80 students or more. In some cases, large may signify a class of 40-70 students; in others, it may include up to 1500 students or more in a single cohort. Large classes are most common in the first year of study

at university. This carries the added responsibility of supporting first year students through the transition to university, while also introducing them to learning in the university context.

Though a large class has no 'exact size', usually it is measured in terms of the number of students per teacher (student-teacher ratio). In some countries, 25-30 students per one teacher is considered large, while in other countries this is seen to be normal or even quite small. From a lecturer's perspective though, a class is 'large' whenever it feels large. While a class of more than 50 students is usually considered a large class, to those who normally teach 25 or fewer students, a class of 35 can be large and overwhelming (Dion, 2005).

Similarly, many lecturers faced with large classes might be tempted to give up, thinking that there is no chance of getting so many students to learn. The problem is, however, that they assume that learning occurs in proportion to class size; the smaller the class, the more students learn. However, research shows that class size does not automatically correlate with student learning. Students in large classes can learn just as well as those in small ones. What counts is not the size of the class, but the quality of teaching. Evidence shows that students place more emphasis on the quality of teaching than class size. Moreover, they may not mind being in a large class as much as lecturers or teachers may think they do or mind (Gibbs, 1992). To highlight this view, Gibbs (1992, p. 13) attests that,

> "I have taught hundreds of students over the span of many years, and my current class has 80 students. At first, I realized that I had finally achieved that comfortable security of having a ready-made set of lecture notes, volumes of exam and quiz questions, and a sense of predictability regarding the course. Strangely enough, however, I was also bored and bothered; bored from lecturing about the same things year after year, and bothered because my lectures came across so rigidly that I was failing to impart to my students the satisfaction of finding solutions to problems."

According to Mulligan & Kirkpatrick (2000, p. 8), what is valuable to students in large classes, among others, include the following:

- Give students a short task in the first tutorial to identify students potentially at-risk;
- Provide online support (e.g. discussion forums on the web; course FAQs; self-review quizzes; links to key support sites around the university);
- Develop peer-assisted study programs and mentoring schemes to encourage student interaction;
- Make the most of small group tutorials for building student confidence and developing connections between students, academic staff and the culture of the Department.
- Build interest and rapport by adopting a relaxed style where students feel comfortable asking questions. Include regular opportunities for students to discuss key points among themselves. Avoid use of humour which may not be understood by students from different cultural or linguistic backgrounds;
- Make the aims of the lecture explicit and clear. Follow a straightforward progression with a predictable format;
- Pace: vary the pace during sessions to maintain interest (e.g. use a range of media to emphasize key points);
- Explanation and elaboration: give clear explanations of technical terms. Use examples from students' own experiences, cultures and backgrounds. Provide definitions and country-specific terms. Some lecturers ask students to compile glossaries of key terms in groups to assist comprehension;
- Signalling: explicitly identify important information and key concepts. Use clear verbal and written signals when you change topic or emphasis. Avoid relying on tone or intonation alone to signal changes of topic;
- Questioning: create an atmosphere that encourages student questions (e.g. there is no such thing as a stupid question). Repeat questions so that the whole group can hear. Respond empathetically to student questions. Model the question response behaviour that you wish to encourage;
- Visual and multimedia resources: use a range of strategies to enhance student understanding (e.g. graphs, diagrams, movie clips) and give students opportunities to revise material (e.g. PowerPoint presentations and lecture capture technology).

Review of the literature

Managing large classes

Effective management of large classes has been a concern and a major phenomenon among higher institution of learning. Carbone (1998) and Stanley and Porter (2002) have produced books focusing on the large class environment, offering strategies for course design, student engagement, active learning, and assessment. The advantages of large classes include decreased instructor costs, efficient use of faculty time and talent, using available resources, and standardization of the learning experience (McLeod, 1998). However, there are some significant disadvantages to large classes, including strained impersonal relations between students and the instructor, limited range of teaching methods, discomfort among instructors teaching large classes, and a perception that those faculties who teach large classes are of lower status at the institution (McLeod, 1998).

