

Research Article

Use of WhatsApp in Higher Education for Teaching and Learning: Sociocultural Perspective of Learning

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Abstract

Drawing from social learning theory, this study aims to investigate the experiences of third-year students regarding the use of WhatsApp group chat for teaching and learning. This is premised during a COVID-19 lockdown context at a rural South African university, wherein opportunities to learn socially from each other are created as students interact with their peers, educators and facilitators, and learning materials, objects and activities are collaboratively co-created, shared and disseminated through WhatsApp groups. Data were collected through focus group interview of eight third-year students registered for a Bachelor of Education in Senior Phase and FET degree majoring in English and Life Orientation. The study found that WhatsApp allows students to communicate, collaborate and encourage in remote learning to disseminate knowledge as a way of improving their academic performance. The results provide an insight into how WhatsApp plays a significant role in learning English in the development of reading, writing, speaking and listening skills, which consequently improves students' academic literacy and interpersonal skills. The findings of this study further reveal a disparity of network connectivity, accessibility and electricity between those residing in the urban and rural areas.

Keywords: WhatsApp, social learning theory, COVID-19 lockdown, academic literacy, interpersonal skills

Introduction

Technologies and their use have made big changes in education from a closed model and teacher-centred classroom to a model more open and student-centred, where the teacher moves from one holder of knowledge for a learning mentor, able to manage diverse discourses and performs, as well as stimulate the intellectual capacities of students in the treatment of information, which include online learning, hybrid learning and collaborative models. Several studies support teaching and learning using a variety of social media tools. Social networking sites for higher education institution students are aimed at enhancing both collaborative study and social interaction. The use of social media such as Twitter, Facebook, Blogger, Wordpress, Pinterest, WhatsApp, etc. in education provides students with the ability to get more useful information, to connect with learning groups and other educational systems that make education convenient (Dahdal, 2020; Al-Jarrah et al., 2019; Yadav, 2021). Social media can be an effective tool for teaching and learning in higher education to help connect students to information and help them generate a dialogue with their teacher and other students about a course. Social media has a vital influence on our lives as it helps a lot in every field of life, such as political field, economic field and educational field (Raut & Patil, 2016). Students usually used social sites for many reasons, such as for study purpose, for entertainment purpose, as social media provides any data you want very

easily and quickly within a fraction of seconds. Students are motivated to learn from their peers online. In other words, they interact and receive feedback from one another. In this case, social media does not only help to acquire knowledge, but also establishes enduring relationships with students by creating and sustaining a sense of belonging.

Social media tools and networking sites encourage students to engage with each other and to express and share their creativity. Social networking sites can also help students develop leadership skills, from low-level planning and organizing to activities that promote social change and democratic engagement. Given the widespread popularity of social media, it has become essential to understand and adopt social media sites to develop future educational plans, as well as deploy current course material on new technologies, which can impact significant positive relationship with social media usage (Sarwar, Zulfiqar, Aziz & Chandia, 2019). Social media serves as a dynamic tool to expedite the development of learning environments by encouraging cooperation and communication among students, which reinforces their learning behaviour and performance. Students in this digital age are now more greatly exposed to various developing technologies because the cyber world of new technology provides them with unique opportunities for cross-cultural interactions, learning and self-exploration. In other words, social media is more open, resourceful, and put greater emphasis on ultimate student learning by encouraging creative thinking, mutual work and self-paced learning.

Several studies have investigated the use of instant messengers (IMs) for learning, but the understanding of how WhatsApp group chat can effectively be adopted for learning and teaching of English remains a domain worth examining. WhatsApp is a multimedia communication platform that allows users to send contents like pictures, audio, videos, make voice calls, send documents, etc. A growing body of research has also reported on the use of WhatsApp in mobile learning. For instance, Lai (2016) investigated the use of WhatsApp in vocabulary building and found a significant correlation between a learner's chat and vocabulary gain. Equally important, Andujar (2016) examined the use of WhatsApp interactions on ESL students' writing skills and found that there were differences between the control group and the experimental group. He concluded that the findings for syntactic complexity and lexical diversity were not conclusive. In his words, Andujar (2016) found that WhatsApp constitutes a powerful educational tool to encourage second language interaction among participants and its tremendous potential to activate students' involvement remains one of the least exploited functionalities of mobile phones. Andujar's statement provides a glimpse of the existing literature to identify the research gaps and guide future studies to provide directions into the less ventured area related to mobile technology.

