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*Best teaching practices for
increasing student engagement
in large classes within the
Faculty of Commerce*



ABSTRACT

With the increased access to education and massification of education in South Africa and internationally, this may adversely affect the participation and engagement of students in classes that seat between 50 to over 100 students. The trend towards increased enrolment at higher education institutions is also reflected in the South African Department of Higher Education and Training's (DHET) Green Paper on Post-

School Education and Training. This research project was undertaken to examine problems students face in large classes and to identify from the students perspectives teaching strategies that are used in the classroom. The setting of the research is a private higher educational institution and the research focuses on higher certificate students'. A questionnaire administered via google documents was used to collect data from students. The findings reveal that there is evidence of student engagement in the classroom. Students find that a large class will assist them with peer learning however, a lecture-based approach, using principles of constructivism, in order to balance the learning needs of students is a favored option by students in large classes.

Key words: student engagement, large class size, teaching practices

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1. Provisional title

Best teaching practices for increasing student engagement in large classes within the Faculty of Commerce.

2. Context of the study

The research project is aimed at gaining an understanding on student engagement in large classes. The project therefore intends to identify effective teaching methodologies that can be used when teaching large classes especially in the Faculty of Commerce. Anderson, Eyitayo, Garg and Lee (2007), defines a large class as where it becomes impossible to handle students in the same way a smaller class is managed. Therefore, the purpose of this study is to ascertain some best practices that can be used to engage with students in large class sizes. More specifically, this will be aimed within the Faculty of Commerce where there are more than 50 students in a class. The educational institution of which the study is situated in, offers undergraduate and contact session to full time students. Three Higher Certificate qualifications (NQF level 5) will be targeted namely, Higher Certificate on Office Administration, Higher Certificate in Logistic and Supply Chain Management and Higher Certificate on Business Management. I have chosen this particular NQF Level has these classes are the largest in size at the higher educational institution. More importantly, the students enrolled in the Higher Certificate programme are first years and majority of students have to transition into higher education with large class sizes. Therefore these students will provide great insight on how teaching practices influence student engagement in the classroom.

2. Problem statement

Lectures remain an important part of the students' learning experience (Fry, Ketteridge and Marshall, 2015). It is not impossible for students to gain access to recorded lectures or receive the lecture in real time. However, the potential for student engagement in a lecture allows students to feel involved and is probably one of the reasons for lectures still taking place today.

Active learning in the classroom is encouraged to foster deep learning (Fry *et al*,2015). However, this becomes challenging with large class sizes (Exeter, Ameratunga, Ratima, Morton, Dickson, Hsu and Jackson,2010). Student engagement is important as the literature claims that students would learn better through engagement in the classroom (Cooper, 2000; Fry *et al*, 2015).

More specifically, you will find that in the Faculty of Commerce there are modules that have not been performing well whilst other have been meeting targets. This shortcoming raise concerns around the quality of education students are receiving in those specific modules. Therefore,it is important to address the effectiveness of teaching practices on student engagement. In developing countries such as South Africa, teaching in large classes has direct negative ramifications for the quality of educational experiences. If the numbers of drop outs increase this means that the goals outlined by the Department of Higher Education to increase enrolment numbers in HE will be impacted (Hornsby,Osman and Matos- Ala, 2013).

Thereby, by using an interpretivists approach, the researcher hopes to achieve the aforementioned purpose.

3. Study aims, objectives and research questions

This study aims to investigate best approaches to teaching large classes in higher educational institutions that encourage student engagement, therefore, the objectives and research questions are set for this study are:

Objective one sets to explore the level of student engagement in large classes.

The objectives address the following question:

- What factors influence student engagement in the classroom?
- What are student's perceptions of the teaching methods used in class?

Objective two sets to explore effective methods of student engagement in large classes.

- What are some best practices that can be used by lecturers in engaging with students in large classrooms?
- How can the educational institution assist lecturers with increasing student engagement?

4. Literature review

4.1 Introduction

With the number of people enrolled in higher education, lecturers may find it difficult to engage with students and offering them personal contact. Moreover, in South Africa, where student enrolments in public and private Higher educational institutions' (HEI's) reached a total of 1.1 million in 2016 (Department of Higher Education and Training, 2018). Hence, the issue with student engagement arises as the number of students enrolled at educational institutions increases (Anderson, Eytayo, Garg and Lee, 2007). Therefore, the aim of this study is to promote a greater understanding of the issues that lecturers and students face in engaging in the classroom and to share some best practices that are adopted in large classes.

