

# WhatsApp platforms as the panacea for online programmes in distance education in Zimbabwe and Zambia

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## Abstract

The study focuses on the wide usage of the WhatsApp application in delivering online programmes in distance education. The WhatsApp mode of communication is a social media, which was the result of a fourth industrial revolution but has found wider currency in all aspects of human life including distance education. It has caused massive social upheavals in social life including in electronic teaching and learning from early childhood development programmes to university education. Universities are now using it with sceptics doubting its effectiveness in electronic teaching and learning. This study, therefore, sought to find out if WhatsApp is the panacea for online programmes and how it is used in distance education. A qualitative paradigm using a case study design generated data from 26 lecturers, and 119 undergraduate and postgraduate students on the phenomenon from three universities in Zimbabwe and Zambia. Open-ended questionnaires and WhatsApp focused group discussion were employed to answer the posed questions. The WhatsApp platform is used as the first line of communication between students and their lecturers. Universities ought to integrate all facets of the WhatsApp platform to their electronic LMSs to enable students to access online programmes.

**Keywords:** WhatsApp, panacea, distance education, communication, Zambia, Zimbabwe

## 1. Introduction

The study focused on the wide use of the WhatsApp application in delivering online programmes to all students in Distance Education (DE). The WhatsApp mode of communication is a social media, which is a creation of the fourth industrial revolution but has found wider currency in all aspects of human life including in distance education. It has caused massive social upheavals specifically in social life including in electronic teaching and learning from early childhood development programmes to university education. This is where the old adage which goes 'if you cannot beat them, join them' rings true. People and organisations across a wide spectrum have embraced it. A communication method used by most persons. A WHO Report of 2020 presented by Professor van Zummeren on a UNISA webinar in August 2021, indicated that WhatsApp is the most used social media platform at 89%. Those who ignore it face the risk of being marginalised especially in Africa (Benyera, 2021). Educational institutions including

Universities are now using it with sceptics doubting its effectiveness in electronic teaching and learning.

According to Yeboah *et al.*, (2014); Bouhnik and Deshen (2014) and Alsanie (2015), WhatsApp tool is a proprietary, instant messaging subscription service for smart phones and selected feature phones that uses the internet for communication. In addition to text messaging, users are able to share images, video and audio media messages using integrated mapping features. WhatsApp is an application available on the new generation smart phones like iPhone and Android Operating systems. Users are not charged for a text sent through WhatsApp. This is because WhatsApp sends messages through an internet data connection. WhatsApp supports many different message types, from simple text to pictures to audio files and videos.

Recent statistics puts WhatsApp usage at one (1) billion as at February 2016 (Statista, 2016). WhatsApp is the most sought after messenger for many smart phone operating systems and can also be used on laptops and computers based on configuration applicable that involves users

downloading an application player and this enables users to download the WhatsApp web version and use it comfortably without restriction (Yuvaraj, 2014).

Context

The study was anchored within the Institute of Distance Education (IDE) of the University of Zambia (UNZA) and the Zimbabwe Open University (ZOU) in the Department of Disability Studies and special Needs Education and the Catholic University of Zimbabwe (CUZ). The UNZA is configured as a dual mode institution, meaning regular and distance education programmes running parallel to each other while sharing resources (Moore and Kearsley, 2012). According to Simui et al. (2017) and Mundende et al. (2016), the IDE is an important vehicle through which the University is increasing access to quality education. This is evident in the high level of enrolment of postgraduate students accessing university education via distance mode averaging 600 students per academic year since 2014. Despite the University having existed since 1966, postgraduate programmes have not been on offer through the distance-learning mode until the year 2014. Instead, focus has been on undergraduate programmes (Simui et al., 2015).

In 2010, UNZA entered into a collaborative relation with ZOU to offer postgraduate programmes (Simui et al. 2018). Among programmes on offer are the four namely: Master of Science in Counselling (MSCC), Master of Peace Leadership and Conflict Resolution (MSPL), Master of Education Management (MDEA), Master of Business Administration (MBA) and Doctorate of Philosophy generic. Inspired by the UNZA-ZOU model, the rest of the University of Zambia have since off-loaded nearly all postgraduate programmes to also run on the distance learning mode. ZOU is a fully Open and Distance Electronic Learning University which offers all its programmes online through the MyVista platform. CUZ

although campus based has also embraced online teaching and learning.

This study therefore, sought to find out if the use of WhatsApp platform was the panacea for both undergraduate and postgraduate online programmes and how it is used in distance education.

Research questions

The study was guided by the following research questions:

- i. What is the WhatsApp platform used for in Distance Education?
- ii. What are the strengths and weaknesses of this mode in online teaching and learning in DE?
- iii. How do users view it?
- iv. How can we improve this mode of online teaching and learning?