In Malaysia, WhatsApp is a popular social media. A recent survey carried out by The Digital News Report (2017) found that Malaysians are the world's largest users of WhatsApp at 51 percent. Malaysians are familiar with the use of WhatsApp and obviously, no training will be required for the participants. In the Malaysian context, studies have addressed the role of WhatsApp in the educational context (Mistar & Embi, 2016; Man, 2014; Ganasegaran et al., 2017). The WhatsApp group allows its users to deliver certain announcements, share ideas and learning resources, and supports online discussions (Amry, 2014). The WhatsApp Messenger application is able to increase student learning motivation, accelerate the occurrence of study groups in building and developing knowledge. Accordingly, learning with the help of online applications such as WhatsApp Messenger can enhance collaboration in learning, share knowledge and information that is useful in the learning process, and maintain the joy of learning throughout the ages (Susilawati & Supriyatno, 2020; Moodley, 2019). WhatsApp represents more reliability to users and senders depending on the level of privacy of their conversations, which is much better than other social media platforms, such as Facebook or Twitter (Lambropoulos & Culwin, 2010; Lenhart & Madden, 2007; Reid & Reid, 2005; Rambe, Chipunza & Ng'ambi, 2020). Gachago et al. (2015) and Rambe and Bere (2013) found that WhatsApp fosters student learning and heightens student participation as a key outcome of integrating WhatsApp into pedagogic delivery.

South Africa went into lockdown on 27 March, 2020, as a result of the COVID-19 pandemic. Most universities in South Africa have been able to move the coursework components into an online mode while at the same time trying to address factors such as lack of access to devices, data and electricity. Lecturers have had to adjust their courses to comply with the principles of being mobile-friendly, low tech, low data and low immediacy in order to reach the diverse student population. WhatsApp is ranked the top messenger app around

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the world (Kemp, 2020). There were 22 million social media users in South Africa in January, 2020, and 89% of users used WhatsApp (Nel Marais, 2020). In South Africa, joining WhatsApp groups with other students was a common way of transferring into study of settling in and adapting to being a student at UNISA (Madge et al., 2019). This suggests that in the early stages of becoming a student, many students found WhatsApp as easily accessible and invaluable tool to connect with other peers and obtain information about their studies that they were about to embark on, but struggled to access elsewhere. Thaba-Nkadimene (2020) conducted a study at a South African rural university titled “The Influence of WhatsApp Usage on Collaborative Pedagogy and Social Networking during Teaching Practice at a Rural University in South Africa” and found that WhatsApp is the most preferred collaborative learning platform and valuable tool for communication of pedagogical information among students and lecturers because of its Web 2.0 with MIM technology features. However, despite the proposed advantage of WhatsApp, very few studies have addressed the students’ reflections and views qualitatively in institutions of higher learning in blended learning classrooms. This study sought to explore the students’ reflections after their engagement in the virtual environment via WhatsApp for interactions and collaboration related to their course. It is hoped that the findings extend and broaden the body of knowledge in mobile learning and application of apps in the educational context.

Theoretical framework

This study is underpinned by social learning theory which is a complex technology-supported collaborative learning wherein consciousness is socially mediated through students’ interaction with peers, educators, facilitators and artefacts before it is internalised through internal psychological processing. According to Huang, Spector and Yang (2019), social interactions are regarded as the seedbed through which students learn in communities and groups. This suggests that opportunities to learn socially from each other are created as students interact with their peers, educators and facilitators, and learning materials, objects and activities are collaboratively co-created, shared and disseminated through WhatsApp groups. In other words, social media supports social learning by facilitating collaboration (i.e. shared creation) and knowledge creation and aid students’ deep understanding and flexibility of time and space (Huang et al., 2019). The collaborative generation of learning resources can also be studied from a social learning theoretical lens, which emphasises examining learning from the perspective of social networks. Therefore, a WhatsApp group serves as a social network to the extent that it comprises individuals connected to other persons (e.g. peers, educators and facilitators) who share resources, artefacts, mutual trust and social interaction to facilitate social learning.