4.1 Defining student engagement and large class size

According to Lane and Harris (2015) student engagement refers to the quality of effort and willingness to participate in class activities. Chapman (2003) defines student engagement as having cognitive, affective and behavioural criteria. Cognitive criteria refer to the mental effort in learning tasks whereas the affective criteria assess their emotional reactions to complete tasks. Behavioural criteria assess the extent to which students actively participate in the learning task. Therefore, the research hopes to understand the context of large class teaching and how it influences teaching and learning.

Ramsden (2003) state that the aim of teaching is to make student learning possible and attempting to alter students understanding in order to conceptualise phenomena and ideas in an academic setting and is possible through student engagement. Whilst a number of definitions exist on student engagement, for the purpose of this study,

student engagement will refer to the interactions in and outside the classroom and how lecturers design their lesson in the classroom.

According to Baruth (2009) teaching large classes is an ongoing debate. Anderson *et al* (2007), defines a large class where it becomes impossible to handle students in the same way a smaller class are managed. For example, a lecturer is more likely to remember each student's name and meet with the student on regular basis in a smaller class than a larger class.

Moodley (2015) and Hornsby and Osman (2014) debate whether large class effects student learning and quality education. Lynch and Pappas (2017) state that smaller class sizes will maintain engagement in content covered in class. They assert that large classroom assists in democratisation of higher education as it breaks down power structures.

4.2. The benefits of student engagement

The benefits of student engagement in the classroom is important for a number of reasons. According to Lane and Harris (2015) and Brussow and Wilkinson (2010) students learn best when actively engaged. Danker (2015) asserts that using a flipped classroom approach helps students engage in deep learning rather than passively learning. Danker's (2015) study showed that more than 70% of students gave at least 80% of their attention to activities in the class using a blended approach to learning. Cooper (2000) adds that student would learn better if they are provided with the opportunity to discuss content in the classroom. Furthermore, this enables active learning and fosters critical thinking and is more likely to produce better results.

A study conducted by Anderson *et al* (2007) found that engagement in the classroom impacted positively on students' final marks and learning compared to students with little or no engagement. However, Furlong and Ammon (2005 cited in Anderson *et al* (2007) found that conducting class activities was not always a success and that it will depend on the timeliness, uniqueness and importance of the content being taught in the lesson. The National Education Association (2006) developed a benchmark theory

that demonstrates the shifts of teaching and learning. The below table highlights some of the key teaching and learning changes in education.

Table 1: Benchmarks for Teaching and Learning

Benchmark for	Moving from....	Moving towards
Learning	Passive absorption of learning and Individual activity	Active engagement with information and individual and group work.
Knowledge	What: facts and procedures of a discipline	What, how, and why: main ideas, concepts, facts, processes of inquiry.
Teaching	Lecturers in information-deliverer role Teachers do most of the work	Different lecturer roles, from information deliverer to architect of educative experiences.

National Education Association (2006)

4.2. Challenges of not creating student engagement in large class sizes

The literature reviewed indicates the importance of student engagement in large classes. The first challenge facing 21st century lecturers reported by Cheong, Shuter and Suwinyattichai (2016) is the managing of digital distractions in class due to physical distances between the lecturer and student. In addition, there won't be sufficient technology in some educational institutions to assist students and as a result lecturers continue using traditional lectures (Mulyryan-Kyne, 2010). On the other hand, Stephens (2005) and Greyling and Wenzel (2007) argue that using digital technology in the classroom increases interaction and creates a more active environment.

Secondly, Lynch and Pappas (2017) and Anderson *et al* (2007) found that some of the challenges that students may face in large classes, is a lack of interaction between the lecturer and students especially during discussion sessions, inadequate classroom facilities available to students. The authors add that students also feel anonymous which results in students being demotivated.

Another long-standing issue addressed by, Ward and Jenkins (1992) is that first year students are unprepared for large classes and find it difficult to adapt and are often felt feeling confused and uncomfortable. Rumberger and Rotermund (2012) assert that this often leads to a drop-out in college. Lynch and Pappas (2017) assert that students' concerns arise due to paying a lot for their studies and still do not find quality and contact with their lecturers, this makes them feel like a product. Another problem with large classes according to Danker (2015) and Young, Robinson and Albert (2009) students find it difficult to concentrate if they are passively receiving information in class and are unable to construct their own knowledge.

Fry *et al* (2015) claims that there is nothing more demotivating than having students sitting in a class where the lecturer is monotone and the PowerPoint presentation is predictable. According to Lane and Harris (2015) and Brussow and Wilkinson (2010) students learn best when actively engaged.

