



## Usage of WhatsApp Messenger for Learning among Students in Selected Tertiary Institutions in Oyo State

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### Abstract

This study investigated the usage of WhatsApp mobile applications among students in selected tertiary institutions in Oyo State. The objectives of the study were to establish WhatsApp usage among students; identify the significance of WhatsApp Messenger among students, and determine the challenges students faced in the use of WhatsApp. To achieve these objectives a survey was undertaken in the selected tertiary institutions among students using questionnaires. The results of the study showed that there was widespread use of the WhatsApp application among students in the selected institutions. It was used for learning purposes of conveying academic tasks such as assignment and tutorial questions, time tables and notices. The findings also revealed that for academic purposes WhatsApp was mostly used for alerting friends about the absence or presence of lecturers, conveyance of academic tasks such as assignments, tutorial questions, time-tables and notices. It was also established that there was very little communication between students and lecturers using WhatsApp for academic purposes. The study concluded that WhatsApp was a viable delivery of academic material in the teaching and learning environment. It was seen to be a user-friendly, cheap, and effective means of communication among students. However, users also pointed out some challenges they faced in their usage of WhatsApp which included lack of privacy, lack of security of personal information and irregular internet access.

**Keywords:** Usage, WhatsApp messenger, Students, Learning

## Introduction

Technology has an immense impact on human lives. The use of social media applications such as this application has become popular as a learning tool in many institutions (Mistar and Embi, 2016). Education currently tries to develop new critical skills for students not only to learn content. Technology offers teachers the ability to transform the quality of instruction; achieve a more student-centred learning environment, have more differentiated instruction and develop problem or project-based learning and demand higher-order thinking skills. Teaching in all settings should encompass student-centred approaches to learning. Technology should not be used only as a tool for demonstration, as an electronic overhead projector or blackboard; rather the use of technology by students should be an integral part of instruction (Sayan, 2016). It has generally been observed that most students very readily adapt to social media and like to interact with their friends this way. Therefore, many teachers are seeing a great deal of success in using this means of communicating with their students (Hemmi, Bayne & Land, 2009). They maintained that since students already collaborate, search for information, communicate and socialize using web technologies as part of their everyday lives, there is no reason for them not to use the same skills and behaviours in the classroom to support learning.

Educational systems around the world are under increasing pressure to use new information communication technologies

(ICTs) to teach students the knowledge and skills they need in the 21st century. The influence of these media on learning and teaching environments is growing more each year. Message applications can reinforce class material and positively influence the discussion, collaborative work and authoring. Educators are experimenting with these technologies hoping to stimulate critical thinking skills, collaboration and knowledge construction (Sayan, 2016). A report published in the United States by the 2007 National School Board Association found that 96 per cent of youth in this age range have used social networking tools at some time, with their average engagement with them rivalling time spent watching TV at 9 hours a week. Yet perhaps the most stunning statistic of the report is that the topic of most conversation at these sites is education; 60 per cent of the students' surveys said they use the sites to talk about education topics and more than 50 per cent use them to talk about specific schoolwork (Klopfer, et al., 2009).

A great deal of education research provides evidence for the effectiveness of using social media technologies directly in the context of traditional education situations or online education (Barab and Duffy, 2000). Some studies have demonstrated the benefits of online social interaction in the learning process. Positive aspects of online interaction with teachers and peers include the following: access to peer and expert knowledge, the ability to receive feedback from teachers and peers, and an opportunity to reflect on the exchanged messages (Ellis, 2001).

By expressing their thoughts, discussing and challenging the ideas of others, and working together towards a group solution to a given problem, students develop critical thinking skills as well as skills of self-reflection and co-construction of knowledge and meaning (Brindley et al., 2009).

A study by Junco et al. (2011) sought to discover a causal link between the use of Twitter and other social media and student engagement. Twitter has been studied for its effect on student interaction and engagement, it was found that students engaged with faculty and each other in a vibrant and connected virtual learning environment (Junco et al., 2011). Yeboah and Ewur (2014) undertook a study whose aim was to establish the impact of WhatsApp messenger usage on students' performance in tertiary institutions in Ghana. The study indicated that WhatsApp had been a necessary tool for students as it could enhance their performance if used positively. They explained that WhatsApp made communication easier and faster, thereby enhancing the effective flow of information and idea sharing among students. They, however, cautioned that if used negatively, WhatsApp could have an adverse impact on the performance of students. Among the negative impacts they identified were that it took much of students' study time; resulted in procrastination-related problems, destroyed students' grammar and spelling; led to a lack of concentration during lectures; and difficulty in

balancing online activities and academic preparation.