Class size and student performance

The findings of different researches on the relationship between class size and student performance has identified considerable conflicting results (Toth & Montagna, 2002). The results of some studies show no significant relationship between class size and student performance (Hancock, 1996; Kennedy & Siegfried, 1997). However, other studies favour small class environments (Arias & Walker, 2004). Results vary based on the criteria or parameters used to measure student performance, as well as the class size to evaluate it. When traditional achievement tests are used, small classes provide no advantage over large classes (Kennedy & Siegfried, 1997). However, if additional performance criteria are used (e.g., long-term retention, problem-solving skills, students' centred approaches etc.), it appears that small classes hold an advantage (Gibbs et al., 1996; Arias & Walker, 2004).

Effectiveness of teaching methods

The conventional and traditional inert view of learning involves situations where material is delivered to students using a lecture-based format. On the contrary, a more modern view of learning is constructivism, where students are expected to be actively involved in the learning process by participating in discussion and/or collaborative activities (Fosnot, 1989). Overall, the results of recent studies

concerning the effectiveness of teaching methods favour constructivist, active learning methods. The findings of a study by de Caprariis, Barman, and Magee (2001), for example, concluded that lecture leads to the ability to recall facts, but discussion produces higher level comprehension.

In addition, research on discussion or focus group discussion (FGD) methods has shown that group learning and student-led discussions not only produce favourable student performance outcomes, but also advance greater participation, self-confidence and leadership ability (Perkins and Saris, 2001; Yoder and Hochevar, 2005). Hunt, Haidet, Coverdale, and Richards (2003) examined student performance in group learning methods, finding positive learning outcomes in comparison to conventional lecture-based methods. In contrast to these findings, a study by Barnes and Blevins (2003) suggested that active, discussion-based methods are inferior to the conventional lecture-based method. A comparison of lecture combined with discussion versus active, cooperative learning methods by Morgan, Whorton, and Gunsalus (2000) demonstrated that the use of the lecture combined with discussion resulted in superior retention of the subject matter and material among students.

Teaching effectively in large classes

In large classes, it is very imperative to make the best use of time and the time available for learning. That is why time management is very essential and this entails planning in advance. A sizable portion of the work involved in teaching a large class takes place well before the first day of class. For example, in a small class a lecturer can easily give an impulsive assignment, but in a large class there is need for more time to carefully plan a lecture and its activities.

Many lecturers, regrettably, have never been taught how to plan lectures. They were taught to rely on textbooks, and in some cases a textbook is the only available teaching aid. In any case, a good lecture plan will help to relieve fears about teaching many students because a lecturer will know in advance what to do, why, and how. A lecturer will be able to convey the lecture calmly, and such assurance will carry over to students who, in turn, will be more restful in learning from the

lecturer. Even if lecturers rely on information from textbooks, they must plan how to communicate the information so that all students will understand. For large classes, this planning is not magnificence; it is a necessity because it will bring order into the classroom environment, even though it may be crowded (Dion, 2005, p. 18).

The planning process centres around three major areas:

- *Physical and psycho-social environment*
- *Content*: that is, what topic has been identified in your national curriculum documents, and how can this topic be made meaningful to your students and adapted to fit the local community; and
- *Process*, or how the content is taught, which may involve using different teaching methods to meet the different learning styles of students or to maximize the time available for teaching and learning.

The following are some of the most important elements in lecture planning that can help a lecturer to manage the learning of many students.

Be comfortable with what one is teaching (topic, content)

Teaching large classes becomes much more difficult if a lecturer is uncertain about what one is teaching. A lecturer should:

- Read on those topics that one will be covering so that one is confident in presenting them and can maintain a steady focus during teaching. This way, students will be able to follow the lecture and its activities easily, and, will be less likely to become bored and disruptive.
- Think of questions to ask students, and try to anticipate questions that students might ask.
- Review the course materials, assignments, and reading lists of other lecturers who have taught the topic before.
- If possible, attend a class taught by an experienced lecturer to see how he or she organizes the content and student activities in a large class.

Be clear about why one is teaching a given topic and its learning objectives

A lecturer should:

- Think about the knowledge, skills, and attitudes one would like students to learn, and choose two or three to focus on in one lecture.
- Explain clearly to the students what one would want them to learn from a specific lecture.

Some teachers with large classes write the learning objectives on the chalkboard or a large piece of poster paper before class begins. They then explain each objective to their students at the start of the class so everyone has a common understanding of the lecture to be learned.