4.2 Challenges faced by lecturers in large classes in large class sizes

Although Mulryan-Kyne (2010) study found that lecturers cope well with teaching large classes. Anderson *et al* (2007) and Ward and Jerkins (1992) add that lecturers may not notice students that do not attend, arrive late to class or become disruptive. Additionally, according to Ramsden (2003) lecturers are pressured as there is a lot of time and energy that is required for engagement whilst simultaneously assuring quality and increasing pass rates. There also have a limited number of assessments used where lecturers would prefer using multiple choice and shorter questions that open ended and essay questions (Anderson *et al*, 2007). This may mean that lecturers do not have sufficient time to engage in other forms of assessments such as group work, discussions or role plays.

Feedback is significant in the development of student learning, however due to the large classes, this is often reduced (Shield, 2007 and Anderson *et al*, 2007). A study conducted by Briggs (2015) noted that negative feedback is a barrier to academic performance and the only way to overcome this is through student engagement where students receive timely feedback to ensure students are on the right track.

Lane and Harris (2015) study found that the average level of student engagement is higher in the front than the back of the classroom. Hence, it becomes difficult to control larger classes or engage with students during the lesson. As can be seen from the literature it is important to address issues of student engagement in large classes as it not only impacts of student learning but as an effect of how a lesson is planned and assessments, that needs to be further investigated.

4.3 Reported practices for increasing student engagement in large classes

Literature provides a number of practices that can be adopted in the research project. This research project does not aim to generalize a practice to a large class context however, attempts to find ways in which lecturers are engaging with students in the classroom either cognitively or behavioral. The flow theory by John Spencer assists in boosting student engagement in the classroom (Spencer, 2016). John Spencer proclaims that if lecturers are to engage with students they need to develop a maker mindset and empower students to hit a state of creative flow. Spencer explains the flow happens when students are intrinsically rewarded, lecturers use scaffolding, embrace student choices, minimizes disturbances and assist students with metacognition (Spencer, 2016).

Cooper and Robinson (2000) emphasizes that a lecture based approach was effective in the context of handling large classes. However these authors add that the lecture should communicate content to students that would take them time and effort to research and learn on their own. Briggs (2014) suggests that conducting an activity every 15 minutes is a good rule of thumb for managing large classes whilst Lynch and Pappas (2017) the use of PowerPoint and clicker dependent activities were found useful in encouraging student engagement.

According to Timpson and Burgoyne (2002) the lesson should be like a performance where the lecturer should be loud fluent, maintain eye contact and body expression. Lynch and Harris (2017) suggests that the following to increase student engagement, a teaching assistant would be useful to assist in large classrooms and employing graders who are responsible for providing detailed feedback for formative and

summative assessments. They also suggest that having a class policy creates a small class feel and encourages accountability.

Cooperative learning strategies is also an important element in active learning. Cooper and Robinson (200) mentions that small group work can promote cognitive collaboration and enhance critical thinking in the classroom.

For limited time in the classroom, Cooper and Robinson (2000) suggest conducting informal discussion groups. Reason for being informal is for students to collaborate with different students. For example, the lecturer could ask students to turn to their partner and present a solution to a problem. However, Cooper, MacGregor, Smith and Robinson (2000) argue that group work leads to excessively grading the group and neglecting the individual talents of the students.

Another popular strategy suggested by Danker (2015) that could increase student engagement in the classroom is using a flipped approach to learning, where students learn through application and practice as it is student centered. In this approach the student is autonomous whilst lecturers guide students. Danker (2015) adds that using peer collaboration, problem-based learning as a much deeper interaction in the classroom.

The literature review found that student engagement contributes positively towards teaching and learning however, with the increase in numbers at HEI it becomes difficult for lecturers to engage with students which has detrimental effects on a students' studies in all facets of their college life. Student engagement is also not easy to measure in the classroom, the types and limitation of each was discussed. Thus it remained imperative to determine some best practices that are used by lecturers to alleviate the issues that impede on teaching on learning.

5. Research methodology

The research design that was used for this research project is a descriptive study and takes a stance of an interpretivists. This allows for a clear picture of and accurate data

that on phenomenon being studied (Du Plooy-Cilliers *et al*, 2014). It asks questions such as why and how. This research does not intend on using a scientific or positivist approach to measure the best teaching practice to engage with students rather interest is primarily on how students can be engaged in the classroom and what strategies can be used in the classroom to engage with them.

The study adopted quantitative techniques. Data was obtained from students enrolled in the following Higher Certificate programmes: Office Administration, Logistics and Supply Chain and Business Management. The questions are empirical in nature and are both exploratory and descriptive.

5.1 Target population

The study is located at one higher private educational institution within Durban, KwaZulu Natal. It is geographically convenient to the researcher and the institution expects rapidly increasing class sizes in 2020.

