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WHATSAPP UTILISATION AT AN INITIAL TEACHER PREPARATION PROGRAMME AT A UNIVERSITY OF TECHNOLOGY IN SOUTH AFRICA

Abstract:

All universities in South Africa are encouraged to use a Learning Management System such as Blackboard to facilitate blended learning. Despite, the availability of Blackboard at one university of technology in the country, some lecturers and students prefer utilising WhatsApp for teaching and learning. The purpose of this study is to investigate students and lecturers' perspectives about learning and teaching using WhatsApp at a university in South Africa. The study was done using a qualitative case study within an intepretivist paradigm. It was guided by Garrison, Anderson and Archer's Community of Inquiry as a theoretical framework. Sixteen students and two lecturers who heavily use WhatsApp were purposively selected to participate in semi-structured interviews and focus group discussions. The study found that lecturers use WhatsApp not only for communication purposes, but to foster collaborative learning among students. Although students noted some limitations which they experience when using WhatsApp, they preferred the social media to blackboard. The study concludes that although WhatsApp is response to students' needs, it does not adequately prepare students to graduate with digital literacy skills expected by the Department of Education in the country.

Keywords:

LMS; Utilisation; WhatsApp; Curriculum; Teacher

JEL Classification: I20

Introduction

Since the advent of the Fourth Industrial Revolution (4IR), technology has been one of the dominant pedagogical tools used to enhance students' learning experiences in higher education across the globe. Various emerging technologies are being used in institutions of higher learning including social media. Rambe and Bere (2013) argue that technological applications which include social media are being utilised to enhance teaching and learning in most 21st century universities. There are various social media which are currently being used in higher education today. This include Facebook, Twitter and Instagram. Since there are many different types of social media used in higher education, Ta'amneh (2017) contend that universities should pay a very special attention and carefully observe which social media its students are using and make the most of it to support their learning and inform programme design and delivery. WhatsApp is one of the widely used social media which is no longer being used exclusively for communication purposes, but also to facilitate learning among students in higher education (Baruah 2012).

WhatsApp has been found to be helpful for learning because it promotes student participation in both face-to-face and distant contexts between students and lecturers (Willemse, 2015). According to Fattah (2015) WhatsApp technology can enhance students' active participation. It can provide students with a chance to practice language for free. Alqahtani, Bhaskar, Elumalai, Abumelha (2018) argue that WhatsApp is a significant learning platform that helps students develop and support their language learning skills. The social media enables students to learn collaboratively.

Fattah (2015) states that the use of WhatsApp in teaching and learning is ideal in the digital era, as it necessitates collaborative learning among students and lecturers. Sayan (2016) echoes the same sentiments that although WhatsApp is a relatively new tool in education, its usage is massive as it comprises of up-to-date features that encourage lecturers and students to use in order to enhance collaborative learning. WhatsApp is being used in higher education to enhance discussions and sharing of information among students and their lecturers (Yeboah and Ewur 2014). It helps students to self-construct and share information and knowledge for learning through computers or mobile devices. WhatsApp provides students and lecturers with the ability to work in groups (WhatsApp groups) where meaningful subject related discussions can be made (Gachago, Strydom, Hanekom, Simons and Walters 2015).

Rajab and Rashid (2016) contend that group discussions allow students to communicate and discuss course related topics with fellow classmates and an instructor. Rambe and Bere (2013) and Rambe (2015) concur that WhatsApp is a useful resource in South African higher education as lecturers use it extensively to reach out all students and to ensure that discussions related to the subject are taking place. Rambe and Chipunza (2013) postulate that students at a South African university perceived WhatsApp as a level for bridging to peer-generated resources, heightening on-task behaviours and promoting important context free-learning.

WhatsApp helps students improve their academic performance. According to Ta'amneh (2017) a group of students who learnt using WhatsApp performed better than students who learnt using the traditional technique (face to face). This means that the utilisation of WhatsApp is consequential in the teaching and learning process. WhatsApp plays a crucial role on students and lecturers as it allows differentiated instruction to occur (Sayan 2016). When differentiation is implemented in learning, students' academic performance is likely to increase as their

individual needs will be met. Cetinkaya (2017) concurs that WhatsApp has an impact on the way students perform academically and its use is welcomed extensively. Cetinkaya (2017:1) states that the "use of WhatsApp in education process should be stimulated as a supportive technology". This means WhatsApp should not be the main technology which must be used to facilitate teaching and learning. It must be used as a supporting tool only.