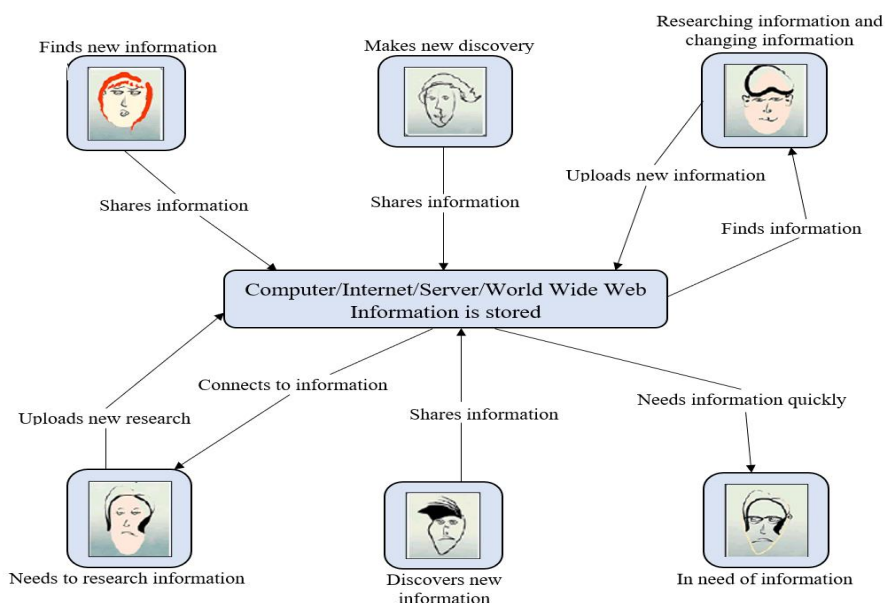
Theoretical and Conceptual framework

This study rides on two theories namely: Michael Moore’s (1989) theory of interaction and George Siemens’ (2004) theory of Connectivism. For Moore’s (1989) theory, he postulates that three interactions exist in distance education as follow:

- i. Students and their lecturer(s) are engaged in a two-way interaction.
- ii. Students interact with students by means of group discussions and group project work.
- iii. Students interact with content by means of study modules and other materials.

In this study, we mirror the three types of interactions cited above using the “WhatsApp” and elicit discussion on the potential of “WhatsApp” as a learner support tool in distance education.

In addition, Siemens (Siemens, 2006) (See figure 1 below) believes that learning in the 21st century is too



complex to be processed through laws of behaviourism and cognitively. Instead, there is need to rely on a network of people and increasingly technology to store, access, and retrieve knowledge and motivate its use (Siemens, 2006).

Siemens (2004) observes that Connectivism is a learning theory for the Digital Age. In Connectivism, learning is a process that occurs based upon a variety of continuously shifting elements. The starting point of learning is the individual who feeds information into the network, which then feeds information back to individuals who in turn feed information back into the network as part of a cycle as can be seen in Figure 1 above.

## 2. Literature Review

The WhatsApp application has become a communication tool for almost all facets of human life. The covid-19 pandemic with the resultant lockdowns to protect human life from contagion has catapulted it to the fore of human communication. Companies and social groupings use it for advertising and information sharing swiftly with confidentiality assured through its end-to-end encryption (E2EE) protocol. Ngalomba (2020) writing during the beginning of the covid-19 era stated that 1.5 billion users in 180 countries use WhatsApp to exchange texts, audio (voice notes), videos, books and audio and video calls (Barhoumi, 2015). Persons use WhatsApp across the social spectrum despite their education levels because it is user friendly and cost effective. Universities using Distance Education cannot afford to ignore such a resource to communicate to their students. Madge et al. (2021) points out that many African universities use it extensively with their students

The use of WhatsApp should be viewed from two angles: the lecturer's side and the student's side. Therefore, from the lecturer's perspective it has a variety of uses. Studies have shown various ways in which it is used in DE (Barhoumi, 2015). Lecturers use it to communicate, teach and supervise DE students. Probably its most significant use has been to send information to students. WhatsApp can be used as a notice board to communicate information to students. The notice would include information about applications, registration, orientation programmes, tutorial/lecture timetables and examination timetables.

Despite the many benefits of WhatsApp, its use in the delivery of tutorials to students at any level has been met with resistance from most lecturers. The history of WhatsApp for social communication has placed it in the realms of a non-formal tool suitable for chatter issues as its name alludes. The disruptive nature of the coronavirus has catapulted it into the forefront of DE despite being in the fringe of formal education. Moyo (2020) reporting on the situation in Secondary in Zimbabwe states that despite

students being on covid-19 government compulsory lockdown, some teachers found a way of delivering tutorials to them using WhatsApp. Thus, materials found their way to students, hence, enabling them to continue learning without significant disruptions. Universities have lagged behind in this aspect, with some contemptuous at the idea of delivering lecturers on the WhatsApp platform. The nature of WhatsApp chats enables the delivery of tutorials or lectures synchronously or asynchronously. Synchronous means that which occurs in real time and asynchronous that happens when is offline or non-real time.

WhatsApp is used to motivate students in their learning. Counselling of Students who are lagging behind assists them to keep up with their programmes. The creation of group chats on the WhatsApp platform helps students to see their progress as compared to others thus acting as a motivating factor. Students become constructors of group knowledge (Pence 2007; Misaghi, Toniotti, Batiz and Dos Santos, 2021) adjusting it when in session, synchronously. Later, they can visit the chats and focus on the aspects they may have not understood.

Students create WhatsApp platforms as study tools. Barhoumi, (2015) gives the following uses of the platforms. It enables virtual collaboration and cooperation amongst students in class. It provides opportunities for all students to take part even including the introverts in a live classroom setting. Linked to the above is its propensity to enable group members to share items through comments, texting and messaging (chats).

The question that comes to mind is how we focus on the positive aspects of WhatsApp platforms and ameliorate its weaknesses. The WhatsApp platform is a free application that is easy to use. This is its major strength as it enables almost free communication between individuals and organisations. The whole use of the applications rides on this major strength. Equally aligned to this strength is its strong security features an issue alluded to earlier on in the introduction. The encryption of all its traffic ensures that all transactions occur in a secure and confidential manner. Lastly, members are able to communicate with each other with minimum costs. The cost of data in Zimbabwe and Zambia is high and prohibitive to students especially those in rural areas where the provision of base stations to enable mobile communication has a very low density. The use of laptops and desktop computers that require electricity and more data is also not tenable. WhatsApp on a handheld cellphone becomes the most, best option to access materials and link with fellow students.