The researcher also gained perspective of students who are in large classes. Responses will elicit their perspectives on students' engagement in teaching and learning.

5.2 Sampling technique

There are two types of sampling techniques, namely, probability and non-probability sampling. This research will use non-probability sampling comprising of purposive and quota sampling.

Non-probability sampling selects units of analysis that the researcher is interested in (Cohen *et al*, 2011). The authors further add that non-probability sampling is suited to small scale research and is inexpensive to set up.

The use of non-probability sampling was advantageous to this research project since, the research objectives will not require generalizations in terms of characteristics of the population but rather perceptions of student engagement from both students and lecturers. Thus, the use of non- probability sampling was deemed suitable.

As mentioned previously, this is a descriptive study; according to Penwarden (2015) descriptive studies can have the presence of bias as an issue because the researcher selects the sample for the study.

In addition, the researcher selected a non-probability sampling because it is best suited for web based surveys as used in this research project (Van Selm and Jankowaski, 2006). The author's mentions that a researcher cannot guarantee probability sampling for web based surveys due to malfunctioning email addresses or bouncing mails. Thus, the research project favours the non-probability approach.

Table 1 indicates the sample size for each unit of analysis. The total population size for the students was 330. This was obtained from the educational institution targets for 2020.

Table 1 indicating methodological choices for the study

Target population	Instrument design	Population size	Sample technique	Sample size	Instrument distribution
Students	Questionnaire of both open and closed structured and standardized questions.	2020 students at the higher educational institution: 330 (Targets from the Higher Educational Institution). Higher Certificate in: - Office Administration - Business Management - Logistics and Supply Chain	Purposive sampling	10	Self-administered web-based survey via Google documents

5.3 Data collection method

The first step in the data collection process was to select the instrument that would be appropriate in responding to the research objectives. According to Saunders *et al.* (2009) the common methods of obtaining quantitative data that is valid and reliable, is by the use of surveys; quantitative data.

Adopting surveys is beneficial for its ability to collect responses from a fairly large sample and allows for easier data analysis (Saunders *et al.*, 2003). This is deductive in nature. In addition, through the use of surveys and structured interviews similarities and differences in perceptions can be identified across subsets of the sample.

The researcher did not select postal or telephonic questionnaires could not be used for two reasons. Firstly, both telephonic and postal surveys did not fit the time and budget constraints of the research project. Secondly, the researcher did not have access to students' postal addresses to post the questionnaire. These postal addresses or numbers could be incorrect for both parents and students.

5.4 Measuring instrument

Table 1 indicates that for the questionnaire both open and closed-ended questions are used. Each question is directed to obtain answers in response to variables in the research project objectives.

The advantage of using closed-ended questions makes it easier to collect and analyze data (Saunders *et al.* 2009: 375). The inclusion of open-ended questions is used to gain more in-depth analysis of the research questions that have been set. Mouton (2011: 153) explains that some open-ended questions can be used to elaborate on certain issues that cannot be explained by the closed ended questions. Therefore, the researcher can go back and check to validate the research study (Hesse-Biber 2010:3).

On the other hand, a closed-ended question limits the respondents' choice in the survey. To address this issue, an *other* option will be used.

Three types of closed ended questions were developed as explained by Welman *et al.* (2006) namely, category, list, ratio and rating is used in the questionnaire design. A

tick box will be used for the questionnaire design to identify the characteristics of the sample such as, qualification of the students, how long they study for.

An added benefit of selecting questionnaires and using rating scales is that bias is minimized as participants are given the same questionnaire to complete and eliminates the possibility of the researcher misinterpreting the results (Mouton 2001).

According to Cohen *et al.* (2011: 328), using a rating scale is useful for gaining attitudes, perceptions and opinions. Thus, a five-point Likert scale is used to collect data (Refer to research instruments link).

5.5 Data analysis

For the survey, google documents captures the data and is automatically generated into Excel spread sheet. Thereafter, the data was analyzed by the researcher. Descriptive statistical tools used to report findings include graphic presentation of bar graphs, pie charts and cross- tabulations. This enables comparisons to be made effectively (Graziano and Raulin 2004: 105). The statistical measures for this project consisted of cross-tabulations.

5.6 Limitations and delimitations

The study is limited in the following way:

- This research project represents students and lecturers from only one private higher educational institution. Therefore, the results of this study is not generalized to other educational institutions.
- As this research project is for period 2019-2020 and the sample size is dependent on the large class size, the results may not be generalized to other contexts.
- The low response rate is attributed to the facilitation of the survey online. Students may not have access to data or a device. Initially, the researcher would have liked to administer the questionnaire in class. However due to the Corona virus 2019 pandemic, the researcher was limited to using google documents.