The usage of WhatsApp in higher education teaching and learning is welcomed with mixed feelings by academics (Rambe and Bere 2013). Mwakapina, Mhandeni and Nyinondi (2016) postulate that although WhatsApp is praised by some scholars as a good teaching and learning tool, the social media is criticised for being disruptive and not suitable for generating meaningful discussions which promote effective teaching and learning. Mwakapina et al (2016) further argue that in spite of the fact that WhatsApp is popular today and it is used by some academics as a teaching tool, its suitability and utilisation in facilitating appropriate teaching and deep learning in higher education remains debatable. Those who challenge the suitability of WhatsApp as a teaching and learning tool argue that the social media tool is suitable for social interactions, communication and sharing course related material.

A study conducted in Zambia found that WhatsApp was mainly used for social interactions by final year students (Akakandelwa, Moonga and Changala 2018). The academic related ways in which students used WhatsApp were mostly to alert friends about the absence or presence of lecturers, conveying academic tasks which include assignments, tutorial questions and answers, time-tables and other notices (Akakandelwa et al 2018). Similarly, a study conducted in Tanzania confirmed that students used WhatsApp mainly for sharing study materials such as links to online learning resources, notes, assignments, and coursework (Mazana 2018). WhatsAp was not used for deep academic discussions among students, neither was it used for discussions with lecturers in both studies conducted in Tanzania and Zambia (Akakandelwa et al 2018 and Mazana 2018). In fact, Akakandelwa et al (2018) postulate that there was very minimal communication for educational purposes which was done by students and lecturers.

Lundberg (2018) criticised the app saying being on your phone can appear disruptive and rude in classroom. WhatsApp was built as an alternative to short messaging service (SMS) and it is not suitable as a technology for enhancing students' experiences as deep and focused student discussions are hard to attain using the social media application. In spite of the shortcomings levelled by various academics against WhatsApp use for educational purposes, it can be used to enhance students' learning experiences in higher education. Kustijono and Zuhri (2018: 1) contend that WhatsApp can be implemented to attain educational purposes as it can be used to train students' critical thinking skills, and "the existing constraints can be overcome."

At the context where this study was conducted, some academics are utilising WhatsApp explicitly as the main teaching tool. This is despite the fact that the institution is emphatic on utilising a blackboard. The institution has a Faculty of Education which is the biggest teacher education provider in the province and it envisions to be at the heart of technology education and innovation in the continent. By implication, one would expect that academics and students at the university which envisions to be at the heart of technology and innovation in the continent optimises a LMS to facilitate blended learning approaches. But, some academics are utilising WhatsApp as a teaching and learning tool. Utilisation of WhatsApp as a teaching tool at an initial teacher preparation programme does not only contrast with the institution's blended learning guidelines, but also with goal 16 of the Department of Basic Education (DBE) Action Plan to

2019 which seeks to let all trainee and in-service teachers to have comprehensive subject knowledge and good computer literacy skills.

There is dearth of research on how WhatsApp is utilised for educational purposes and the impact that it has on students' academic performance (Akakandelwa et al. 2018). In a bid to fill that gap, this study seeks to investigate students and lecturers' perspectives about learning and teaching using WhatsApp at a university in South Africa

Theoretical Framework

This study utilises Garrison, Anderson and Archer's (2010) Community of Inquiry (COI) as a theoretical framework. The origin of this theory can be traced back to the work of John Dewey and it is consistent with the constructivist approach to learning (Garrison and Arbaugh 2007). The theory of COI in an online context assumes that learning occurs within the community through the interaction of three core elements: i) cognitive presence, ii) social presence, and iii) teaching presence (Garrison et al. 2010). Cognitive presence involves the extent to which students are able to use their critical thinking skills to construct meaning (Garrison et al. 2010). This is related to this study where students use WhatsApp and their cognitive skills to perform learning activities. The social presence in online environments has been defined as the way that students portray themselves in their online interactions in the absence of face-to-face communication (Kumar, Dawson, Black, Cavanaugh and Sessums 2011). Students' collaboration (using WhatsApp) with others and with lecturers give rise to a social presence and a sense of online community (Garrison 2011). This is related to this study where lecturers and students have an online learning community (WhatsApp) which they use to achieve educational goals.