Studies on the views of users of the WhatsApp platform are largely positive (Madge et al., (2019). In a study of WhatsApp use among African international distance education (IDE) Unisa students, Madge et al., (2019) proffers a wide range of their views on the different ways in which it is used in their different programmes. The study reveals that it is a convenient tool if used with set ground rules as it can end up being abused. Cetinkaya (2017) identified views from users and the first one was

that they developed positive opinions towards their courses. As they communicated with their lecturers and other students, they were able to understand further their courses. Most students viewed it as a study aid as it helped recall during examinations. The group chats containing study material was a memory recall catalyst during examinations. Secondly, students felt that it had a positive impact on their success. Taking part in the groups enabled students to feel positive about their success as they dialogued with their lecturers and other students.

Alubthane and AL Youssef (2021) cite three views that emanated from their study on students' perceptions. Students pointed out that it reduces worry, as it is convenient and practical. Students are averse to complicated procedures that tend to increase their stress levels. The WhatsApp platforms help to clarify procedures and other issues. Demetriou et al. (2021) revealed there was a positive correlation between distance learning and student anxiety. Consequently, the use of WhatsApp became an anxiety reliever to students in different programmes. Secondly, it aids communication between students and their lecturers. This is crucial as it helps to clarify concerns raised in the courses. Thirdly, students view it as helpful as they are able to share materials and ideas.

Studies have highlighted challenges with the use of WhatsApp. Alubthane and AL Youssef (2021) raise views on incidences of lecturers ignoring questions from students. The asynchronous nature of WhatsApp makes it difficult to direct a lecturer to respond. Crucial areas can be left unresolved to the detriment of the students. This is related to the second view that the lack of group policies resulted in some groups losing focus. For example, some members posted information that were not in line with current discussion. This resulted in the group digressing to older posts or other irrelevant information.

Numerous studies have shown extensive use of the WhatsApp platform in all aspects of teaching and learning in education (Misaghi et al., 2021). However, with reference to DE, the use of WhatsApp is a new phenomenon in the sphere that may need refining. Noted gains are in its use as shown in the benefits and disadvantages section. Numerous ways in which WhatsApp has been used have been cited in various literature. However, various positive and negative permutations noted need refining. Alubthane and AL Youssef (2021) proffer three ways of improving the use of the WhatsApp platform. They recommend the continued use of WhatsApp platform for teaching and learning focusing on enhancing intersection and communication with students and amongst students. This enables discussion and sharing of materials. It can be used to also share appropriate educational sites for use by the students. Linked to the above recommendation is the need to set group rules to regulate their activities. This will focus the group onto the group's terms of reference without digressing to mundane issues that are usually the comfort zone for directionless groups.

Technologies have resulted in DE lecturers having excessive workload in comparison to what they have been doing in the traditional system. It has also enforced them to move out of their traditional lecture halls to the virtual realm that is as wide as their imagination. The WhatsApp platform has equally brought its own unique demands onto the lecturer, as it requires them to be on their toes following up all the groups. Due to these multiple roles, Alubthane and AL Youssef (2021) recommend that lecturers should appoint assistant student leaders on each group to help them ensure that there is compliance to group rules, to collect questions and give them to the lecturers. This would ensure that all questions especially the challenging ones are not ignored ensuring increased group focus.

Although studies have shown that, the WhatsApp platform is an important resource, at present it is at the peripheral of DE electronic Learner management systems (eLMS). Such an important resource with all its benefits should not be adrift of the eLMS. Therefore, Ngalomba's (2020) recommends that WhatsApp should be integrated to eLMS to improve student engagement on it. This will ensure that no students are left behind in all the teaching and learning programmes.

### 3. Methodology

The study is anchored on qualitative paradigm with nested case study design approach within constructivism approach. The study focused on 'WhatsApp platforms as the panacea for online programmes in distance education in Zimbabwe and Zambia'.

#### *Research Design*

A nested case study design within constructivism approach was applied focused on three Universities in Zambia and Zimbabwe. The intention was to delve in the lived world of distance students while on WhatsApp and explore how they construct their reality in the quest to ease the communication challenge. The researchers remained silent participants during data generation period so as not to disrupt privacy but elicit discussion in a natural setting among WhatsApp targeted users.

#### *Research Sample*

A total of 15 postgraduate students on the distance-learning mode at the University of Zambia; 38 undergraduate students at Zimbabwe Open University and 66 at the Catholic University of Zimbabwe were purposively sampled due to their active engagement on the WhatsApp phenomena under study. Students were members of active identified WhatsApp groups which were created by the lecturers to augment two undergraduate programmes and one post graduate programme on the eLMS of each University participating in the study. Real time communication in the WhatsApp focused group discussion was a major limitation.

However, this was overcome by informing the students of the set time the discussion would start. Lectures only facilitated the group discussions.

Data Generation instruments and Procedure

The study followed the following nine steps:

- i. Identified poor communication among distance students as a challenge;
- ii. Identified WhatsApp tool as a student driven solution to combat poor communication;
- iii. Reviewed related literature on the phenomenon;
- iv. Identified the appropriate methodological to the phenomenon under study;
- v. Identified sample purposively;
- vi. Attached the principal researcher to WhatsApp group over time without disruption of natural setting (remained silent throughout the length of the study);
- vii. Developed open-ended questionnaires and WhatsApp focused group discussion (FGD) schedules for both lecturers and students.
- viii. Developed a data-capturing matrix with Date, Day, Time, Name, contribution, Theme and Interpretation as columns.
- ix. Documented discussion using data generation matrix; and
- x. Concurrently analysed findings during data generation process.