Structure the lecture logically

The best way to lose students' attention in a large class is to present topics, concepts, and activities in a random manner. Some lectures and their content are best presented chronologically, such as historical events, or sequentially in a step-by-step approach (A leads to B which leads to C). At other times, one can describe a problem and then illustrate its solution, or, better yet, have students work individually or in groups to illustrate how they might solve it.

Plan teaching strategies and activities in advance

A lecturer should avoid planning to lecture for an entire period, although one may be tempted to do so. Since the attention span of the average student is limited to increments of 10-15 minutes, it is best if a lecturer changes the format of the lecture every so often so that students remain attentive. In large classes especially, there is a tendency for students to start talking amongst themselves (or even to fall asleep) when they become bored. Therefore, a lecturer should plan on 'mini-lectures' interspersed with brief activities, such as questions and answers or inviting students to share related examples or personal experiences.

In planning a lecture, a lecturer may identify activities in which all students can participate in an orderly manner, and select one or, better yet, two teaching methods for each class session: lectures, small group discussions, independent work, role-playing, demonstrations, etc. A

lecturer may also decide how to: (a) prepare the class instruction, (b) present the new concepts, (c) have students apply what they have learned through activities (for example, through discussions, in-class writing activities, or collaborative work), and (e) assess whether students can put into practice what they have learned (for instance, through a short quiz, in class writing assignment, a problem solving exercise, or homework).

While a lot of careful planning is needed to develop an appropriate learning activity, the major reward is better student learning in the large class. To start, instead of asking "What am I going to do in each class session?" focus on "What are my students going to do?". A lecturer should ensure that whatever activities are chosen, students will achieve their learning objectives.

Recruit teaching assistants in advance

Though the lecturer is ultimately responsible for the learning of students in his or her class, one can get others to help. These 'teaching assistants' can be valuable assets to the large class because they will allow a lecturer to work with individual students, to manage activities effectively, and to observe the overall class. For instance, ask retired teachers or lecturers, high school graduates, or parents to help manage large class or to teach appropriate lectures. They can be particularly valuable in helping students to conduct group activities. A lecturer can even ask older students or the best students in the class to act as peer teachers. Encourage 'experts' from the community to be resource persons in classes that talk about special skills and knowledge.

Pay attention to students with more individualized needs

The following are some of the questions a lecturer should think about:

- Are there students in the lecture room who will need extra help? What kind of support will the lecturer need to provide to such students?
- Does the lecturer need to help them on an individual basis, or can other students assist them?
- Does the lecturer need to make sure that they are sitting in an appropriate place in the classroom? Often it helps to have students who need extra help at the front of the classroom where

a lecturer can easily help them, especially if the lecture room is crowded.

Develop and follow a formal lecture plan

Good lecture plans achieve at least two objectives. First, they outline what the lecturer hopes will occur during a class and, possibly more important, they convey to students that their teacher has thought about the session and its activities. Some of the ways a lecturer can plan lectures well are by using a simple lecture planning outline, daily lecture planning format, or a lecture planning matrix as shown below. Try to use at least one of them in planning lectures; maybe start with just one topic or lecture. This should give a firm start in organizing teaching in a large class setting; a way to monitor whether or not students are following what is taught; and a chance for the lecturer to think about what to do next and how to improve teaching.

Budget time carefully

Teaching a large class takes a great deal of time and energy. If a lecturer feels rushed or overwhelmed, students will feel it too. A lecturer may set up weekly work schedules so that one is prepared for what needs to be done. It is also prudent for a lecturer to find ways to scale back other obligations so that one can have time to deal with the complexities of teaching such classes.

Similarly, UNESCO (2006) gave the following tips for teaching large classes:

- Plan ahead and prepare thoroughly; problems can be magnified in large classes, but they can also be dealt with effectively.
- Maximize classroom space by removing unnecessary furniture, and use space outside of the classroom as learning and activity centres. Ask your students for suggestions on arranging the classroom in a comfortable manner.
- Do everything possible to get to know your students. A positive relationship with your students builds a willingness on their part to actively participate in class.
- Have your students introduce themselves to everyone in an interactive manner. You introduce yourself, as well.