- Due to the Corona virus 2019 pandemic the students that answered the questionnaire only experienced two months in a large class setting as the country underwent lockdown.

The study is delimited in the following ways:

- Due to the short duration of the research project, the researcher decided to only focus on one Faculty within the educational institution and therefore the attempt to identify best teaching practices for engagement in large classes is based within the Faculty of Commerce.
- The questionnaire consisted of mainly closed ended questions and a limited number of questions. This was used to promote students' willingness to participate in the survey.

5.7 Validity and reliability

Saunders *et al* (2009: 143) identify both external and internal validity and reliability measures that will be addressed herein.

5.7.1 External and internal validity

External validity is not adopted for this research project because it adopted non-probability sampling meaning that inferences cannot be generalized to other contexts such as educational institutions (Cohen *et al*, 2011).

The research project will make use of content validity. This was ensured in the use of questionnaire items adapted from the validated instruments by a similar study by Carpenter (2006).

The instruments (questionnaire and interview questions) will also undergo face validity. This refers to the researchers' subjective assessment of the relevance of the questionnaire or interview questions appear to be reliable (Ayodele, 2012). This is mapped in Appendix A.

5.7.2 Reliability

Reliability in research, measures consistency in the results of data obtained (Walker, 2011). The researcher pilot tested the questions to ensure that the survey questions

is unambiguous, meets the purposes of the research and the duration of the survey is adequate for participants to complete. The pilot test was conducted with 5 students at NQF level 5, from the educational institution who were not involved in the research.

6. Ethical considerations

It is important that ethical issues have been identified and addressed accordingly. This section will discuss the ethical considerations that are taken for the research project that was guided by du Plooy-Cilliers *et al* (2014):

- Confidentiality

Data relating to the students and lecturers for this study will be kept confidential and information regarding the participants will not be disclosed. Confidentiality will be maintained by means of coding. For examples, if referring to a lecturer, the research will code it as “*Lecturer one*”. The name of the person will not be used.

When the study is completed, shredding it will destroy the list that shows the coding. According to ABS Research ethics committee, a researcher should destroy physical data after two years and electronic data can be kept for 5 years (Evans, 2007).

- Ethics approval

This research is set to be approved by the Faculty of Management Sciences Research and Ethics Committee. This indicates that this research protocol suffices the ethical requirements set out by the educational institution.

- Informed consent

- ✓ A letter of information is provided to the participants on the purpose of the purpose of the research (refer to attachment). The letter highlights the following aspects regarding ethics: voluntary participation, harm and risk, honesty and trust, and confidentiality).
- ✓ Permission was obtained from the educational institution (refer to attachment).
- ✓ Results of the study will be made available to those interested.

8. Feasibility of the study

The feasibility of the study is discussed, and the relationships between the feasibility of various elements of the study are considered.

Resources: This is a small resource project and there are not many resources that are required for the project. For example, the resources that will be required are Google documents, computers and Wi-Fi.

Significant impact:

The research project will make an impact because it is important to understand what motivates students to engage in the classroom and how lecturers can engage with students more effectively in large classes. From personal experiences, lecturers fear engagement in large classes sizes without realizing the benefits and without proper guidance on how to deliver the lesson effectively. Therefore, the study attempts to find practices that worked well in large classes and to determine

Objectives are achievable:

All the objectives of the study are achievable as information can be obtained from the relevant target population. According to Du Plooy-Cilliers *et al* (2014) an interpretivists gains an in-depth understanding of the phenomena. The questions are empirical in nature and is both exploratory and descriptive. Data will be obtained from students.

- **Objective one** sets to measure the level of student engagement in large classes.
- **Objective two** sets to explore effective methods of student engagement in large classes

The research methodology and techniques were also adopted by similar studies of thus increasing reliability and validity for the research project.

Awareness of the research instruments

The study hopes to achieve the sample size as highlighted in the research methodology. This researcher will refer students to complete the survey via email during the contact class visits that are conducted weekly. The researcher will encourage student by explaining the benefits of this study to their academic year as most of the strategies can be used in planning and developing lecturers for second semester.

Moreover, the researcher will make use of the email distribution list from the educational institution. This link will be posted directly on their student accounts where they will be more likely to complete.

5.8 Potential outputs

The study hopes to assist educational institutions on sharing best practices

The rationale for this research is based in the following areas:

(i) Knowledge

While a number of studies have been conducted on student engagement in the classroom. The researcher would like to conduct this research in order to gain a better understanding of teaching practices that are used in her educational setting. Furthermore, it is important that there is knowledge available on best practices that can be used by lecturers who teach large classes within the Faculty of Commerce.