Analysis and Interpretation

The analysis of data in this study was concurrently done throughout the data generation process using Inductive Data Analysis. Emergent reflection notes were reviewed from time to time to identify the emerging themes and patterns. The data were coded and analysed thematically and the co-researchers and insiders to the WhatsApp group under study for validation purposes in line with Clarke and Braun (2013) crosschecked the identified themes.

Trustworthiness

The study applied Guba’s (1981) four criteria as follows: (i) credibility, (ii) transferability, (iii) dependability, and (iv) confirmability (Guba, 1981). Data generation process was triangulated using observation, reflective journal matrix and document review guide. The researchers used reflexivity approach to decipher meaning from generated data. In addition, data generation procedures and boundaries were documented for the purposes of ensuring transferability of the study findings to different settings. Further, given that the findings were presented verbatim coupled with participant checks on the research, the study meets the dependability and confirmability criteria as well. The use of tables and figures ensured trustworthiness in line with Cloutier and Ravasi’s (2020) recommendation for qualitative research.

Ethical Considerations

In carrying out this study, ethical issues as guided by Cohen et al. (2000) such as anonymity of participants. Therefore, pseudonyms were assigned in place of actual names, to assure confidentiality and privacy (Cohen et al. 2000). Further, ethical clearance was granted through the Zimbabwe Open University.

4. Findings

The finding presented, analysed and discussion are from the undergraduate and postgraduate students and lecturers who participated in the study. The students’ views enabled us to ascertain the current state of the use of WhatsApp in online programmes in DE

Background information of the Participants

Table 5.1 shows the students who took part in the WhatsApp platforms from the three Universities. A total of 26 lecturers from the three universities participated in the study.

Table 5.1 Number of students in the study

University	Students
ZOU	38
UNZA	15
CUZ	66
<b>Total</b>	<b>119</b>

Student participation in the study was evenly distributed as shown in figure 5.1. However, lecturer participation was tilted towards female participants.

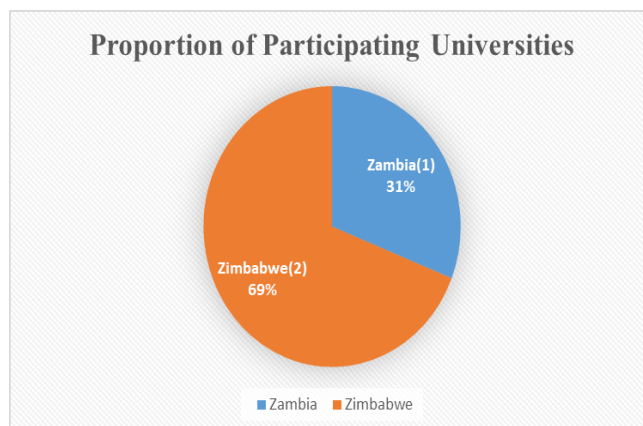


Figure 5.2: University proportion of learning facilitators participants

The participation of two universities in Zimbabwe and one in Zambia in Figure 5.2 is a reflection of the relationship between them.

The findings presented consist of two sections; one side for the students and the other for the lecturer. The students’ responses from the three universities followed a similar trend in all the questions. There was a similar trend in the lecturers’ responses. Therefore, all the responses were put together in the tables and the figure.

WhatsApp platforms use in Distance Education

Table 5.2 displays themes under the use of the WhatsApp platform in DE. These are communication; sharing of information; and group discussions. Communication topped in both groups as the best for class members, academic work and social use.

*“I usually use the WhatsApp tool for announcements and it has really worked well. I am able to get feedback quickly. It is also easy to share notes and PowerPoint presentations on WhatsApp”.*

The focused group discussion revealed that the students created most of the WhatsApp groups:

*“We need tutors input every now and then, to come up with tangible results we need tutors’ involvement”.*

In summary students use it for communicating, creating a discussion setting with peers, sharing notes and learning through audios and texting. A similar trend was also observed in the lecturers’ views.

Table 5.2: WhatsApp Platform use in DE

Learners	Staff
i. Communicating with classes members Supervisor	i. Communicating with students and friends and family.
ii. Information exchange	ii. Class announcements (no discussions of subject content though).
iii. Group discussion with colleagues and lecturers.	iii. Sending out assignments
iv. Learning through audios and texting	iv. Discussion and tutoring
	v. Sharing material (text, audio, and video)

Both groups agree that it enabled the sharing of materials. One student said:

*“Information shared when one is offline can easily be retrieved even after long hours or even*

Strengths and weaknesses of this mode in online teaching and learning in DE

We first present the themes in the benefits/strengths section in Table 5.2. Both groups cited many benefits.

Learners	Staff
i. Timely receipt of announcements, sharing resource materials, peer discussions on topics of interest	i. Ability to send unlimited real-time messages to an individual or groups of friends simultaneously
ii. Lecturers have no disturbances with unnecessary questions during audio recording	ii. Low-cost and private.
iii. Students can revisit the audios, notes etc. as many times as possible for clarity	iii. Can be accessed anywhere anytime so it is flexible.
iv. It is cost effective.	iv. You save and retrieve information anytime
v. Better, control of learning materials and easy to follow class delegations.	v. Potential to increase learning since students can revisit the learning material as many times as possible.
vi. No interferences from unnecessary movements by students or other colleagues during the lecture so the lesson will flow	vi. Shy learners become active in their studies
vii. It's easier to receive and send information to the lecturers and colleagues	vii. Create sense of belonging
viii. Collaboration with other members	viii. Eliminate social barriers
ix. Covid virus transmission is reduced or even avoided	ix. Increase students’ motivation
	x. Room for collaborative learning.
	xi. Ease to use even a beginner mobile user can use it
	xii. Voice support will help clarify the assigned tasks.
	xiii. Ease for lecturers to make contact with their students at their own convenience

*days. Also, almost every student and lecturer are using the application so it is easily accessible”.*

The lecturer said that they enabled announcements and sharing of materials:

These were timeliness, cost effective nature, flexible and safe.

