



Utilising Social Networking Technologies to Increase Students-Lecturer Interaction in Contexts of Large Classes

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Purpose and motivation of the study

My study explored prospects for adopting social networking technologies in this case, WhatsApp platform to mitigate the challenge of student-lecturer interaction in contexts of large classes at the University of Venda. Student enrollment figures continue to increase disproportionately to the available classroom space in the university. There are many instances of large classes, where students overflow the allocated space, thereby compromising students-lecturer interaction.

Literature on large classes points to the pedagogical challenges of lecturers failing to attend to the needs of the diversity of the students in the classroom, difficulties in managing discipline as well as untimely and ineffective feedback (Machika, Troskie-de Bruin, and Albertyn 2014, Zhang 2010, Harmer 2000, Carpenter 2006 and Haddad 2006). This results in diminished student interest in the learning proceedings. On the other end, literature on emerging technologies (Bozalek and Ngámbi 2015; The NMC Horizon Report 2015; Bozalek et.al.2013; Kizito 2012, Johnson and Adams 2011; Veletsianos 2010) reveals the value of emerging technologies and their connectivity facility in promoting hybrid learning as opposed to traditional approaches that confines learning to the classroom context. In 2015 the University of Venda responded to the suggestion of integrating emerging technologies for pedagogical purposes by issuing free Tablets to all students. Since the distributed Tablets are loaded with social networking platforms like WhatsApp, Tweeter and Face Book, the study explored the possibility of using WhatsApp to increase out of class students-lecturer academic interactions. This was done as a way of mitigating the challenge of interactive learning in large class contexts.

Literature Review

Debate on pedagogical challenges associated with large classes has long been carried out. Interestingly, there is no unanimity among scholars on the definition of what constitutes a large class (Hayes 1997). The fact that perceptions about large class are contextual, makes it difficult to find exactitude a definition of large class. Jawitz (2013), Jawitz (2013), Daniel et.al (2010) Onwu and Stoffels (2005) convincingly posited that when confronted with a situation of lack of physical space for movement due to overcrowding, diminished opportunity for learners to participate actively in class, limited opportunities for both instructor and learner to interact and the general conditions constrain or impedes meaningful teaching and learning, that defines a situation of large class.

A copious amount of literature explains the pedagogical challenges associated with situations of large classes. As posited by Harmer (2000), challenges of large classes affect both lectures and learners. Large classes can be a pedagogical disaster since teachers in most cases fail to attend to the diverse needs of learners, manage discipline, failure to give timely and effective feedback. Haddad (2006) argues that when learners' diverse needs are not met, they lose interest in learning and this results in discipline related problems. Strained interpersonal relationships between the learners and the instructor normally emerge (Zhang 2010, Carpenter 2006, Tan 2009).

Globally, the need for integrating emerging technologies for pedagogical purposes has long been realised. Johnson and Adams (2011) define emerging technologies as those innovations which have the potential to promote teaching and learning as well as creative inquiry in institutions of higher learning. In the context of South Africa, embracing Emerging Technologies (ETs) for teaching and learning gained credence as part of preparing students for the challenging and sophisticated global working environments (NMC Horizon Report 2015; Kizito 2012; Bozalek 2011; The National Research and Teaching Foresight ICT report 2003). Pioneering studies by Bozalek (2011) concluded that ETs have the potential to promote learners' interaction with peers and educators thereby contributing to quality education outcomes. Similar opinion is shared by Mangukiya (2012) who attests that because of connectivity enhanced by the emerging technologies, teaching and learning is no longer confined to the classroom, but can take place anywhere possible. An expansive definition of ETs shared among scholars looks at them as tools, technologies, innovations and advancements that can be used in diverse educational environments for teaching and learning purposes (Bozalek et.al.2013; Veletsianos 2010). Gadgets or tools such as mobile cell-phones, tablets, and social networking technologies among other portable computing devices form part of ETs. Bozalek and Ng'ambi (2015:105) further describe integration of ETs as "transformative pedagogical practices".

In line with ETs, the use of social networking technologies (SNTs) for academic purposes has created new pedagogy opportunities, especially for well-resourced teaching and learning institutions. Social networking is a 21st century innovation that broadly defines some "technological tools that stress the social facets in [the] form of a funnel for communication, collaborative learning, and inventive expression; this is also to boost education in a higher institution of learning" (Al-Rahmi and Othman 2013:11) . There is profound evidence in education of the growing popularity and usage of SNTs, specifically Facebook, Twitter and Skype, and their subsequent impact on pedagogy amongst students at historically disadvantaged institutions (HDI) (Munyoka, Dzimiri and Runhare 2019; Bell 2010; CHE 2016). However, these SNTs provide different tools, working environments and cultures (Ractham and Firpo 2011). Due to such differences and the possibility of complexities in comparison of how the tools are used, Ractham and Firpo (2011) suggest that researchers should use one of these SNTs to demonstrate their utility and impact on pedagogy.

