Fostering active engagement in large classes teaching

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Introduction

The growth of massification in Higher Education around the world is regarded as a challenge for teaching in Higher Education (HE). This huge growth in large numbers of student enrolment has created anxiety and discomfort among academics, especially in promoting interactive quality teaching and learning. In this context, Large classes are a common characteristic that caused the change in the profile of HE in South Africa, coupled with students' cultural diversity, and varying levels of educational challenges from poor levels of academic proficiency to weak connectivity especially in rural based universities. Class size in isolation is not a distinguishing feature of student performance, but class size matters in relation to educational goals and the educational experience (Hornby, Osman, De Matos-ALA, 2013). In HE the goal of teaching is beyond simple knowledge acquisition to the promotion of student engagement, and higher order cognitive function. The aim of this project was to foster active student engagement in teaching large classes.

Teaching large classes differs in terms of context, but it has been a well-known fact that subsidies to HEIs has been reduced for the past 20 years. This has huge impact on resources like human resource, WIFI connection, infrastructure support. Moodley (2015) identifies aspects contributing to adequate resources. They are amongst others venue capacity, lecture-student ratio, and, inadequate staff. However, Nyamupangedengu (2017) argues that the cause of large classes in Higher Education Institutions (HEIs) might be: the delivery of the curriculum which does not cater for a diverse student body and a lack of standardisation of teaching and learning processes to accommodate the realities of the majority of the students.

Stats SA (2017) also highlighted that half of the students who enter HEIs are unable to complete on time and take a long time to complete their qualifications. Furthermore, Lipinge (2013) avers large classes are prevalent in many universities and are often gateway courses to students' major field of study, where the drop-out rate is very high between the first and second year of study.

Ndebele and Maphosa (2013) state that active learning is a planned series of actions or events where students: process, apply, interact and share experiences as part of educational process. Active learning promotes and instils independent thinkers who are able to view the world beyond the university. In active engagement students are expected to learn how to develop their own knowledge through critical interaction, simulation and authentic engagement.

Student engagement refers to the degree of attention, curiosity, interest, optimism, and passion that students show when they are learning or are being taught, which involves motivation to attain the level of development and progress in their education (Ashwin & McVitty, 2015). Students' active engagement is important in teacher education as the experiences the students acquired would prepare student teachers for different situations they will encounter throughout their working life-world.

Technology has also resulted in better transfer of knowledge and excitement in the process of teaching to enhance deep learning. The University of Johannesburg emphasises that in a class with a broad range of demographics students with a low self-esteem who fail to achieve often sit passively at the back of the room (Hornby et al., 2013). When introducing technology, it was found that these students viewed learning as fun as they were engaging with their peers and the lecturers. In Australia it was found that mobile and wireless technology can provide opportunities for participation, and active engagement of students. Technology is regarded as able to cater for a range of abilities, interests and learning styles. A particular use of technology in teaching can also have barriers especially with some students who still expect the voice of the lecturer in explaining concepts, before they can have true meaning and understanding.

Theoretical framework

This study is located within the social constructivist theory of learning by Vygotsky. In analysing social constructivist theory Biggs (1999) emphasises that students in HE must engage and take responsibility for their own learning. According to social constructivist (Vygotsky) knowledge involves social construction where students are invited to share and learn from the interaction while the teacher controls the learning environment and management of assessment activities. Social constructivists emphasise the social environment as facilitator of development and learning, where

students' learning is enhanced by active engagement with the content (Ndebele & Maphosa, 2013). The more the student receives support from their peers, the lecturers and the supportive materials and resources, the more they expand their understanding, skills, conversations and become independent.

The study seeks to answer the question*: What teaching strategies can be used to teach large class to promote active student engagement?*