- Move around the class when talking – this engages students more actively, and it can reduce the physical and social distance between you and your students.
- Be natural and personal in class and outside of it – be yourself!
- Tell your students you will be available before and after class to answer any questions they might have.
- Keep track of frequently asked questions or common mistakes. Use these to develop lectures and help students avoid making mistakes.
- Be aware of the class. If you notice or even feel that there is something wrong, ask a student what is going on. Invite small groups of students to visit you to discuss important class issues. When necessary, involve students and use positive discipline to deal with misbehaviour.
- Give a background questionnaire or a diagnostic test to check the content of your lectures and the knowledge and skills of your students, to identify those students that need special attention, as well as to make connections to students' life experiences.
- Determine what information can be delivered in a form other than lecture and develop these methods. For instance, group work, role-playing, student presentations, outside readings, and in-class writing can be excellent ways to vary classroom routine and stimulate learning.
- Develop a formal lecture plan as a way to organize your teaching in a large class setting; a way to monitor whether or not your students are understanding what is taught; and a chance for you to think about what to do next and how to improve your teaching. In your plan, identify what topic is to be taught, the learning objectives, teaching methods, classroom arrangement, main activities, resources, and assessment methods.
- Develop a visual display of the outline of the day's topics and learning objectives (for instance, a list on a chalkboard). This will make following the flow of the class much easier for you and your students. Plan for a clear beginning, middle, and end to the class.
- Use "prompts" to develop students' question and answer skills,

and count to 10 after you ask a question to give time for the student(s) to answer.

- Give assignments that really assess whether or not your students are learning what you are teaching. Can they explain the process by which they solved a problem, and can they apply what they are learning to everyday life? Give clear and thorough instructions for all assignments.
- Develop a portfolio system or other ways to keep track of student performance – both successes and areas needing improvement – and to identify those students who require extra attention.
- Develop exams that really tell you if your students have truly learned and can apply what you have taught them, not just what they remember.
- Give prompt feedback on assignments and exams. Involve your students in the grading process to give faster feedback.
- Reflect on your teaching.
- Discuss with your colleagues and students how your class can be improved. Visit the classes of colleagues who are also teaching many students, and exchange ideas and materials for teaching large classes. Above all, view the challenge of teaching a large class as an opportunity, not a problem.

Problems with large classes

While it is hard to draw definitive conclusions about student achievement based on class size alone, since other variables such as the quality of lecturers, student's degree of motivation and the role of the parents may come into play, large classes yield the following difficulties:

- One of the main difficulties that a teacher may experience while teaching a large class is the tremendous effort that she or he will have to make. With an outnumbered class there is always something to be done.
- With a large class, it is difficult to get a satisfactory knowledge of student's needs. Intimacy with students and remembering

names might be a problem.

- As a consequence of the large number of students, the noise level is inevitably high which adds to the stress lecturers may experience.
- Organizing, planning and presenting lectures may constitute another challenge for teachers in such classes as students' abilities might differ considerably.
- There is another difficulty related to the learning process. In fact, engaging learners actively in the learning process may not be easy in a crowded class.
- It is hard to imagine how a large class would benefit from school resources such as computers, books, references...
- With a crowded classroom, teachers might find it difficulties to measure effectiveness.
- A large class gives reluctant students a place to hide (Shannon, 2006).

Statement of the problem

Teaching anything anywhere has its challenges. The common challenge lecturers face is large class sizes. Classroom management becomes paramount in delivering effective lectures in such a situation. Too many good lecturers have seen their lectures derailed by deficient classroom management skills. Therefore, this study wanted to explore the strategies used by lecturers to manage and teach large classes in University.

Research questions

The following research questions will be answered to justify the study.

1. What are the strategies used by lecturers to manage large classes?
2. Do lecturers possess the skills needed to effectively teach large classes?
3. What are the effective assessment practices used by lecturers in large classes?

Methodology

Research paradigm

Morgan (2007) defines a paradigm as a set of beliefs and practices that guide a field and argues that paradigm can be used to summarize the belief of researchers. The paradigm serves as a guide to the investigation. On the basis of the research questions this study will be guided by the positivism paradigm. Positivists aim to test a theory or describe an experience through observation or measurement in order to predict and control forces that surround us (Mackenzie & Knipe, 2006) Hence, interpretivists believe that reality is constructed by people's perception of it. They recognize that individuals contribute to the on-going construction of reality in their social context through social interaction. Based on the above analysis, the study will explore the strategies for teaching and managing large classes in university.