(ii) Educational institutions

Participating students may provide valuable suggestions to improve teaching practices that can be used by lecturers. This would be beneficial to the academic teaching and learning team in developing their lecturers who face challenges in engaging with students. The results may also provide data or linked to improving students' pass rates on campus.

(ii) Students in larger classes

The study will gain valuable insights on students' perspectives and is likely to assist

students in benefiting from improved teaching and learning practice should lecturers implement this in their teaching practices. A further benefit would be to gain insight on addressing challenges students might face being in a large class and the educational institution may address this.

6. Analysis of data and findings

The questionnaire was administered via Google documents. The link was distributed via the educational institutions email distribution list. The consent form was attached and students were asked to read the document and agree to participate in the research. This section will discuss the results found from the questionnaire. The findings are presented by question to ensure there is alignment to the study objectives.

6.1 Sample representations

The final sample included 13 respondents. Only 1 student did not agree to participate in the survey. The majority of respondents were studying for the first time at a higher educational institution (93%) whereas, 7% indicated that this was not their first time studying (Figure 1). This means that students will need to transition into Higher Education. As pointed out in literature by Ward and Jenkins (1992) is that first year students are unprepared for large classes, find it difficult to adapt, and are often felt feeling confused and uncomfortable.

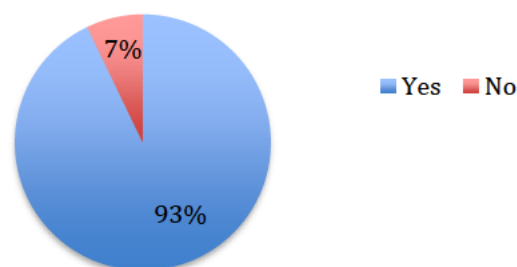


Figure 1: Numbers of students whose first time in college

The majority of the sample that responded to the survey came from the Higher Certificate in Office Administration (64.3%) and the latter from Higher Certificate in Logistics and Supply Chain (28.6%). There was a low response rate from students in Business Management (Figure 2).

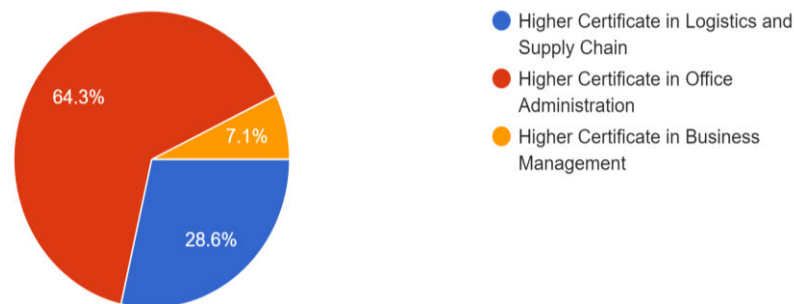


Figure 3: Programmes students enrolled in

6. 2 Factors that influence engagement

Table 1 presents findings on the respondents' engagement in the classroom, which is relatively positive. It can be seen that amongst the sample, 39% of students believe they are actively involved in their learning. However, 15% of students were not actively involved in learning in the large class. One of the reasons for students being involved in their lecture could be attributed to the results from Figure 5 where 86% of students mentioned that peer learning was a benefit of being in the class.

Students also believe that they learn a lot in their lecture (strongly agree 38% and agree 38%). More importantly it was also agreed that students' opinions are valued (54%). This means that there is discussions or communication that is taking place between the lecturer and student in the classroom, which student value. Only 23% of students mentioned their opinions were not valued in class. This could be attributed to being in a large class size, where the lecturer may not have enough to interact with students on various topics in the class (Lynch and Pappas, 2017) and Anderson *et al*, 2007).

The topics covered in class is valuable to the majority of students 46% however, 31% of students were neutral. This could mean that students are passive learners in the

content. Table 2 supports this answer, as 36% of students are passive learners, meaning that the instructor is the main source of information.

Table 1 also indicated that although the majority of students mentioned that engagement increases, 31% of students were neutral. A study by Iaria and Hubball assert that although in a large class there is interaction amongst students, a large class size is likely to affect the quality of learning in the classroom. This reason for this may also be linked to the finding, which indicate that 31% of students found the content covered in class invaluable. Consequently, literature reports that when students do not find content valuable it may impact on their performance (Rissanen, 2018).