 Figure 1 shows the analysis of social constructivist as analysed and interpreted in this study.
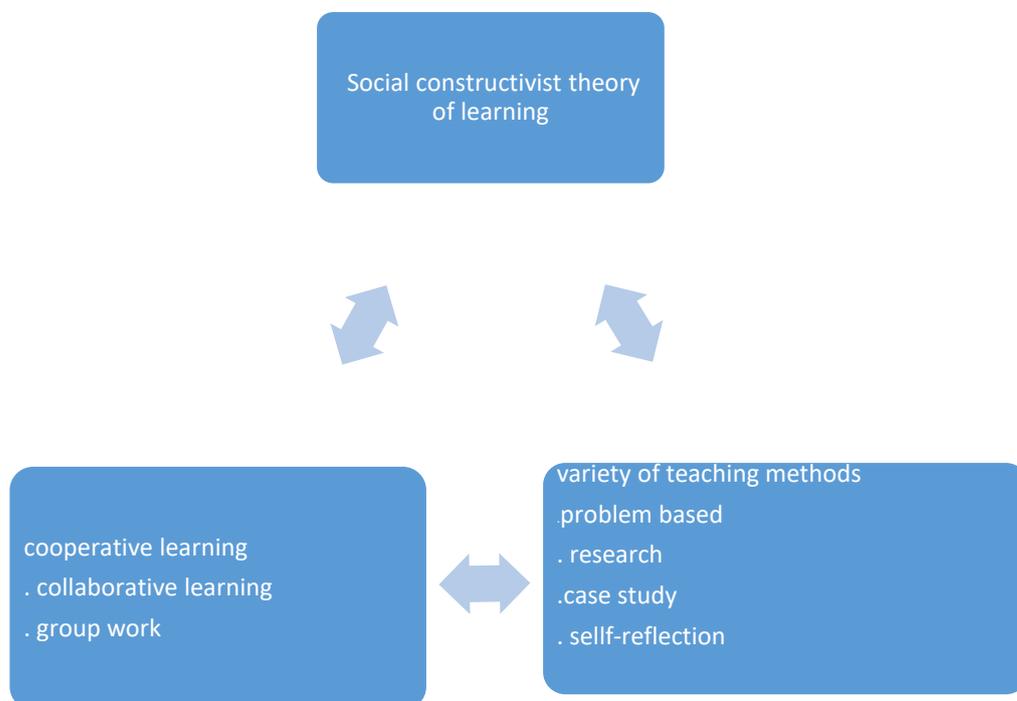

Figure 1 A mind map of how the Social constructivist theory was incorporated in this project

Methodology

This project used the qualitative research approach and, an interpretivist paradigm was employed in this study. The interest was to extract participants' opinions and views on large class pedagogies. In this study seven (7) lecturers took part in-depth unstructured interviews. Purposive sampling entails the selection of the sample based on participants' judgment, and the researcher must be confident that the chosen sample is truly representative of the entire population (Creswell, 2014). Typically, the evaluation involves obtaining the perspectives of different participants in the case.

Ethical clearance was obtained for the small project nested within a bigger project for scholarship of teaching and learning. Individuals who participated in the study were respected and given pseudonyms. Participants were assured that their responses will not be identifiable in any way and that they would stay anonymous.

Data collected were analysed by identifying four themes; *large classes, teaching strategies, challenges in promoting active learning challenges and student support.* Data collection was also aligned with an interpretivist paradigm in considering actions and opinion of participants. The responses were compared to find common themes.

Findings

The findings of the study indicate that participants had their different interpretation and conceptualisation of what constitutes a large class. They mentioned large numbers per class, while Mulryan-Kyne (2010) and Ndethiu, Masingila, Miheso-O'Connor, Khatete, Heath (2017) and Hanover (2010) shared different perspectives with regard to the concept. They state that large classes depend on personal perspective, culture, lack of interaction and the remoteness and inaccessibility both in and out of class. This kind of information will also guide the teacher on what to consider in preparing for activities that would engage students in class, even in a small class.

The finding also revealed that facilitators also need to use a variety of teaching strategies that foster student engagement. Participants indicated that they use cooperative strategies in their classes; they opted for instructional activities that are more student-centred and focused on guiding students to achieve outcomes to construct their own meaning from learning as shown in Figure 1. The facilitator should possess skills and competency to teach in HE. The university under study, in responding to competency to teach at HE, proposes to expose all academics to do Postgraduate Diploma in Higher Education Teaching (PGDHET). This programme exposes academics to a variety of policies in the HE context, such as teaching and assessment strategies, that guides academics to prepare materials that accommodate students' the differences.

Tutorials, small groups and, presentations were regarded as the most used methods. It is only one participant who had mentioned problem solving and debates as strategies for engaging students in large classes.

The findings revealed that participants indicated that they use tutors, online videos, extra materials, Moodle, mentorship and peer support. Improvement in the infrastructure would be appropriate to provide students with proper learning spaces to encourage active learning engagement through collaboration and support from the faculty and the tutorials.

Conclusion

The study revealed that large classes become a challenge when promoting active engagement. In active learning students are expected to learn how to develop their own knowledge through critical interaction and engagement. Academics should be provided with continued opportunities to develop and initiatives that would empower them with innovative pedagogical strategies and methodology to engage students actively in large classes. Students in these classes can also be expected to collaborate voluntarily

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