Research design

The study adopted descriptive survey research design to investigate the strategies used for teaching and managing large classes at universities.

Population/Sample

The population of this study comprises mainly all the lecturers in four universities in the Eastern Cape Province in South Africa. Simple random sampling technique was used in the selection of the lecturers. The sample size of this study consists of one hundred and ten university lecturers (N=110).

Validity and reliability of research instrument

A structured questionnaire was used to elicit information from the respondents. The instrument was validated by the experts in the same field and Cronbach alpha was used to measure its reliability. The reliability coefficient is r=0.87. The instrument was divided into two sections; section 1 required respondents' bio-data, while section 2 contained three parts. Part 1 contains items on strategies for teaching and managing large classes with twelve indicators. Part 2 contains items on the required skills for teaching large classes with seven indicators and part 3 contains items on effective assessment practices in large classes which also have seven indicators. Likert modified response scale was used. The responses range from Strongly Agree to

Strongly Disagree.

Data administration and analyses

The instrument was administered to the respondents in their various universities with the support of research assistants. The administration was completed in 10 days. Data collected was analyzed using descriptive and Chi-Square statistics.

Results and Discussion

Research question 1

What are the strategies used by lecturers to teach and manage large classes?

Table 1

Descriptive Statistics on Strategies for Teaching and Managing Large Classes

Item	N	Mean	Std Deviation (SD)
I am always motivated to capture students' attention.	110	1.8000	.75176
I always keep my class lively by moving around with purpose and reduce student anonymity	110	2.0000	.63535
I give students advance organizers to assist in giving structure to their learning.	110	2.2000	.75176
I always make connections between previous learning, the current class, and future topics	110	2.2000	.40183
I do connect student learning to real world applications.	110	2.0000	.00000
I make use of visual media, handouts, skeleton lecture notes and problem-based activities to facilitate active learning.	110	2.4000	.80366
In my class I encourage interaction and engage with students during lectures by asking questions and expecting responses.	110	2.0000	.89852
I use a mixture of teaching methods during lecture.	110	2.6000	.80366
I evaluate student understanding regularly through Mini quizzes, short test, class work or True/False responses.	110	2.8000	.75176
I acknowledge some of the key issues my students might face (e.g. time management, assignment time, managing study etc.)	110	2.0000	.89852
I acknowledge the limitations of lecture theatres/rooms by letting the students know that I may not be a ble to talk with them individually during a lecture, but that lectures complement small group work in tutorials or laboratory sessions.	110	2.6000	.80366

Table 1 above shows the indicators on the strategies for teaching and managing large classes. The results show that 'I evaluate student understanding regularly through Mini quizzes, short test, class work or True/False responses' is the best indicator with (Mean 2.8, SD = .752). This is immediately followed by 'using mixture of teaching methods

during lecture', and 'acknowledging the limitations of lecture theatres/rooms by letting the students know that I may not be able to talk with them individually during a lecture, but that lectures complement small group work in tutorials or laboratory sessions' with (Mean 2.6, and SD of .804) each. Other best indicators are 'making use of visual media, handouts, skeleton lecture notes and problem-based activities to facilitate active learning' with (Mean 2.4, and SD of .804), 'giving students advance organizers to assist in giving structure to their learning' with (Mean, 2.2 and SD .752) and 'making connections between previous learning, the current class, and future topics' with (Mean, 2.2, and SD of .402).