WhatsApp has some academic advantages. It enables quick transference of links to study materials, unlike any other technologies, which often do not work, or other forms of communication that students do not just use after school hours. It also ensures that everyone gets the message, whether it is a video intended for class or a copy of a solution for an exercise sent after school hours (Bouhnik & Deshen, 2014).

Learning requires daily social interactions between students and teachers on one side and between students and daily life events on the other; "bridging the all-too-well-known gap between the classroom and the real world. Learning has meaning and relates to the real world because it is modelled on the systems of the real world" (Klopfer et al., 2009). Institutions of learning strive to develop and support methods to improve the effectiveness and efficiency of interaction and collaboration among students and their teachers. Most web social media tools have been developed to maintain, manage, and improve social interactions between people; where people can easily access, reuse or comment on content that is authored by others. The evolving learning environments allow students to learn anytime and anywhere (Wetzel, 2010). It is hoped that the findings of this study will increase awareness among both lecturers and students regarding the positive effect of WhatsApp usage in an academic environment. It is hoped that the study will encourage lecturers and

students to explore effective and more organized strategies for integrating WhatsApp into the teaching and learning process.

Educational mobile tools have emerged and show great potential to help students construct and share information and knowledge for learning through computers or mobile devices (Pence, 2007). Educational research demonstrates convincingly that immediate and frequent feedback improves learning (Hodder et al., 1989). Furthermore, "social networks may play an important role in raising awareness about the reliable resources of information among students and society by providing alternative sources of knowledge" (Battrawi & Muhtaseb, 2013). WhatsApp is a smartphone application that operates on nearly all current types of devices and operating systems. The application has been on the market since 2010. The declared purpose of the developers was to replace the existing short message service (SMS) platform with a system that is free of charge in an ad-free environment. WhatsApp is used as a means of sending and receiving messages to and from individuals or groups. It includes a variety of functions, such as text messages, attached images, audio files, video files and links to web addresses (Sayan, 2016).

Mistar and Embi (2016) believe that with the fact that WhatsApp has many benefits for students. Firstly, it promotes cooperation between peers can be promoted through the possibility of sharing content and supporting material, for example, research articles, e-books,

laws, YouTube channels, links, and so on WhatsApp can also be used for data collection since the teacher/researcher/student researcher can use this medium to send voice or written questions and receive answers in the same environment, thus promoting quick feedback.

Secondly, the teacher/moderator can use WhatsApp groups as a means to assess student participation (Thorton, 2015) WhatsApp is also ideal to motivate and stimulate students: It is very important in the teaching-learning process to involve students so that they reach the objectives defined by the curriculum and their objectives. Through WhatsApp, students can feel more comfortable than during face-to-face classes to ask questions or share interests, even when talking about contexts with large classes (+/- 50 students) it is much easier for the teacher to evaluate the participation of students and reward them throughout the process than limit this to a test/exam grade (Chen, 2018) As a mobile learning tool, WhatsApp also affords higher forms of inclusion: learners are all different, some are more extroverted and others are more introverted, some have visual and other hearing problems; in any case, WhatsApp allows more introverted students to feel more comfortable participating, those who express themselves better through the written channel feel more confident, those who have visual limitations can access the material through voice messages or those who have hearing problems can read all content (Oriji & Onikpa, 2018).

**Objectives of the study:** The objectives of the study were to;

1. determine the extent to which respondents utilize WhatsApp Messenger;
2. discover the significance of WhatsApp Messenger and
3. determine the challenges the respondents faced in their usage of WhatsApp.

### **Methodology**

**Study Design:** The study adopted a descriptive survey research design. A descriptive survey research design was adopted for the study. According to Nworgu (2015), a descriptive survey research design is one in which information is gathered from an unbiased representative group of interest using a questionnaire, interview, and observation. A descriptive survey design was found suitable for this study because data were collected from the respondents using a questionnaire. The study was carried out in Oyo State, Nigeria.