Problem of the study

The COVID-19 pandemic has not stopped at national borders and it has affected people regardless of nationality, level of education, income or gender. Education is no exception. The COVID-19 pandemic has also had a severe impact on higher education as universities closed their premises and countries shut their borders in response to lockdown measures. Higher education institutions were quick to replace face-to-face lectures with online learning, of which these closures affected learning and examinations. These online platforms are also known as Learning Management Systems (LMS) which are designed to administer, record, monitor, report, automate and deliver educational courses (Ellis & Ryann, 2014). Several studies investigated the use of Blackboard-based instruction in teaching and learning which allows students to access learning materials at their own pace and provides auditory, visual, and kinesthetic cues addressing a wide range of learning styles (Farooq et al., 2012; Mekheimer, 2012; Martin et al., 2013; Al-Jabry et al., 2014; Almelhi, 2014, Motlhaka, 2020). However, the use of Blackboard-based instruction in teaching and learning gives students limited access due to inadequate data bundles because it requires more data bundles than other forms of social media, such as WhatsApp. Studies have investigated the use of instant messengers (IMs) for learning, but the understanding of how WhatsApp can effectively be adopted for learning remains a domain worth examining. As the number of undergraduates who own smartphones is rapidly increasing on a daily basis, and invariably, this increase in phone ownership which may imply an increase in the use of WhatsApp. However, in South Africa, the number of WhatsApp users is on the increase, but its adoption for learning is inadequately investigated in South African higher education. This study seeks to investigate the impact of WhatsApp for teaching and learning during COVID-19 lockdown at a rural South African university.

3.1. Significance of the study

The results of this study could provide a scientific database for making decisions regarding successful implementation of WhatsApp group chat for teaching and learning during COVID-19 lockdown at a rural based university.

3.2. Questions of the study

The present study seeks to answer the following two main questions:

- How did the engagement in the WhatsApp group chat assist students in developing their academic literacy skills?
- How did the engagement in the WhatsApp group assist in developing students' English First Additional Language proficiency?
- What are students' positive and negative experiences of engaging in the WhatsApp chat group?
- How accessible is WhatsApp as compared to other social media platforms?

Method

4.1. Sampling

The research setting of this study is comprised of one South African rural university located in Mankweng, Limpopo province. The sample of this study is comprised of students whose first language is one of South Africa's official indigenous languages, such as Xitsonga, Sepedi, Setswana, isiZulu, isiXhosa, isiNdebele, Siswati and Tshivenda. The sample included eight third-year students between the ages of 18 to 25 registered for a Bachelor of Education in Senior Phase and FET degree majoring in English and Life Orientation in the School of Education at a South African rural university. Purposive and convenient sampling were used due to the qualities respondents possess in terms of diverse cultural and linguistic backgrounds drawn from their Sepedi first language. Students' reflections were used to gather in-depth information on the use of WhatsApp by a small group of South African students.

4.2. Data collection

4.2.1. Focus group interview

The data collection technique used in this study was focus group interview to explore the experiences of respondents in using WhatsApp group chat in analysing Sonnet 18 by William Shakespeare. During the focus group interview, respondents and the researcher reflected on the summary of the poem, literary devices, language and tone, rhyme scheme metre of "Sonnet 18", structure and form and themes. Drawing from Vygotsky's sociocultural framework, this study draws from multiple voices and a socially oriented research procedure which put control of the interaction and construction of knowledge in the hands of respondents rather than the researcher. Thus, each respondent was given the opportunity to reflect on his/her analysis experience and the impact of peer reflection. The interview session lasted for 60 minutes.