The advent of smart devices like smartphones and tablets with WI-FI connectivity meant that both students and lecturers are reachable anywhere and anytime. This resonates with insights from the connectivism learning theory that argues for aligning modern learning with the current digital innovations. (Siemens 2004). Connectivism theory is, therefore, fundamental to this study since the theory outlines internetworked collaborations and information exchange facilitated by the proliferation of smartphones connected to wireless internet. It is further noted that through connectivism knowledge is collaboratively constructed and that connectivity is the medium of knowledge transfer (Downes 2007; Siemens 2004). What makes connectivism distinct from other conventional learning theories such as behaviorism and is its ability to locate learning within the confines of technology (Ball 2011). It is within the same mindset that the study explored how WhatsApp besides being a SNTs can proffer practical ways towards bridging the polemic divide between the lecturer and learners in contexts of large classes. The challenge of large class is what I grapple with annually in delivering on my teaching duties at the University. Allocated venues for 3rd year classes overflow with students yet very little has been done to address the challenge of teaching space. This

has adverse consequence, especially for those students who do not have a seat in the classroom and stand or sit in the corridor or on the floor inside the classroom.

Against the outlined challenges of large contexts, Action based research study was conducted to establish how WhatsApp social networking technology can be utilised to address the challenge of student-lecturer interaction beyond the classroom contact setting.

Significance of the Study

A study on utilization social networking technologies to mitigate challenges of large classes at the University of Venda is an under researched area. The study thus contributes to the knowledge gap on utilization of social networking technologies for pedagogical purposes.

Implementation

A qualitative action-based research was deployed in exploring how social networking technologies can be utilized to mitigate challenges of student-lecturer interaction in contexts of large classes. Collaborative action-research with a participatory component was adopted and this entailed working with two colleagues interested in improving their teaching practice in the context of large class contexts as spelt in the problem. As a collaborative team of 3 lecturers experiencing a similar challenge of large-class and limited learning space, we all created a group WhatsApp platform involving 3rd year students in International Relations in the Development of Studies. Three of us as lecturers could interact with the students after class hours discussing various topics covered in class. A total of 65 students participated on the group WhatsApp and the research activity commenced between July 2018 to April 2019 academic periods. Initially, as lectures we could trigger discussions with students on various topics covered in class or any other contemporary contending topic and students could join in and share their views. As lectures, a prime task was therefore to observe, monitor and reflect on progression on WhatsApp interactions or conversations. Students interacted with fellow peers and lecturers in the comfort of their homes or rooms. This has resonance with the wisdom of connective knowledge or mobile learning championed by connectivism proponents (Ball 2011; Downes 2007; Siemens 2004) The value of utilising action research with a collaborative component lies in the fact that as a team of lecturers, we could gather and analyse the conversations and decide on the plan of action towards improving teaching and learning in view of our situation of large classes (Hine 2013 and Dean 2010).

For purposes of impact assessment, face to face in-depth interviews were conducted with 10 purposively sampled students who had participated in the class-group WhatsApp to establish the extent to which they feel connected to their respective lecturers since participating on the group (Babbie (2016) and Alshenqeti (2014) . The following questions guided the interview process: (1) What is your learning experience in a large class? (2) Is your class participation improved during WhatsApp conversations? (3) Are complex issues clarified on WhatsApp? (4) Do you experience improvement in student-lecturer engagement during group chats more than during the class? (5) What is your overall experience of mobile learning through the WhatsApp platform? In-depth interviews were meant to examine their learning experiences after partaking in the WhatsApp group. Utilising a dual method involving in-depth interviews and collaborative action-research with a participatory component helped to verify the WhatsApp outcomes as well as ensuring data trustworthiness. Since this study was collaborative with other lecturers, analysis therefore involved a comparative model of similarities and differences on the same category of responses, for example identifying where students are agreeing and disagreeing on the same question. Another in-depth interview was conducted with the fellow participating lecturers. The comparative approach was informed by the fact that the questions were the same for both the students. This was meant to extrapolate where students and lecturers' responses and observations converge and diverge.

Permission to conduct the study at the University of Venda, was sought from the University research ethics. This is mainly because the study involved the University of Venda students and Lecturers. Due to continued disruptions in the academic programme the clearance is not yet issued but the research office is well aware of my TAU project. As part of adhering to the ethics of research, before each student participated in the in-depth interviews, they were asked to sign an informed consent form as evidence that participation was voluntary with free will. The consent document containing the purpose and processes of the study was made available to all participants to make an informed decision to participate.