**Population of Study:** The population for the study comprised all the students of the Faculty of Science, The Polytechnic Ibadan and Faculty of Agricultural Extension, Home and Rural Economics, Oyo State College of Agriculture and Technology, Igboora, Oyo State (OYSCATECH) within the 2020/2021 academic session

**Sample selection:** The sample size for the study was a total of 150 undergraduate students comprising 100 students from the Polytechnic Ibadan and 50 students from OYSCATECH. The selection was

done in multi-stages; first by randomly selecting 20% of the faculties in the schools. This gave one out of five faculties in the Ibadan Polytechnic and one out of seven faculties in OYSCATECH. The faculty selected were the Faculty of Science from Polytechnic Ibadan; the Faculty of Agricultural Extension, Home and Rural Economics from OYECH. The next stage involved random selection of 10% of the student population in each faculty. Two departments were randomly selected from each faculty giving a total of four departments. The sample for each faculty was then randomly selected in equal proportion from the two selected departments. The selected participants comprised 70% females and 30% males within an average age range of 19- 22 years. 29.3% of the respondents are students with Higher National Diploma (HND) while 70.7% of the respondents are students with Ordinary National Diploma (OND). The majority (92%) were single;45% of the respondents lived in the school hostels,40% of the respondents lived off campus and 15% of the respondents came from home.

**Instruments for data collection:** A set of pre-validated survey questionnaires was used to obtain data for the study. The first section was structured to obtain data on the respondents' demographic characteristics such as gender, institution, and academic level. The second section was on the extent of WhatsApp usage by the respondents. It was rated on a five-point scale of Daily (5), weekly (4), fortnightly (3), monthly (2) and Never (1). The third section contained items that identified the significance of WhatsApp

usage, it was measured on a 4-point rating scale of strongly agree (4), agree (3), disagree (2) and strongly disagree (1). **Validity and reliability test of the instrument:** The questionnaire was subjected to face validation by three lecturers in the Department of Home and Rural Economics, Oyo State College of Agriculture and Technology, Igboora, Oyo State. Cronbach alpha technique was used to test the reliability of the instrument and a coefficient of 0.85 was obtained which indicates that the items of the instrument had high internal consistency.

**Method of data collection:** One hundred and fifty copies of the questionnaire were hand distributed to the respondents with the aid of two research assistants. The respondents filled out the questionnaires and they were collected back immediately. One hundred and fifty questionnaires were distributed, out of

which 142 were successfully filled in and returned; giving a response rate of 94.7%.

**Data and statistical analysis:** The data collected were analysed using SPSS version 23. Data on the extent to which respondents use WhatsApp Messenger were summarized in frequencies and percentages.

## Results

### The extent to which respondents utilize WhatsApp messenger

Table 1 shows the usage of WhatsApp by the respondents. Data show that all (100%) of them indicated that they use WhatsApp Messenger. The majority 69.7% used it daily; 16.2% used WhatsApp Messenger weekly, 7.7% of the respondents used WhatsApp Messenger fortnightly and 6.3% reported that they used it monthly.

**Table 1: Usage of WhatsApp by Respondents**

|             | Frequency | Per cent |
|-------------|-----------|----------|
| Never       | 0         | 0.00     |
| Daily       | 99        | 69.7     |
| Weekly      | 23        | 16.2     |
| Fortnightly | 11        | 7.7      |
| Monthly     | 9         | 6.3      |
| Total       | 142       | 100.00   |

### The significance of WhatsApp messenger

Table 2 shows data on the significance of WhatsApp Messenger to the respondents. From the table, many (%) of the respondents reported that WhatsApp messenger boosts students' performance; 21.3% of the

respondents noted that WhatsApp messenger is convenient and user-friendly; 17.61% of the respondents reported that WhatsApp is used in sharing documents relating to the courses that they were studying and 19.01% of the respondents reported that WhatsApp consumes fewer data.

**Table 2: Significance of WhatsApp Messenger**

| S/N | Significance of WhatsApp Usages | Frequency  | Per cent   |
|-----|---------------------------------|------------|------------|
| 1.  | Boost students' performance     | 60         | 42.25      |
| 2.  | Convenient and User friendly    | 30         | 21.13      |
| 3.  | Sharing of Document             | 25         | 17.61      |
| 4.  | Consume Less Data               | 27         | 19.01      |
|     | <b>Total</b>                    | <b>142</b> | <b>100</b> |

**Challenges students face in their use of WhatsApp**

Table 3 shows data on the challenges students face in their usage of WhatsApp (table 3) show the concerns and challenges the respondents encountered while using WhatsApp.