Kumar et al (2011) define teaching presence, as a facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes. This component of COI is evident in this study where students are utilising WhatsApp beyond communication, as they interact with lecturers for learning purposes. The theory of COI was chosen for this study because a combination of its three components ensures a collaborative constructivist e-learning educational experience of students. The theory is related to the study as it deals with online teaching and learning which is supported by the COL.

Methods

The study was done using a qualitative approach within and interpretive paradigm. A qualitative approach was chosen as it allows researchers to collect rich textual data through interaction with participants (Cohen, Manion and Morrison 2018). Interpretive paradigm was chosen as it is compatible with a qualitative approach and it allows participants to explain the phenomenon in detail (Creswell 2012). The study was done as a case study of the Faculty of Education of a university of technology in South Africa. A case study was chosen as the researchers sought to have an in-depth investigation of participants' perspectives (Yin 2018) about using WhatsApp at the university. Purposive sampling which is characterised by deliberate targeting of information rich participants (Creswell 2012) was used to select two lecturers and sixteen students who are using WhatsApp as a teaching and learning tool. Data was collected using focus group discussions with students and semi-structured interviews with lecturers. Data was analysed using content analysis. Ethical issues were observed by obtaining ethical clearance from the university. Purpose of the study was explained to participants prior to data collection.

Participants signed consent forms and they were informed that they were free to withdraw from the study at any point in time.

Findings

The findings collected from the research participants show that WhatsApp is used as a tool for communication among other uses. Both students and lecturers agree that WhatsApp is a platform that provides easy access to information and it is used to communicate course related information, for example, class is cancelled, venue has been changed. One student said, "WhatsApp is easy to use to transfer information as everyone can have access to information sent by lecturers. Sometimes when time for a lecture is changed or when a lecture is cancelled, it is easy to get information." Students unanimously agreed that WhatsApp is an effective tool for communication. One student said, "I have been using WhatsApp during my studies and it is helpful because it is easy for me to get information from other students especially when I need something urgently to use for my study." Another student concurs by saying,

It is easy to communicate and response is fast as most of the people are always on WhatsApp for their personal issues. Things which are posted on WhatsApp for learning are understandable and short and lecturer can also maintain communication with students and we can also use Wifi instead of using data.

Both lecturers supported the view that WhatsApp is ideal as a communication tool. Lecturer A said "I use it in many ways to communicate information to my students, sometimes it can be informal like please do not forget we have a lecture tomorrow or please bring this to the lecture tomorrow". Lecturer A further clarified the way in which she uses WhatsApp for communication saying, "with WhatsApp, I can get hold of students instantly and we can just communicate as easy as we want about work or about other problems that they may be experiencing". Similarly, lecturer B concur with the view that WhatsApp is used for communication with students: "I use WhatsApp to reach students and reminding them about the crucial work that needs to be done."

Another student supported the view that WhatsApp is idea for communication especially if one was absent.

Let us say for example you were not in class and then you obviously have numbers from group chats surely you are going to take one number of the student and ask him/her to help you with information. WhatsApp is useful because you get information fast and then you communicate with students and lecturers fast. If I do not want to attend classes I can communicate with those students and ask what was happening in class and then I can get everything for example assignment and notes.

It was found that WhatsApp is used to enhance students' learning experiences. One student reported that as a result of WhatsApp, they are able to get guidance and support from the lecturer on projects that they will be working on. One student said,

Lets say you are writing a research proposal and you encounter a problem with the design phase, you can ask a lecturer who is continuously there to help you. Basically it (WhatsApp) helps you with your assignments especially if the lecturer is involved. You are able to communicate with that lecturer through the whole assignment or proposal.

Another student concurs that WhatsApp enables students to discuss ideas and the lecturer will be in a better position to oversee what students are discussing and correct if any wrong information is given by another student. The student said,

When sending information on a WhatsApp group, you must be specific about who you are sending to because any student can reply. Even if any other student reply the message by answering the question, it is still okay as the lecturer will be there to correct wrong answers given and he can say that what the person said was correct or incorrect or the lecturer can add to what the student has said. If the student does not understand, the lecturer will elaborate further or call you for consultation.

A lecturer concurred with the view that students are supported via WhatsApp on their educational tasks:

During the recent bus strikes, we were running a series of workshops for the first year students and because of the bus strikes we had to let the children stay at home. They could not get here; it became possible to give them work on a daily basis on WhatsApp and tell them what to do. I use it (WhatsApp) as a call centre. I could sit at home and they could ask questions so it was almost like a lecture in progress.