Table 5.2: Benefits/strengths of the WhatsApp Platform Learners Staff

The students highlight the issue of its cost effectiveness as they say:

*“It is cheaper but effective in the teaching and learning process. Easy to use and requires less data*

*Also, very fast in accessing data and responding to feedback from lectures and colleagues in the same program”.*The lecturers highlighted its speed in a number of aspects as shown in Table 5.2.

Students pointed out that it has safeguarded them during the Covid-19 era.

Table 5. 3 summaries the challenges faced by both groups. Three themes came out clearly. namely, network problems, the quality of the interactions in the group and suitability of WhatsApp for some activities.

Table 5. 3: Challenges encountered by using WhatsApp in teaching-learning process

Learners	Staff
<ul style="list-style-type: none"> <li>i. Network is not always clear</li> <li>ii. Interruptions of internet which makes some students to miss out key important issues being shared in the group</li> <li>iii. Internet is the only barrier in some places.</li> <li>iv. Internet limitations at times</li> <li>v. Distractions from other messages; screen of a smart phone is too small for reading learning materials which is stressful for eyes</li> <li>vi. Has limitations as it has distractions due to flooding with non-educational messages</li> <li>vii. Internet connectivity sometimes becomes a challenge</li> <li>viii. Some students may not have gadget, bundles or connectivity so they may not be able to have their questions may remain unanswered.</li> <li>ix. Due to connectivity problems students may download a lot of information at once when they finally get connection, which may be too much information to grasp at once</li> <li>x. Some students may lose information due to the expiring of their WhatsApp application or due to theft of the gadget.</li> <li>xi. Some practical lessons are difficult to teach using WhatsApp platform.</li> </ul>	<ul style="list-style-type: none"> <li>i. It's difficult to follow through the threads, and not everyone is logged on at all times.</li> <li>ii. Disruptions due to other social interactions</li> <li>iii. Network challenges</li> <li>iv. There are some instances which require the use of emails for example academic project communication with supervisors</li> <li>v. There are some who are too quiet to contribute</li> <li>vi. Receive too many messages from students, some of which are not related to the course</li> <li>vii. Expensive especially when you have to download big content files.</li> <li>viii. Materials sent cannot be edited</li> <li>ix. Cannot retrieve sent messages in chat</li> <li>x. Cannot limit those who will view the content since it can be further shared especially with unregistered students.</li> <li>xi. Learners at times are lazy to make use of information sent through WhatsApp</li> </ul>

One Student summaries these problems as follows:

*“Unstable internet connectivity; inability to download materials in format that is not supported by my devices; absence of focused*

*interactions in the student WhatsApp groups as both school and non-school discussions take place; sometimes, feedback from teachers took longer and, in some cases, never came through”*

Another student says:

*“Lecturer may fail to assist weak students because online students can just be following without understanding because the lecturer may fail to capture the non-verbal communication which may give the lecturer a hint that students are not understanding anything”.*

Students also raise the issue of keeping up with the group discussion as one points out that:

*“It's hard to stay updated when one has been offline for a long time and important pieces of information have been mixed up with unnecessary social issues. Hence, students may miss out vital notices in the process”.*

The lecturers agree, as they say:

*“Network problems can hinder the process during lessons, lack of funds to purchase the data bundles and to download all images and audios;*

*multiple groups create a lot of confusion”.*

However, lecturers perceived more challenges from the students as shown in the submissions in Table 5.3 citing, unresponsive and lazy students. Students also perceived some lecturers as unresponsive.

*Users' views towards the WhatsApp platform in teaching and learning process*

Both groups view the WhatsApp platform positively as they echo its use in teaching and learning in their responses in Table 5.4. Two themes emerge here: Convenience and useful; Effective during the Covid-19 era. For example, one

Table 5.4: Views regarding the use of WhatsApp in teaching-learning process

Learners	Staff
<ul style="list-style-type: none"> <li>i. Convenient, but sometimes network interruptions</li> <li>ii. It is useful for sending and receiving learning and teaching materials but may not be suitable for virtual lectures.</li> <li>iii. It is very effective</li> <li>iv. It's a good medium as well</li> <li>v. Very useful</li> <li>vi. Excellent tool</li> <li>vii. Excellent choice for busy people</li> <li>viii. It is a very useful platform which is not very expensive</li> <li>ix. It is expensive especially when long audios are sent</li> <li>x. Difficulty to use in some areas where there is limited connectivity</li> </ul>	<ul style="list-style-type: none"> <li>i. It is very effective</li> <li>ii. Pleased with the platform as it was a success especially during this Covid-19 period</li> <li>iii. It can help educators to do their research easy</li> <li>iv. It is a very useful platform which is not very expensive</li> <li>v. It is expensive especially when long audios are sent</li> <li>vi. Difficulty to use in some areas where there is limited connectivity</li> </ul>

One student points out that:

*"It is an effective way to share information, with assurance of storage capacity, but ineffective when disseminating information that require quickest response from and between students and lecturers".*

Below are positive extracts from three students:

*"It has been very useful during this Covid - 19 era, we were able to receive data, interact and indeed learned fully beyond our expectations".*

*"Just completed a post graduate course in teaching methods, WhatsApp saved me all the way, my grades are an average of 70%. Thanks to WhatsApp"*

*"It's been a pleasure using WhatsApp for schooling, I have gotten good grades I have never got in my life"*

*One lecturer views it as a social tool:*

*"I have not given it much thought, because I view in more of a social platform than an academic one".*

The Group discussion revealed that:

*"Some people have challenges when it comes to technology, for example others fail to use myVista, thus WhatsApp becomes the easy way to access updates and discussions"*

A lecturer alludes:

*"Elicits positive responses in teaching and learning, it is cheap and reliable to both the*

*teacher and the learner".*

Figure 5.3 shows the satisfaction levels of the students on the use of the WhatsApp platform.