Table 1: Students engagement in the classroom

Factors that influence engagement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Students actively involved in learning.	31%	39%	15%	15%	0
Students learn a lot during the lecture.	38%	38%	24%	0	0
Students opinions are valued during class time.	23%	54%	0	23%	0
The topics covered in class is valuable to students.	23%	46%	31%	0	0
Lecturers support my teaching and learning.	32%	54%	7%	7%	0
Students believe that effective engagement impacts the performance of the module.	38%	38%	31%	0	0

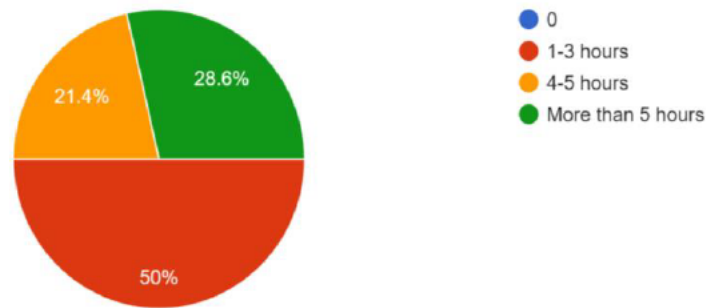


Figure 4: Number of hours' students prepare for classes

It was found that the majority of students prepare 1-3 hours for their sessions and 28.6% of students prepare more than 5 hours. Only 21.4% of students prepare between 4-5 hours. Engaging with material outside the classroom was found to be inadequate. Poor engagement of students with course content, less commitment to independent learning (Carpenter, 2006).

6.3 Benefits and challenges of being in a large class

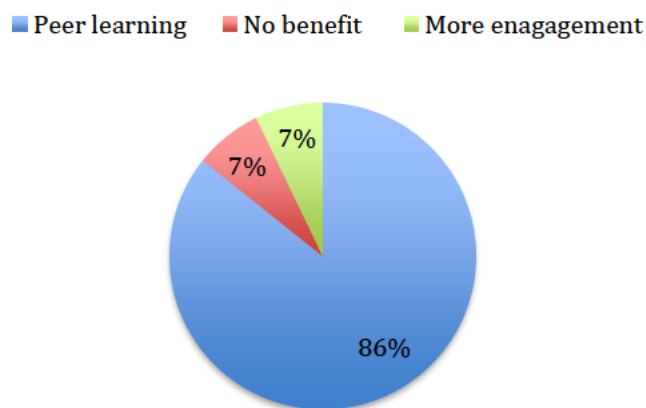


Figure 5: Benefits of being in a large class

In line with the results, a student revealed, *“you are in a bigger group with students and if there is group work there is more student who can provide input.”*

“Group activities are easier. My friends can explain to me what is happening if i don’t understand.”

This implies that students may work better in a collaborative environment with their peers. Buchs, Duran, van Keer (2017) states that learning through interaction with peers is the principles that Vygotsky mentions in his work, which can be effective.

Table 2: Challenges in the classroom

Challenges of being in large classess	Students response %
Lecturer not available after class	7%
Struggle to view presentations	7%
Physical distractions in the classroom	36%
Anonymity	7%
Passive learning	36%
None	7%

As a follow up question, students were asked to discuss challenges they have experienced in their class. Table 2 depicts these results.

Students are engaging with passive learning in the classroom (36%) – as students mentioned there require more class time to engage with their lecturer. These results are in line with Lynch and Pappas (2017) study where students’ concerns arise due to paying a lot for their studies and still do not find quality and contact with their lecturers, this makes them feel like a product.

Most of the problems associated with large classes that have been identified relate to the negative effects on student learning where students are not able to ask questions or fear of being embarrassed when asking questions in a large class size. This results in students becoming anonymous and passive students. A student alluded to *“I specifically don’t have any challenges, except that we don’t know other students’ names but we in the same class.”* As mentioned in the literature review, low

participation levels, social isolation and lack of adequate resources also figure among the problems for students identified in the context of large classes (Gibbs 1992). Carbone and Greenberg (1998) found a general dissatisfaction among students with large classes citing such factors as inadequacy of classroom facilities and environment, lack of structure in lectures, lack of opportunity for discussion as some of the reasons for this.