Another lecturer said, "They (students) can contact me to tell me if they are having a problem, or something which they do not understand and I help them. Or they can tell me about the problem the next time I see them and I help them"

Some students praised WhatsApp for making it easy to complete their group work tasks easily and effectively. A student said,

WhatsApp has an impact when completing group work task. It helps when everyone in the group has the same mind-set of completing the educational task and it is essential to set up ground rules so that if anyone says A, B, C or D gets blocked or is removed from the group. WhatsApp is effective when you are working on the same assignment for instance you are doing a research proposal as a group, you divide the work according to the components of the proposal. You will have someone working on introduction, the other one will be working on literature view and the other one will be dealing with methodology. When everyone is done with their sections, they can just send you and you have one document. Lets say you are chasing a deadline of 12pm and all group members are in different places, all the work can be done timeously using WhatsApp.

Students reported that WhatsApp enables them to work collaboratively. One student explained how they work collaboratively,

WhatsApp for me is effective when it comes to group work. We discuss the topic on WhatsApp and complete the whole assignment and submit. Before submission, we meet to make touch ups, but the assignment will have been completed through discussion on WhatsApp. If you have something you do not understand, you send it to the group. We read and explain and come to a conclusion, basically that is how we do it.

Students reported that WhatsApp helps them improve their language skills. One student said,

I would say that it (WhatsApp) improves your language skills because mostly we chat with friends from other provinces or country like Lesotho. As a result of chats that we have on WhatsApp, we learn something about other people's language. We sometimes play mind games where somebody asks a question which requires the other to think and come up with an answer. For example, Sipho's father had three sons … In order to respond to this, one has to think.

Another student concurs that WhatsApp helps improve language skills: "WhatsApp correct spelling mistakes. Lets say you are communicating with other students and you write something

incorrectly, it can correct you." Another student said "WhatsApp is good as students can communicate in their mother tongue and understand concepts better." Another student supported this by saying, "WhatsApp is effective as students can send a voice note explaining something in your local language and that makes it easy for us to understand."

Students preferred learning using WhatsApp compared to Blackboard. Students who preferred WhatsApp to Blackboard said, "Yes, WhatsApp is much better than Blackboard." Another student said, "haai, that Blackboard never works" and another said, "at least with WhatsApp we know it is going to work." Students claimed that Blackboard at their university hardly works, that is why they prefer using WhatsApp for educational purposes. A student said,

I probably check my WhatsApp more than 50 times a day. I always know when things are happening. I would never do that on Blackboard, because half the time, Blackboard is not even working. Also, the computer labs are always full, so we never get a chance for Blackboard.

One student who preferred WhatsApp to blackboard criticised usage of the LMS because she does not have internet connectivity outside campus. Student reported, "the challenge is blackboard is very difficult because sometimes some students do not stay around campus. They do not have internet access and communication which is sent via blackboard is not easily accessible compared to what is sent via WhatsApp." Another student wish blackboard could be linked to WhatsApp for accessibility and easy use:

lets say someone is conducting a research and they ask me what I would like to be improved on WhatsApp. I would say blackboard should be plugged into WhatsApp. That way, we will be able to use our WhatsApp data to access our results for tests. It would be nice to have blackboard linked to WhatsApp so that we can login without student numbers and use it.

Lecturer A corroborated students' views that it is better to use WhatsApp than blackboard:

I mostly use WhatsApp I do not use blackboard at all because it is very problematic for the students. Many of them many cannot access blackboard because they do not have internet access. Some cannot access it because they just cannot use it properly and also blackboard is very often down. At least with WhatsApp I can get hold of the students instantly and we can just communicate as easy as we want to about work or about other problems that they might be having.

Despite the fact that students preferred WhatsApp to blackboard, they noted negative experiences which they encounter with the social media. One notable negative experience is distractions on WhatsApp as students sometimes fail to cope with their academic work. A student said,

the bad side of WhatsApp is that you get distractions. You find that in groups that we share important information, someone could be making jokes and people will start following that and then there will be arguments among students and then people will be wanting to remove some people from the groups. So, WhatsApp is very helpful and at the same time distractive

Another student said,

Trying to study while someone else is busy texting you is not easy. You know how people are, they see you online, they want to chat about non-educational stuff. If you are a person who can switch off data and have self-control and tell yourself that you are just going to study you can try. For me, WhatsApp is not effective.