Figure 5.3: Students' satisfaction with the WhatsApp platform use

Suggestions for improvement for online teaching and learning

Presentation of the findings are in two themes. The first in Table 5.5 is on the general suggestions for improving the use of the platform, the second one on specific suggestions for its integration on the LMS.



Table 5.5: General suggestions

Students agree that it should be monitored to ensure that it is effective.

“The class WhatsApp should be able to limit unnecessary comments from the learners. There should be time for listening from the teacher only and another time when comments from learners can be allowed”.

Table 5.6 summarises responses on the integration of WhatsApp onto the LMS.

- v. It is the best mode of learning process so far; hence need to improve the linking system for the university between students and lecturers.
- vi. It would make learning very convenient despite how busy one might be.
- vii. It would make access to information a whole lot easier
- viii. Incorporate into Moodle, MyVista and Astria
- ix. To use WhatsApp as an alternative way to send upcoming events, orientation etc.

Table 5.6: WhatsApp integration into Learner Management System

Learners Staff

- i. Linking it to the School Management System
- ii. WhatsApp should just supplement/complement LMS
- iii. Course material accessing by the learners should be made easier such as having all the materials uploaded on the Astria and MyVista platforms.

Students feel that it be integrated into the LMS as they give specific examples from their countries:

“It will make it easier to get important information timely since I am usually with my mobile device and as long as Internet connectivity is available”.

“It will help minimize posting unnecessary social or irrelevant information by group participants. It means such a link will remain academic and mutual”.

Lecturers gave specific ways of incorporating it in Table 5.6.

Learners	Staff
<ul style="list-style-type: none"> <li>i. Sending data, communicating with lecturers and students</li> <li>ii. Improve communication especially from teachers</li> <li>iii. If it can be monitored well and regulated, then it can be a good platform</li> <li>iv. Encourage students to be well digitally oriented. Also, to communicate about its advantages</li> <li>v. By putting free Wi-Fi internet on the entire campus not in selected parts.</li> <li>vi. Lecturers to be responding quicker as it is an easy platform to work with</li> <li>vii. Making it mandatory for learners</li> <li>viii. All lecturers and students should have access to smart phones and unfailing network like MTN, either by borrowing from neighbors or relatives who own such</li> <li>ix. Campaign using posters to have all lecturers use WhatsApp as one of teaching tools</li> <li>x. Internet should be upgraded in all parts of the country.</li> <li>xi. Our government should formulate a free Wi-Fi internet policy throughout the country and perhaps make data bundles cheap for all meaning Zambians to Access teaching-learning process easily.</li> </ul>	<ul style="list-style-type: none"> <li>i. Better only when the tutor is available</li> <li>ii. Lectures must be willing to help students when they need help</li> <li>iii. Programmable timetable so that lessons wont clash</li> <li>iv. By sharing lectures and resources</li> <li>v. The teacher can use WhatsApp for one on one-text exchanges to address expectations and needs.</li> <li>vi. It should be used mainly for notification purposes; discussions should use other platforms such as zoom and others</li> <li>vii. There is need for motivation and showing of commitment.</li> <li>viii. May be sharing notes.</li> <li>ix. By encouraging learners to use it positively</li> </ul>

- iv. iv.It will allow certain cost-effective measures such as virtual residential and research Defense to be considered even when pandemic of Covid-19 ends

Figure 5.4 summarises the findings from the current study.

Figure 5.3: WhatsApp Platform interactions and connections from the findings

Learners	Staff
<ul style="list-style-type: none"> <li>i. Linking it to the School Management System</li> <li>ii. WhatsApp should just supplement/complement LMS</li> <li>iii. Course material accessing by the learners should be made easier such as having all the materials uploaded on the Astria and MyVista platforms.</li> <li>iv. It will allow certain cost-effective measures such as virtual residential and research Defense to be considered even when pandemic of Covid-19 ends</li> <li>v. It is the best mode of learning process so far; hence need to improve the linking system for the university between students and lecturers.</li> <li>vi. It would make learning very convenient despite how busy one might be.</li> <li>vii. It would make access to information a whole lot easier</li> </ul>	<ul style="list-style-type: none"> <li>i. Incorporate into Moodle, MyVista and Astria</li> <li>ii. To use WhatsApp as an alternative way to send upcoming events, orientation etc.</li> </ul>

6. Discussion

The study is situated in an era of disruptions namely the fourth industrial revolution with its technological base and the Covid -19 pandemic and its mandatory lockdowns which disrupted all forms of human social and economic life. DE, which relied on physical teaching and learning modalities had to change overnight to embrace technology in all its activities. The WhatsApp applications found its niche as a social tool for all human communication. This study endeavoured to establish whether the WhatsApp platform was the remedy for online programmes, disrupted by the Covid-19 pandemic in DE in Zambia and Zimbabwe. The findings show that WhatsApp platforms are used in online programmes in DE. The initiators of the use were students with lecturers reluctantly following suite.