Table 2

Chi-Square on Strategies for Teaching and Managing Large Classes

S/N	ITEMS	SA	A	D	SD	Df	X.Tab	X.obs
1	I am always motivated to capture students' attention.	0	22(36.7)	44(36.7)	44(36.7)			
2	I always keep my class lively by moving around with purpose and reduce student anonymity.	0	22(36.7)	66(36.7)	22(36.7)			
3	I give students advance organizers to assist in giving structure to their learning.	0	44(36.7)	44(36.7)	22(36.7)			
4	I always make connections between previous learning, the current class, and future topics.	0	22(55.0)	88(55.0)	0			
5	I d o connect student learning to real world applications.	0	0	110(110)	0			
6	I make use of visual media, handouts, skeleton lecture notes and problem - based activities to facilitate active learning.	0	66(36.7)	22(36.7)	22(36.7)			
7	In my class I encourage interaction and engage with students during lectures by asking questions and expecting responses.	0	44(36.7)	22(36.7)	44(36.7)	30	43.77	224.4
8	I use a mixture of teaching methods during lecture.	22(36.7)	22(36.7)	66(36.7)	0			
9	I evaluate student understanding regularly through Mini quizzes, short test, class work or True/False responses.	22(36.7)	44(36.7)	44(36.7)	0			
10	I acknowledge some of the key issues my students might face (e.g. time management, assignment time, managing study etc.).	0	44(36.7)	22(36.7)	44(36.7)			
11	I acknowledge the limitations of lecture theatres/rooms by letting the students know that I may not be able to talk with them individually during a lecture, but that lectures complement small group work in tutorials or laboratory sessions.	22(36.7)	22(36.7)	66(36.7)				

Table 2 reveals the results on the chi-square conducted on the 11 indicators on strategies for teaching and managing large classes with (Df =30, X. Table Value of 43.77, and X. Observed = 224.4). Since the X. Observed 224.4 is greater than the X. Table Value 43.77; therefore, all the 11 indicators are significant in teaching and managing large classes.

Research question 2

Do lecturers possess the skills needed to effectively teach large classes?

Table 3

Descriptive Statistics on Required Skills for Teaching Large Classes

Items	N	Mean	Std. deviation
I am skilled in organizing and presenting effective lectures.	110	2.2000	.40183
Engaging students and developing a sense of belonging.	110	8.6000	12.26407
I am skilled in integrating active learning elements in traditional lecture formats.	110	2.6000	.80366
I am skilled in blending face-to-face and technology-enhanced learning activities.	110	2.8000	.75176
I am skilled in crowd control in large groups.	110	2.4000	.49214
I am sensitive to class climate/mood.	110	2.6000	.49214
I am skilled in managing and supporting staff teams.	110	2.2000	.40183

Table 3 above shows the indicators on the skills required for teaching and managing large classes. The results show that 'engaging students and developing a sense of belonging' is the best indicator with (Mean 8.6, SD = 12.264). This is immediately followed by 'skilled in blending face-to-face and technology-enhanced learning activities' with (Mean 2.8, and SD of .752); while 'skilled in integrating active learning elements in traditional lecture formats' with (Mean, 2.6 and SD of .803) and 'sensitive to class climate/mood' with (Mean, 2.6 and SD of .492) trail respectively. Other best indicators are 'skilled in crowd control in large groups' with (Mean 2.4, and SD of .492), 'skilled in organizing and presenting effective lectures' with (Mean, 2.2 and SD of .402), and 'skilled in managing and supporting staff teams' with (Mean 2.2 and SD of .402).

Table 4

Chi-Square Statistics on Required Skills for Teaching Large Classes

S/N	ITEMS	SA	A	D	SD	Df	X.Tab	X.obs
1	I am skilled in organizing and presenting effective lectures.	0	22(55.0)	88(55.0)	0			
2	Engaging students and developing a sense of belonging.	22(36.7)	44(36.7)	44(36.7)	0			
3	I am skilled in integrating active learning elements in traditional lecture formats.	22(36.7)	22(36.7)	66(36.7)	0	18	28.87	140.4
4	I am skilled in blending face-to-face and technology -enhanced learning activities.	22(36.7)	44(36.7)	44(36.7)	0			
5	I am skilled in crowd control in large groups.	0	44(55.0)	66(55.0)	0			
6	I am sensitive to class climate/mood.	0	22(36.7)	44(55.0)	0			
7	I am skilled in managing and supporting staff teams.	0	22(55.0)	88(55.0)	0			

Table 4 reveals the results on the chi-square conducted on the 7 indicators on the required skills for teaching and managing large classes with (Df =18, X. Table Value of 28.87, and X. Observed = 140.4). Since the X. Observed 140.4 is greater than the X. Table Value 28.87; therefore, all the 7 indicators on the required skills for teaching and managing large classes are significant.

Research question 3

What are the effective assessment practices used by lecturers in large classes?