Another student echoed the same sentiment about WhatsApp not being effecting as a learning tool:

WhatsApp is sometimes not really effective especially when it comes to group work. Sometimes when you are doing group work you need to have a one on one chat with group members personally because group work is stressful and is irritating as some people do not like to work in groups. When you are doing an assignment, sometimes you find that you have those arguments and then someone is bringing this idea up and another is throwing a different idea. It is much better when you communicate rules upfront. Some people when they start using voice notes they will send about four consecutively. Somebody else will then send theirs and it will be a long list of voice notes to be listened to. So, it is really not effective but when you are sitting together face to face, you get to communicate properly and give each other chance to express their views.

One student acknowledges that WhatsApp get distractions, but he manages them by multitasking. Student said,

I do not want to lie and say I mute some friends or groups, I can do both because WhatsApp is the fastest way to communicate with people so I can like answer someone giving me advice about learning or something like that and answer someone who is making jokes at the same time. I can multitask.

Some students said WhatsApp is not ideal because they run out of data bundles on their phones and when the phone gets stolen, they will be left behind. One student said, "when they are big things to download, we run out of data." Similarly, another student said "data to connect to internet is the greatest challenge that we face as students." A student who lost a phone said, "my phone was stolen, and for two weeks, I did not know anything that was going on. People say they will tell you, but they forget."

Discussion

The perspectives of lecturers and students about using WhatsApp fits in the COI which is a theoretical framework guiding this study. Students reported that WhatsApp enabled them to learn collaboratively among themselves and with the lecturer providing guidance. This fits in the teacher presence on the COI. Rambe and Chipunza (2013) reiterates that students managed to have rich collaborative discussions where they generated data through WhatsApp discussions which they had. Rajab and Rashid (2016) concur that the social media allows discussions which can be controlled by a teacher or lecturer.

This study found that students developed critical thinking skills as a result of discussions they had. This concurs with Kustijono and Zuhri (2018) who state that discussions which students had enabled them to develop critical thinking skills. The development of critical thinking skills falls in the cognitive presence in the COI (Garrison et al 2010). Besides developing critical thinking skills, this study concurs with a study conducted by Alqahtani et al (2018) who reported that students developed language skills through WhatsApp. Students in this study gave credit to WhatsApp as it helped improve their language in various ways. One can argue that WhatsApp helps students improve in their studies. Ta'amneh (2017) postulates that students who were taught using WhatsApp performed better than those who were taught without the social media. Rambe (2015) corresponds that the instant messaging on WhatsApp makes learning easy and successful among students.

Findings of this study concur with Mwakapina et al (2016) who state that the usage of WhatsApp is welcomed with mixed feelings as some people think that it is ideal to use for educational purposes while others say it is not. Students who felt that WhatsApp is not a suitable learning tool said so because of distractions that it has as a social media. Akakandelwa et al (2018) and Mazana (2018) had similar findings that WhatsApp was not mainly used by students for deep academic discussions, but passing information such as cancellation of classes and change of venues. WhatsApp is a social media which students predominantly use to chat with their friends and relatives and it becomes difficult to do serious academic work without distractions from other people (Mwakapina et al 2011). The aspect of WhatsApp as a social media falls in the social presence in the COI (Garrison and Arbaugh 2007).

Conclusion

The purpose of this study was to investigate students and lecturers' perspectives about learning and teaching using WhatsApp at a university in South Africa. This study concludes that although WhatsApp is convenient for students in a context where blackboard is often disrupted by poor internet connectivity, the social media needs to be used along with the LMS. Otherwise WhatsApp on its own as a teaching tool is not going to let students develop digital literacy skills expected of them by the Department of Education when they graduate as trained teachers. The Department of Education expects all teachers to have a certain level of digital literacy as schools have integrated technology. Some schools in Cape Town are currently using blended learning approaches. It will be rather counter-productive for a trainee teacher institution to expose its students to using WhatsApp (which they are already using every day as a social media) exclusively when they will be expected to implement blended learning using a LMS. WhatsApp should not be discarded as it helps particularly with essential communication between lecturer and students and students among themselves. It needs to be used to complement a LMS.

Recommendations

The study recommends that the institution has to seriously consider widening internet access to students both on and off campus if its blended learning strategy is to come to fruition. For as long as students experience limited internet connectivity, it is not going to be possible for the institution to attain its vision of becoming the heart of technology in the continent. Students are made to think that blackboard is problematic as it often does not connect. Little do they know that problem is not because of blackboard, but poor internet connectivity.

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