The findings revealed that the WhatsApp platforms were used for communication purposes. Communication topped in both groups as the best for class members, business and social use confirming Ngalomba’s (2020) observations. Initially students wanted to find out from their peers the pertinent information pertaining to their courses. Information that would orientate them to their programmes. Consequently, the platforms became information highways on anything that the students needed from the mundane to the most important. Most groups operated without the supervision of lecturers. However, groups invited a few lecturers with the sceptics remaining at the fringe. This is contrary to Madge et al. (2021) who state that most African countries are now using the WhatsApp in their programmes. Students also needed to share information on their courses and other aspects of the university administrative issues confirming findings from Madge et al. (2021).

One of the main uses of the WhatsApp platform is for group discussions. Due to lack of access to face-to-face tutorials, students need clarification in certain aspects of their modules. Traditionally, face-to-face tutorials in DE afforded students the opportunity to get clarifications on specific aspects of the course module. The Covid-19 pandemic has disrupted this and as result the WhatsApp group discussion have filled that void. Barhoumi (2015) mentions such uses in his findings.

The heightened use of the WhatsApp platform indicates that users value its role in their learning endeavors. This means that its benefits far outweigh its weakness. Despite both groups citing many benefits, students benefited more from the interactions on it. It saved them time, it was cost effective, flexible and safe to use. Madge et al.’s (2021) findings resonate with the aspects of cost effectiveness and its effectiveness in easing the student into the programme helped by their peers without the imagined threatening lecturers’ intervention.

In an African setting, network problem become paramount due to low earnings. Most working students do not earn much or may be under sponsorship. The cost of data in Africa is out of reach for most of these students. The WhatsApp application uses internet, which may be difficult to access in remote areas. The quality of the interactions in the group and suitability of WhatsApp for some activities came up as a weakness. Sometimes students are digressed in the groups because of lack of focus. This is rife in those groups without clear terms of references aligned to the teaching and learning. It is therefore paramount that lecturers get involved in this WhatsApp groups so as to focus them.

Although both groups were positive about the WhatsApp platforms students were affirmative than their lecturers. They found it convenience and useful, and effective during the Covid-19 era. This in line with Madge et al.'s (2021) findings on Unisa students including those from Zimbabwe.

The general suggestions for improving the use of the WhatsApp platform resonate with Alubthane and AL Youssef (2021) who proffered three ways of improving this tool. Their suggestions encourage the embracing of the tool for a much wider and focused use in enhancing communication and all forms of interactions in sharing materials and appropriate links. The findings aligned with Michael Moore (1989) George Siemens' (2004) theories on interactions and connections as indicated in the summary in Figure 5.4.

Students clearly feel the need for the linking of WhatsApp platforms to the LMS. Students in from UNZA gave specific ways and benefits that would accrue to the busy student. The nature of WhatsApp would enable students to get information from the LMS at a lower cost. Ngalomba's (2020) recommendation on his paper on the Tanzanian experience with the WhatsApp groups that WhatsApp should be integrated to LMSs should be vigorously pursued to realise its economies of scale and benefit all students (Ngalomba, 2020).

## 5. Conclusions and recommendations

### Conclusions

The use of WhatsApp platforms has become ubiquitous in DE. It is now used as the first line of communication between students and their lectures. Students in this research were the initiators of its use with lecturers taking part in the group chats and tutorials. This is a resource, which universities cannot afford to ignore. Its use in administrative, teaching and learning and research are significant. The 'new normal' requires universities to do more research on such emerging technologies so as to fine tune their use.

### Recommendations

The study made the following recommendations:

- i. Lectures should take part in the creation of the WhatsApp groups and use them in their teaching and learning
- ii. Lectures should create focussed terms of references for use in the groups. Groups should have assistants to link the group to the lecturer
- iii. Universities must enable students to get gadgets to use.
- iv. Universities must integrate all facets of the WhatsApp platform in their electronic LMSs to enable students to access online programmes.

## References

- Alubthane F. and ALYoussef, I. (2021). Pre-Service Teachers' Views about Effective Use of the Whatsapp Application in Online Classrooms, *The Turkish Online Journal of Educational Technology*. 20: 44 – 52.
- Asiri, A. and Momani M.M. (2017). The Effectiveness of using WhatsApp Application as a mean of Communication between Supervisors and Student – Teacher at King Khalid University. *British Journal of Humanities and Social Sciences*. 16: 111-117.
- Baker, D.L. (2011). Designing and Orchestrating Online Discussions. *MERLOT Journal of Online Learning and Teaching*. 7: 401-411. Retrieved from [http://jolt.merlot.org/vol7no3/baker\\_0911.pdf](http://jolt.merlot.org/vol7no3/baker_0911.pdf)
- Barhoumi, C. (2015). The effectiveness of WhatsApp mobile learning activities guided by activity theory on students' knowledge management. *Contemporary Educational Technology*. 6: 221–238. Retrieved from <http://files.eric.ed.gov/fulltext/EJ1105764.pdf>
- Bouhnik, D., and Deshen, M. (2014). WhatsApp goes to school: Mobile instant messaging between teachers and students. *Journal of Information Technology Education: Research*. 13: 217-231. Retrieved from <http://www.jite.org/documents/Vol13/JITEv13ResearchP217-231Bouhnik0601.pdf>
- Buhari, S. R., Ahmad, G. I., and Bashir H. (2014). Use of social media among students of Nigerian polytechnic. Retrieved from <http://www.cmdconf.net/2014/pdf/47.pdf>.
- Cetinkaya, L. (2017). The Impact of WhatsApp Use on Success in Education Process. *International Review of Research in Open and Distributed Learning*. 18. 7.
- Clarke V, Braun V. (2013). Teaching thematic analysis: Over-coming challenges and developing strategies for effective learning. *The Psychologist*. 26. 2: 120-123. Retrieved from <http://eprints.uwe.ac.uk/21155>.
- Cohen, L., Manion, L., and Morrison, K. (2000). *Research methods in education* (5th ed.). London: Routledge.
- Creswell, J. (2009). *Research design: Qualitative, quantitative and mixed methods approaches*. Los Angeles, CA: Sage.
- Cloutier, C. and Ravasi, D. Using tables to enhance trustworthiness in qualitative research. *Strategic Organization*. 2020. 19:1. 113-133 Retrieved from <https://doi.org/10.1177/1476127020979329>
- Demetriou, L., Keramioti, L. Hadjicharalambous, D. (2021). Examining the Relationship Between Distance Learning Processes and University Students' Anxiety in Times of Covid19, *European*