6.4 Student's perceptions of teaching practices

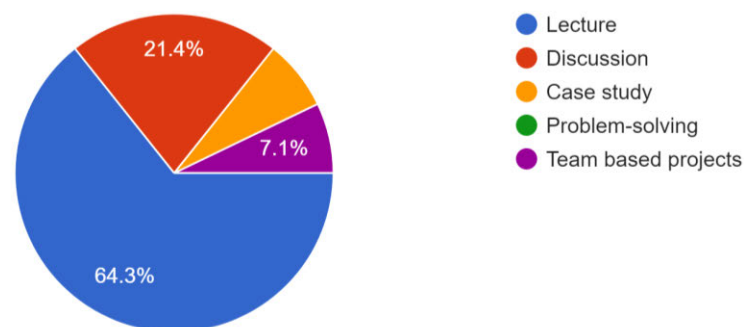


Figure 6: Teaching methods students find more valuable

Many different teaching strategies were used to engage with the higher certificate students including discussions, cases study and tasks. The teaching practices that are found in the educational institutions is discussed below:

- **Lecturing:** the students reported that lecturing was the most valuable teaching method that will benefit their learning at the educational institution (64.3%). Given the context of South African educational institutions, this is important, as students require additional support from lectures in the classroom to support their learning. More especially, being in a large class presents challenges such as physical distractions (Table 2) hence this maybe be a more suitable teaching strategy for students that are enrolled in large classes as opposed to team-based projects (7%). However, it is important to note that literature reveals that lecturing does not always promote active engagement (Strovas, 2015).
- **Discussion based teaching strategies** was the second most popular strategy for

students (21.4%).

- Additionally 7% of students' favored mentioned team based projects and case study based approaches. This is relatively low compared to other studies it was found that students in large classes did not favour team-based projects as an effective approach to increase engagement (Winsett, Foster, Dearing and Burch, 2016 and Williams, 2011).

However, although students felt they are activity engaged in the session, students did provide recommendations on improving their engagement with the content in class. It was found that 25% of students believe that being on the same pace in the class is important for learning. This means that in order for the lecture to be effective, lecturers will need to apply principles of scaffolding. This is a common issue at the educational institution where there are students with different needs and balancing their needs will improve engagement.

Additionally students mentioned that *"provide support to students who can't speak English. Also have more sessions with our lectures."* *"More support from lecturers, have more online classes like we having now. "By making sure that everyone is safe and never being left off."* *"Dividing us or doing the learning online have collaboration classes."*

Seventeen percent of students also mentioned that lecturers could provide more tasks to improve engagement in the classroom. Additionally a student mentioned that *"Dividing us or doing the learning online have collaboration classes."*

Table 4: Improving student engagement

Suggestions on improving engagement	Students response %
Provide tasks	17%
Group work	9%
Online engagement	8%
Provide indepth information	8%

Being on the same pace in class	25%
Facilities such as computers	8%
Additonal sessions with lectures	17%
Assist students with english as a second language	8%

7. Conclusions and Recommendations

Results indicate that students' value lecture based approaches in class. This can be due to reasons that students seek information and find it valuable. Cooper and Robinson (2000) also found that students favored a lecture-based approach however these authors add that the lecture should communicate content to students that would take them time and effort to research and learn on their own found this in a study. The study also find that 50% of students are spending between 1-3 hours outside of the classroom and this means that the notational hours are not being met for the programme.

Indeed lecturers need to shift their focus from passive absorption to engagement that is more active by delivering lecture that uses a variety of teaching principles such as the theory of multiple intelligence for students that, constructivism and scaffolding methods in order to ensure students are on the same pace. Students find it difficult to grasp concepts, which maybe attributed to English not being their first language. Thereby engagement in a large classroom the classroom will ensure a more educative-based approach.

Recommendations for future research include:

- Future research show the link between students in large classes and pass rates and the effectiveness of lecture based teaching style in large classes.
- The sample could also include the lecturers' perspective of teaching and learning in large classes.

Recommendations for the educational institutions:

- Consider having a programme that will assist students in overcoming English barriers, this should be open to all students.
- Monitor lecturers' engagement with students in the classroom by ensuring that students are using principles such as VARK and scaffolding techniques in large class sizes. This can be done through peer reviews and lesson plan developments.
- Encourage lecturers to know their students and foster collaboration amongst peers.
- Encourage lecturers to use learn management systems to promote independent learning and providing tasks to students outside the classroom.
- Seen as the college has large class sizes, the focus should be on training

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Appendix A- Validity of questionnaire and interview questions

Research questions	Research instrument number
Objective one sets to explore the level of student engagement in large classes.	
What factors influence student	Student questionnaire: Q5-9

engagement in the classroom?	
What are student's perceptions of the teaching methods used in class?	Student questionnaire: Q-2-3
Objective two sets to explore effective methods of student engagement in large classes.	
What are some best practices used by lecturers in engaging with students in large classrooms?	Student questionnaire: Q1-3
How can the educational institution assist lecturers with increasing student engagement?	Student questionnaire: Q4- Q7