4.3. Data analysis

Thematic analysis approach was used to analyse data after the transcription of the interview. The analysis of data was guided by the following research questions:

- How did the engagement in the WhatsApp group chat assist students in developing their academic literacy skills?
- How did the engagement in the WhatsApp group assist in developing students' English First Additional Language proficiency?
- What are students' positive and negative experiences of engaging in the WhatsApp group chat?
- How accessible is WhatsApp as compared to other social media platforms?

Discussion of the Findings

The purpose of this study was to investigate the experiences of third-year students regarding the use of WhatsApp group chat for teaching and learning during COVID-19 lockdown at a rural South African university. The following themes emerged during the analysis of essays and focus group interview: Access to academic networking, discussion via WhatsApp group chat enhanced students' English language skills, WhatsApp group chat enriches students' vocabulary, affordability and connectivity challenges to facilitate WhatsApp group. Each of the themes is presented and discussed below.

5.1. Access to academic networking

The researcher sought to determine students' academic networking accessibility which results in more learning, less bias, and greater personal growth by modelling positive behaviours such as generosity, authenticity and enthusiasm for co-construction of knowledge through WhatsApp. Respondents said the following in their own words to justify academic network accessibility through WhatsApp, which allows them to attend classes from any location of their choice:

Excerpt 4

I think the use of WhatsApp in teaching and learning enhances students' academic networking accessibility bridging students' physical distance from institutional resources and breached transactional distance between peers caused by lack of physical contact and limited communicative competence which normally hinder their prospect of engaging in a class discussion.

Excerpt 2

WhatsApp is a good alternative mode of teaching and learning because it helps absent students to catch up and attend class regularly hence every student has access to WhatsApp and it does not consume more data as compared to other mode of teaching and learning such as Blackboard, Zoom meeting among others.

Excerpt 6

WhatsApp group is very convenient because it shortens the distances between students and helps us get information quickly from other students and the lecturer.

Above excerpts demonstrate that WhatsApp group chat is a useful educational tool that facilitates learning by allowing interactions between the lecturer and students, as well as socializing with their peers and developing their communication skills. The findings of this study indicate that WhatsApp group chat allows students to communicate, collaborate and encourage remote learning to disseminate knowledge. In other words, WhatsApp group chat is a good place to check class notes or homework posted by the lecturer and engage in academic discussions in order to improve students' academic performance. WhatsApp group chat serves as an active and equitable communicative, open, transparent and vocal window to all students, which reaches out to a more extensive network of students, instead of being restricted by geographical boundaries. This allows students to access the learning material at a time of their comfort and offers them the accessibility of time and place in education. Thus, the appropriation of WhatsApp breached the psychological barriers among students by enhancing peer-based academic networking among those with different academic abilities. It presents students with opportunities to make informed choices (freedom) about academic commitments they valued, such as sharing of knowledge of complex concepts and routine academic practices, as well as getting instant positive feedback from classmates and lecturer without having to commute to campus. For instance, students do not have to wait for a class to ask a question, but they can ask questions anytime, anywhere and extend their consultative base by 'connecting to an attentive, cohesive group, rather than wait for lecturer's responses. Furthermore, it improves student attendance because online classes can be taken from home or location of choice, wherein there are fewer chances of students missing out on lessons. Students have constantly highlighted the portability and the accessibility of WhatsApp smoothly without time and space constraints. It seems WhatsApp has achieved the status to support pedagogical practices at any time anywhere with immediate results, which cannot be achieved with the desk bound computers. In fact, Bouhnik and Deshen (2014) found that WhatsApp might be

the first technology that entered class without any training or administer supervision, as teachers and students are using in their private life and its advantages enabled it to become naturally, an educational technology. Further, Berger (2011) highlights that mobile learning brings the shift from learning anywhere, anytime to everywhere and every time.