They included the high cost of internet connectivity (42.4%), lack of personal privacy (17.6%), irregular Internet access (19.7%), lack of time to use social media (10.5%) and lack of immediate personal benefits (9.8%).

**Table 3: Challenges Students Face in Their WhatsApp Usage**

| Challenges                          | Frequency | Per cent |
|-------------------------------------|-----------|----------|
| Cost of internet                    | 60        | 42.4     |
| Lack of personal privacy            | 25        | 17.6     |
| Irregular internet access           | 28        | 19.7     |
| Lack of time to use social media    | 15        | 10.5     |
| Lack of immediate personal benefits | 14        | 9.8      |

## Discussion

This study identified WhatsApp as one of the social media platforms used for learning in tertiary institutions. Findings from the study revealed that 69.7% of the respondents use WhatsApp Messenger daily. This is because such social media are commonly used by young people for interaction with their peers. The findings of this study are similar to that of Cheng and Qasim (2021) who found that there has been tremendous growth in the use of social media platforms such as WhatsApp, Instagram, and Facebook to facilitate learning. Chiang, et al., (2019) conducted a study and found that social media platforms like Facebook, Instagram, etc., have become a well-known communication and interaction channel among people worldwide.

This study also found that the majority of the respondents reported that WhatsApp boost their academic performance. This finding buttresses the findings of Abidin (2016) that it is easy to form groups with WhatsApp or to use it for private communication, it can be used to communicate anywhere and at any time, and it is commonly used by university students worldwide (Burke, 2002; Hofacket, 2001). Choshaly and Mirabolghasemi, (2020) found that WhatsApp was one of the most popular Social Network Sites (SNS) among students in tertiary institutions. Deng and He (2020) found that WhatsApp is popular among undergraduate students and that they use it daily. They also reported that students attributed their

heavy use of WhatsApp to its ease of use, speed, real-time messaging, and low cost. WhatsApp can be used in higher education in several ways to achieve different educational goals. However, Wang and Kim (2017) argued that WhatsApp can be used in higher education to create immediate connections, encourage reflection, and facilitate coordination in informal and formal learning.

The study also discovered the challenges faced by students in using WhatsApp Messenger for learning. The majority of the respondents lamented the cost of the internet. Chen (2018) found that WhatsApp was a useful electronic tool to facilitate information sharing among university students on a range of subjects related to the courses that they were studying. This confirms the findings of Chang and Chung (2014) who undertook a study whose aim was to establish the impact of messenger usage on students' performance in tertiary institutions in Ghana. Hemmi et al., (2009) have postulated that educators worldwide are seeing a lot of advantages in using social media such as WhatsApp to communicate with their students. They add that since students already collaborate, search for information, communicate and socialize via web technology as part of their everyday lives, there is no reason why they cannot use the same medium for learning purposes. Yeboah and Ewur (2014) assert that WhatsApp has been a necessary tool for students as it could enhance their



performance, especially if it is used positively. This assertion is supported by Bouhnik and Deshen (2014) who state that WhatsApp has some academic advantages as it enables quick transference of materials.

### **Conclusion**

This study has explored the use of WhatsApp among students in selected tertiary institutions in Oyo state. WhatsApp usage among students was widespread. It was also used for learning purposes of conveying academic tasks such as assignment and tutorial questions, timetables and notices. WhatsApp was seen to be a user-friendly, cheap, and effective means of communication among students. However, users also pointed out some challenges they faced in their usage of

WhatsApp which included lack of privacy, lack of security of personal information and irregular internet access.

### **Recommendations**

The study recommended that tertiary institutions should give guidelines on the usage of WhatsApp so that students could take advantage of its viability and use it more for learning purposes. It also recommended that time management skills should be inculcated into students' curriculum so that they can prudently and productively use time as opposed to predominantly using WhatsApp for social interaction. The study further recommended that there is a need to advise students on the possible hazards of overusing internet accessories and applications such as WhatsApp.

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