Table 5
Descriptive Statistics on Effective Assessment Practices in Large Classes

ITEMS	N	Mean	Std. Deviation
I use early assessment strategies and early-warning assessment systems.	110	2.2000	.40183
I adopt front-end assessment: invest time in developing assessment tasks and preparing students for them.	110	2.2000	.40183
I make clear connections between the lecture material and the assessment process.	110	2.2000	.40183
I teach students about strategies for approaching assessment. This might include strategies for planning.	110	2.6000	.49214
I suggest timelines for conducting library research and tips on how to structure their first assignment.	110	2.6000	.49214
I automate assessment tasks where possible (e.g. online quizzes).	110	3.0000	.89852
I ensure that assessment tasks are ke pt to a minimum and focus on.what really counts	110	2.2000	.98428

Table 5 above shows the indicators on the effective assessment practices in large classes. The results show that automate assessment tasks where possible (e.g. online quizzes) with (Mean 3.0, SD = .899) as the best indicator. This is immediately followed by teach students about strategies for approaching assessment and suggest timelines for conducting library research and tips on how to structure their first assignment with (Mean 2.6, and SD of .492) each respectively. While using early assessment strategies and early warning assessment systems and adopting front-end assessment, invest time in developing assessment tasks and preparing students for them and making clear connections between the lecture material and the assessment process were each return (Mean 2.2, and SD of .492) while ensuring that assessment tasks are kept to a minimum and focus on what really counts return (Mean 2.2, and SD of .984).

Table 6

Chi-Square Statistics on Effective Assessment Practices in Large Class

S/N	ITEMS	SA	A	D	SD	Df	X.Tab	X.obs
1	I use early assessment strategies and early-warning assessment systems.	0	22(55.0)	88(55.0)	0			
2	I adopt front-end assessment: invest time in developing assessment tasks and preparing students for them	0	22(55.0)	88(55.0)	0			
3	I make clear connections between the lecture material and the assessment process.	0	22(55.0)	88(55.0)	0	18	28.87	171.6
4	I teach students about strategies for approaching assessment. This might include strategies for planning.	0	66(55.0)	44(55.0)	0			
5	I suggest timelines for conducting library research and tips on how to structure their first assignment.	0	66(55.0)	44(55.0)	0			
6	I automate assessment tasks where possible (e.g. online quizzes).	44(36.70)	22(36.7)	44(36.7)	0			
7	I ensure that assessment tasks are kept to a minimum and focus on what really counts	22(36.7)	0	66(36.7)	22(36.7)			

Table 6 reveals the results on the chi-square conducted on the 7 indicators on the effective assessment practices in teaching and managing large classes with (Df =18, X. Table Value of 28.87, and X. Observed = 171.6). Since the X. Observed 171.6 is greater than the X. Table Value 28.87; therefore, all the 7 indicators on the effective assessment practices in teaching and managing large classes are said to be significant. Therefore it is expected of lecturers to be conversant and make use of the above indicators so as to be effective in assessment practices while teaching large classes.

Recommendations

The study recommends the following, among others;

- Lecturers should not see the teaching of large classes as a nightmare, but see it as opportunities to improve their teaching.
- Lecturers should adopt different presentation skills based on the level and socio-cultural background of their students
- Lecturers should be creative in managing their large classes
- Universities should make the environment conducive for lecturers to teach large classes. The use of power point and some

other information communication and technologies (ICT) infrastructures are needed to disseminate information while teaching large classes

- Lecturers should see large classes as an opportunity to improve their interpersonal skills by adopting different strategies of teaching and trying different ways to get to know each student as an individual through their work in class or their lives outside the lecture room.

Conclusion

Teaching large classes is a challenge and difficult at times, but it can also offer many opportunities for lecturers to improve their teaching and to make it more enjoyable and rewarding for them and their students. The results showed that all the indicators mentioned are significant in managing and teaching larges classes, but 'engaging students and developing a sense of belonging', which was one of the indicators for required skills for teaching large classes, is the best indicator with (Mean 8.6, SD = 12.264). This was followed by 'automate assessment tasks where possible (e.g. online quizzes)' with (Mean 3.0, SD = .899), which was under the indicators for effective assessment practices in large class and 'I evaluate student understanding regularly through mini quizzes, short test, class work or True/False responses' with (Mean 2.8, SD = .752), which was under the indicators for managing and teaching large class respectively.

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