5.2. Discussion via WhatsApp group chat enhanced students' English language skills

The researcher sought to determine how discussion through WhatsApp group enhanced students' English language skills when they listen to uploaded videos, voice notes of their classmates and lecturer, reading their classmates' comments and responses, as well as writing their comments and responses to their classmates and lecturer. Respondents highlighted the following responses on how discussion through WhatsApp group enhanced students' English language skills:

Excerpt 3

WhatsApp group helps me to listen attentively to uploaded videos and voice notes of my classmates and lecturer in order to engage effectively in the discussion to enhance my understanding of the content under discussion.

Excerpt 8

Reading my classmates' and lecturer's comments and responses develops my reading skill as well as my writing skill when I comment on their responses in writing.

Above excerpts show that respondents develop their English language skills through WhatsApp group chat which facilitated the discussion and helped them to overcome their fear of using the language, as well as motivation towards learning. The findings demonstrate that WhatsApp group chat plays a significant role in learning English in the development of reading, writing, speaking and listening skills, which consequently improves their English language ability. The findings of this study deduce that WhatsApp group chat removes the time barriers for students because they can learn the language through real interactions with others beyond the classroom. The findings of this study concur with the findings of other researchers who found that social media encourages students to use their creativity combined with personal expression to improve and strengthen their English language skills by engaging with information in English both formally and informally (Al-Jarrah et al., 2019; Yadav, 2021). In other words, WhatsApp group chat acts as a bridge to facilitate communication inside and outside the classroom in addressing the needs of English language students. This unlimited exposure to academic texts provides opportunities to increase students' fluency and comprehension. It could be concluded that using WhatsApp group chat helped students to overcome their fear of using English language because they are not in a direct contact with their classmates and lecturer.

5.3. WhatsApp group chat enriches students' vocabulary

Social media has a great pedagogical potential for improving language awareness, grammar, vocabulary, fluency and development language competence by offering students learning opportunities for language skill practice (Dahdal, 2020). Vocabulary is a core component of language proficiency and provides much of the basis for how well learners speak, listen, read and write. Respondents highlighted the following responses on how WhatsApp group chat enriches their vocabulary:

Excerpt 1

WhatsApp group chat was very helpful to enrich my vocabulary because there are instances where I come across unfamiliar concepts when I read my classmates' comments or listening to their voice notes and in such cases, I asked the meaning or contextual meaning of the words to my classmates or lecturer.

Excerpt 5

I developed my vocabulary when I commented on my classmates' responses in writing and speaking because WhatsApp group is a very safe learning environment for me where I express myself freely.

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The above excerpts show that vocabulary plays a great role in communication than other components of language because respondents acquired new vocabulary from their classmates and freely engaged in a discussion with their classmates as a way of enriching their vocabulary. The findings of this study suggest that the role of social media in English language vocabulary development is like the brightness of the day because social media facilitates learning of new words and phrases to improve students' vocabulary. In other words, without an extensive vocabulary and strategies for acquiring new vocabulary, students often achieve less than their potential and may be discouraged from making use of language learning opportunities around them. This suggests that lack of needed vocabulary is the most common cause of students' inability to say what they want to say during communication activities. Thus, social media plays a dominant role in English language learning because it provides opportunities to the English language learners to improve their writing, reading, and similarly, to read new text and phrases to improve their vocabulary.

5.4. Affordability

The use of WhatsApp group chat reduces financial costs. WhatsApp group chat is far more affordable and enhances learning as compared to physical learning. Respondents highlighted the following responses on how WhatsApp group is far more affordable and enhances learning as compared to physical learning:

Excerpt 2

WhatsApp group is more affordable because it eliminates the cost of student transportation, student meals, and most importantly, rental costs as well as WhatsApp data is more affordable as compared to data for other social media platforms such as Twitter, Facebook even Blackboard as other modes of teaching and learning.

Excerpt 7

I think WhatsApp group is more affordable because all the course or study materials are available online, thus creating a paperless learning environment which is more affordable because students are not expected to make copies of study materials or buying books or study guides.