- Journal of Social Sciences Studies*. 6. 2:123- 141. DOI: 10.4682/ejssv6i2.1012
- Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Communication and Technology Journal*. 1981. 29: 75–91. Retrieved from <https://www.jstor.org/journal/educcommtech>
- Hashish, E. A. Hamouda, G. M. and Taha, E. E. (2015). Nursing Students' Perception of Conflict Management Styles of their Nursing Educators. *Journal of Education and Practice*.6: 21-30. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1079105.pdf>
- Madge, C., Breines, M.R., Dalu, M.T. B., Gunter, A., Mittelmeier, J., Prinsloo, P. and Raghuram, P. (2019). WhatsApp use among African international distance education (IDE) students: transferring, translating and transforming educational experiences, *Learning, Media and Technology*. 267-282, DOI:10.1080/17439884.2019.1628048
- Mefolere, K.F. (2016). WhatsApp and Information Sharing: Prospect and Challenges. *International Journal of Social Science and Humanities Research*. 4: 615-625.
- Misaghi, M., Toniotti, E., Batiz, E. C. and Dos Santos, A.J. (2021). WhatsApp as a Tool for Integration and Motivation in Distance Education, *Social Networking*. 10: 3. DOI: 10.4236/sn.2021.103003
- Moore, M.G. (1989). Editorial: Three types of interaction. *The American Journal of Distance Education*. 3:1–6. Retrieved from [http://aris.teluq.quebec.ca/portals/598/t3\\_moore1989.pdf](http://aris.teluq.quebec.ca/portals/598/t3_moore1989.pdf)
- Moore, M.G. and Kearsley, G. (2012). *Distance Education: A Systems View of Online Learning* (3rd ed.). Belmont: Wadsworth, Cengage Learning. Retrieved from <http://isites.harvard.edu/fs/docs/icb.topic454495.files/moore.pdf>
- Moyo, J. (2020). Zimbabwean students switch to social media for lessons, *World Africa*, Retrieved from <https://www.aa.com.tr/en/africa/zimbabwean-students-switch-to-social-media-for-lessons/1971150>
- Mundende, K., Simui, F., Chishiba, A., Mwewa, G., and Namangala, B. (2016). Trends and prospects of instructional material development and delivery at the University of Zambia. *Global Journal of Human-Social Science: Linguistics and Education*. 2016. 16: 5–11. Retrieved from <https://globaljournals.org/journals/human-social-science-journal>
- Ngalomba, S. (2020). Using WhatsApp to enhance online learning, *University World News Africa Edition*. <https://www.universityworldnews.com/post.php?story=20200421102812987> retrieved on 18/09/21
- Pence, H. E. Preparing for the real Web generation. *Journal of Educational Technology Systems*. 2007. 35: 347-356.
- Roberts, T. S., and McInnerney, J. M. (2007). Seven Problems of Online Group Learning (and Their Solutions). *Educational Technology and Society*.10 (4), 257-268. Retrieved from <https://pdfs.semanticscholar.org/95d2/f49000c0590e222c1950477e56749bd6d180.pdf>
- Siemens, G. (2004). A learning theory for the digital age. <http://www.elearnspace.org/articles/connectivism.htm>
- Simui, F., Chibale, H., and Namangala, B. (2017). Distance education examination management in a lowly resourced north-eastern region of Zambia: A phenomenological approach. *Open Praxis*. 9: 299–312. doi:10.5944/openpraxis.9.3.442
- Simui, F., Mwewa, G., Chifwepa, V., Namangala, B., Mudende, K., and Chishiba, A. (2015, October). Reflecting on the drivers to increase access to education via the distance learning mode at the University of Zambia: 50 years of experience. Paper presented at the International Council for Distance Education Conference in Sun City, South Africa.
- Simui, F., Thompson, L., Mundende, K., Mwewa, G., Kakana, F., Chishiba, A., and Namangala, B. Distance learner's perspective on user-friendly instructional materials at the University of Zambia. *Journal of Learning for Development*. 2017.4: 90–98. Retrieved from ERIC database (EJ1141538).
- Simui, F. Kasonde-Ngandu, S. Cheyeka, A.M., and Kakana, F. Unearthing dilemmas in thesis titles: Lived experience of a novice researcher in Sub-Saharan Africa. *International Journal of Multidisciplinary Research and Development*. 2018.5: 99-105.
- Yeboah, J., and Ewur, G.D. (2014). The impact of whatsapp messenger usage on students performance in tertiary institutions in Ghana. *Journal of Education and Practice*. 5. 157-164. retrieved from [www.iiste.org](http://www.iiste.org)
- Yeboah, S. T., Horsu E. N., and Abdulai A.(2014). Usage of WhatsApp and voice calls (phone call): Preference of polytechnic students in Ghana. *Science Journal of Business and Management*. 2014. 2:08. doi: 10.11648/j.sjbm.20140204.11
- Yuvaraj, P. (2014). How to install and use WhatsApp in PC and laptop. Retrieved from <http://www.techychennai.com/how-to-install-anduse-whatsapp-in-pc-laptop/>