Results

The results followed key themes that emerged from the data that was informed by the five questions that guided the in-depth interviews. Such themes were: (1) learning experience in large class (2) class participation on WhatsApp conversations (3) clarification of complex issues (4) student-lecturer engagement during group chats (5) overall experience of learning through WhatsApp Data was analysed through thematic analysis. This method entails systematically identifying, organising and offering insight into patterns of meaning in a data set (Braun, Clarke, Hayfield and Terry 2019). The analysis process began with a thorough reading and re-reading of the transcribed interview scripts as well as the printed WhatsApp group conversations. The interviews were read in conjunction with brief notes which had been noted down during each interview session. The idea behind was to address the notion of critical distance. Researchers played several roles in the research process; of interest are the roles of designer and evaluator. Engaging continually with data maintained some level of critical distance (Charmaz, 2014; Corbin, Strauss, and Strauss, 2014). As noted by Cassell, Cunliffe, and Grandy (2018), critical distance is necessary for one to remain detached and objective in the research process. In addition, continually engaging with data allowed the researcher to develop some form of relationship and familiarity with the text (Blanche, Durrheim, and Painter, 2006). During the reading of each interview, notes were made in the left-hand margin on the transcriptions. A similar approach was also adopted on WhatsApp prints. This was done to identify and describe discourses in the texts.

Theme 1: learning experience in large class

It was evident in the data collected and analysed that students in 3rd Year Development Studies had experienced pedagogical disaster due to large-class environments. They expressed that their learning needs were not adequately catered for mainly because they spent most of their time outside than inside the class. As a result, they experienced some disconnection with the class proceedings. *One student stated that, "every time I feel like coming to class is merely a fixture and at times I do not come since it does not make a difference"*. From the student's worlds what can be deduced is the feeling of frustration and disconnection with the class proceedings.

Theme 2: class participation on WhatsApp conversations

The study results show that class group WhatsApp has both strengths and weaknesses. Outcomes from in-depth interviews and conversation observations show that students participate more on the group than in class. They expressed confidence boosting and more relaxed than contact class situations. They displayed active involvement and more inquisitive as opposed to the constraining classroom environment. At one point, one learner invited a discussion saying, *"guys can we really entrust our future in the hands of ANC criminals?"* Without looking at the merit of the question, one can tell that through SNT, learners take charge of their learning needs and create a culture of debate. Social Networking Technologies however are prone to abuse by some carefree students.

Theme 3: clarification of complex issues

Emerging from the study findings is that complex issues are collectively addressed as opposed to the classroom setting where students leave without asking clarity seeking questions. There is room for further probing and in most cases, students get enthusiastic and want to display their know-how by clarifying issues before the lecturer's intervention. In one context, a student asked a question, "*What are the top conflict drivers in contemporary Africa?*" This is a topic that was covered in class but it took almost thirty minutes without anyone attempting to answer the question. I could quickly intervene and explain since the indication was that everyone was in the dark in terms of answering the question.

Theme 4: student-lecturer engagement during group charts

Both the observations and in-depth interviews outcome revealed increased student lecturer interaction due to mobile connectivity and interactive facility offered by the WhatsApp platform. It emerged that the WhatsApp as a social networking platform allows for informal interaction that cannot happen during classroom setting. As earlier argued, it bridges the gap for student-lecturer interaction as well as the power dynamics that exists in the context of large classes. At one point, a student boldly said, *sir I think you are wrong to say that modern youth activism is infiltrated by hooliganism*". This is something that learners cannot expressly say in a formal fora given the power dynamics of learning.

Theme 5: overall experience of learning through WhatsApp.

Overall, study findings show that despite being a social interaction technology, WhatsApp is useful as a learning tool. Again, there is high degree of student participation on the group as opposed to class contact sessions. There is academic freedom that comes with mobile learning through social networking technologies like the WhatsApp as students can express themselves through conversations on the group. Through in-depth interviews with one of the participating colleagues, he attested that, "*knowledge sharing through WhatsApp has in fact helped me to make necessary adjustments in the manner in which I conducts my class because students can air their concerns without fear of victimization*". This again speaks to the importance of WhatsApp in reflective teaching.

Conclusion

The study concludes WhatsApp as a social networking technology provides rich platform for mitigating the perennial challenge of student-lecturer interaction in contexts of large classes. In this era of the fourth industrial revolution, learning through social networking technologies provides connectivity in knowledge construction and dissemination. However, in the absence of monitoring and strict control mechanisms, WhatsApp is prone to disruption by rogue students. In some contexts, stubborn students can disrupt the flow of conversations by inviting less academic related issues. Also, that in the absence of face to face interaction with the lecturer students have a tendency of being disrespectful of other and at times use vulgar language. In conclusion therefore, despite the pedagogical dividends of utilizing social networking technologies, there is need for setting the operational parameters guiding the engagements.

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