The above excerpts show that WhatsApp is a low-cost, instant messaging application in which users can exchange materials in various formats like audio, video, graphics and textual messages. The findings of this study concur with the findings of Motlhaka (2020) and Rambe, Chipunza and Ng'ambi (2020) which suggest that online enhances academic agency of students to interact with their peers and facilitators in which learning materials and activities are collaboratively co-created, shared and opportunities to learn socially from each other are created. In other words, WhatsApp supports social learning by facilitating collaboration (i.e. shared creation) and knowledge creation to aid students' deep understanding and flexibility of time and space. It could be concluded that WhatsApp as a mode of teaching and learning increases immediacy and connections across formal, informal and open distance learning contexts, facilitates reflection by students while simultaneously increasing their control and ownership of learning.

5.5. Connectivity challenges to facilitate WhatsApp group

COVID-19 forced many students to resort to their rural villages, but with the goal of ensuring that the teaching and learning would continue. Related to the above challenge is the connectivity issue due to load shedding and network for most rural students. However, while at home students in rural areas were confronted with lack of or limited connectivity to support learning. This problem is expressed by the respondents below:

Excerpt 8

I live in a deep rural area where there is poor network coverage which makes it difficult for me to stay connected all the time when attending classes through WhatsApp group chat.

Excerpt 4

My experience as a student was bit difficult because I always had network problems because of loadshedding in my area.

The above excerpts demonstrate challenges experienced by students when embracing the online learning as the new method of learning and teaching during COVID-19 crisis. The findings of this study revealed that students experience network problems because of lack of connections and load shedding in their area whenever they want to engage into online learning as the new method of learning and teaching during COVID-19 crisis. The findings of this study are also confirmed by Tamram and Teferra (2020) and Dahdal (2020) who argue that many African countries face various challenges, such as exorbitant cost, inadequate connectivity and electricity shortage. This is further confirmed by Apuke and Eyindo (2018) and Yadav (2021) who found that slow internet connectivity affects access to learning material. The findings of this study reveal a disparity of network connectivity accessibility and electricity between those residing in the urban and rural areas. In other words, students residing in rural areas suffer the most as compared to those residing in urban areas, which undermines the rights of rural students' to access education due to lack of connectivity and frequent load shedding.

6. Conclusion

This study investigated the experiences of third-year students regarding the use of WhatsApp group chat for teaching and learning during COVID-19 lockdown at a rural South African university. The study found that WhatsApp allows students to communicate, collaborate and encourage in remote learning to disseminate knowledge as a way of improving their academic performance because it reaches out to a more extensive network of students, instead of being restricted by geographical boundaries. The findings of this study concur with the findings of Motlhaka (2020) and Rambe, Chipunza and Ng'ambi (2020) which suggest that online learning enhances academic agency of students to interact with their peers and facilitators in which learning materials and activities are collaboratively co-created, shared and opportunities to learn socially from each other are created. The results provide an insight into how WhatsApp plays a significant role in learning English in the development of reading, writing, speaking and listening skills, which consequently improves students' English language ability. Thus, it facilitates learning of new words and phrases to improve students' vocabulary.

However, the findings of this study revealed that students experience network problems because of lack of connections and load shedding in their area whenever they want to engage into online learning as the new method of learning and teaching during COVID-19 crisis. The findings of this study are also confirmed by Tamram and Teferra (2020) and Dahdal (2020) who argue that many African countries face various challenges, such as exorbitant cost, inadequate connectivity and electricity shortage. The findings of this study reveal a disparity of network connectivity accessibility and electricity between those residing in the urban and rural areas. In other words, students residing in rural areas suffer the most as compared to those residing in urban areas, which undermines the rights of rural students to access education due to lack of connectivity and frequent load shedding. The implication of this study is that lecturers can draw from the findings of this study that technology can be effective in improving English First Additional Language students' academic literacy and interpersonal skills. Future research that is expected to emerge from the present study could examine the use of other social media platforms in English First Additional Language classroom to facilitate the process of students' acquisition of academic literacy skills.

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