

African Journal of Education and Practice (AJEP)

**THE USE OF WHATSAPP IN THE LEARNING PROCESS AMONG GRADUATE
STUDENTS IN THE UNIVERSITY OF NAIROBI, KENYA**

Evans K. O.

The Use of WhatsApp in the Learning Process among Graduate Students in the University of Nairobi, Kenya



^{1*}Evans K. O.

Postgraduate Student, University of Nairobi

*Corresponding Author's Email: info@iprjb.org

Article History

Received 28th February 2023

Received in Revised Form 4th March 2023

Accepted 22nd March 2023



Abstract

Purpose: The purpose of this study is to evaluate the use of WhatsApp in the learning process among graduate students in the University of Nairobi.

Methodology: The study adopted a desktop methodology. Desk research refers to secondary data or that which can be collected without fieldwork. Desk research is basically involved in collecting data from existing resources hence it is often considered a low cost technique as compared to field research, as the main cost is involved in executive's time, telephone charges and directories. Thus, the study relied on already published studies, reports and statistics. This secondary data was easily accessed through the online journals and library.

Findings: The findings revealed that there exists a contextual and methodological gap relating to the use of WhatsApp in the learning process among graduate students in the University of Nairobi. Based on a preliminary empirical review, it is evident that digital technology holds significant importance in the field of education presently. The utilization of WhatsApp mobile technology is highly significant in this context, given its extensive and prevalent use in the realm of online higher education. Moreover, it offers a wider range of alternatives and opportunities for students within the framework of virtual education. The vast majority of entities in the world have transitioned to digital formats.

Unique Contribution to Theory, Practice and Policy: The Social Constructivism theory and Activity theory may be used to anchor future studies on the use of WhatsApp in the learning process among graduate students in the University of Nairobi. A quantitative survey is required to determine the statistical significance of the impact of utilizing WhatsApp as a learning tool among graduate-level students. There exists a necessity for a comparative analysis regarding the efficacy of WhatsApp as a tool for learning in contrast to conventional modes of learning.

Keywords: *WhatsApp, WhatsApp Group, Social Media, WhatsApp, Education.*

©2023 by the Authors. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>)

INTRODUCTION

As of April 4, 2020, the COVID-19 pandemic had resulted in the inability of 1.5 billion children to attend school. According to UNESCO's report in 2020. E-Learning is a mode of delivering educational content through the utilization of Information and Communication Technologies (ICTs). The implementation of this advanced technology has been widely adopted by institutions of higher learning (IHL) globally. According to Sauke's (2015) assertion, the employment of Information and Communication Technologies (ICTs) in the field of education is imperative for International Humanitarian Law (IHL) to remain competitive. The aim is to introduce technological advancements that can foster a society that embraces technology and effectively addresses the demand for continuous and accelerated lifelong learning. According to Sauke (2015), there is potential for increased efficiency and effectiveness. Packaged learning management systems (LMS) such as WebCT, Blackboard, and Moodle are widely used in educational settings. The Learning Management System (LMS) has the capability to conform to various models utilized by universities. The nature of e-learning may exhibit variability. According to Hadullo's (2018) definition, asynchronous e-Learning pertains to the utilization of online lectures, examinations, and assignments that are reinforced by email and discussion forums.

Simultaneous e-Learning, as defined by Kohnke and Moorhouse (2021), involves the utilization of technology, such as video conferencing, to facilitate active participation and attendance among learners. It is imperative for both students and professors to engage in online learning. All of these individuals participate in academic activities such as attending lectures, presentations, and discussions. E-learning can be conducted through online platforms, either remotely or in-person. The research employed asynchronous e-Learning as the mode of instruction. It is imperative for students to employ multiple Information and Communication Technologies (ICTs) in their learning process. Contemporary Information and Communication Technologies (ICTs) facilitate expeditious information retrieval for students. According to Al-Qallaf and Ridha (2019), students have the ability to utilize various technological resources such as wireless networks, Internet search engines, databases, websites, and web 2.0 technologies to access and distribute electronic content such as e-books and e-journals, thereby enhancing their learning experience. According to Hoq (2020), while e-learning may not be a complete substitute for traditional face-to-face learning, it can facilitate the learning process by providing innovative instructional materials and novel pedagogical approaches. Meyer and Gent (2016) suggest that information and communication technologies (ICTs) can serve as a means of supporting learning rather than imposing it. According to Elumalai *et al.* (2021), teachers hold the belief that ICT is solely beneficial when used in conjunction with other educational resources. The argument posits that the integration of technology enhances the educational experience of students and that a cohesive system is imperative for effective pedagogy. The increasing enrollment and educational demands have contributed to the advantages of E-Learning. There is a growing demand among students for personalized instructional programs as opposed to conventional delivery methods. In order to cater to the diverse groups of learners, educational institutions have had to modify their curricula and modes of dissemination (Bebbington, 2021).

Currently, fewer than 25% of developing nations provide any form of distance education, with a number of African establishments utilizing television and radio broadcasting to facilitate this mode of instruction. By way of comparison, the majority of industrialized nations provide

opportunities for distance education, with an overwhelming proportion of these being accessible through online means (Maphosa, 2021). The unequal distribution of technological resources among the low-income demographic in Kenya represents a single facet of the multifaceted challenges faced by the country, as per the Communications Authority's report in 2020. The prevalence of e-learning in Kenyan academic institutions has been driven by a significant youth demographic and the accessibility of affordable internet-enabled mobile devices (Communications Authority, 2020).

As per Sadeghi's (2019) findings, individuals who are registered in online courses are provided with diverse educational resources and are able to engage in learning activities at their own convenience, regardless of their location. According to Chan's (2005) assertion, online discussion forums represent a valuable educational resource that can effectively mitigate obstacles to learning and expedite the dissemination of knowledge. According to Chen et al. (2016), professionals assert that they can facilitate children in acquiring a more profound comprehension of certain subjects and enhance their cognitive flexibility.

The utilization of novel media as an instructional instrument is merely an instance of the diverse range of applications of this technology across various contexts. The term "new media" encompasses a variety of communication platforms on the internet, including wikis, virtual worlds, blogs, and online social networking, as noted by Martínez-López *et al.* (2016). The increased accessibility of low-cost smartphones has also played a role in the proliferation of WhatsApp as an instructional aid. Facilitating the formation of student groups by teachers is a straightforward process, which can foster the development of a social network within the classroom. This study aims to investigate the potential of WhatsApp as an educational tool within the framework of other forms of New Media.

Yang and Lin (2016) posit that the "traditional teacher-centered pedagogy" is an educational approach where the teacher assumes a central position in imparting knowledge to learners. Given their extensive knowledge and proficiency in the subject matter, educators are the most competent individuals to ascertain the organization and content of a particular lesson. Conversely, pedagogy that is centered on the learner promotes the involvement of students in their own educational process. Consolidating prior knowledge is beneficial for reinforcing learning. To advance to a higher level of education, it is imperative to amalgamate previously acquired knowledge with novel experiences. According to Li (2012), there is a shift in focus from the teacher to the student in this type of education.

Molinillo, Aguilar-Illescas, and Vallespín-Arán (2018) assert that the internet can serve as a tool for students to generate and distribute knowledge. In order to derive maximum benefits from collaborative learning activities, it is imperative for students to actively participate in social interaction. The utilization of mobile devices for information sharing can be observed in various activities, with discussion boards being a prominent illustration (Lupton, 2016). The efficacy of the instructional approach and the cognitive and psychological state of the learner are both factors that can influence their capacity to retain information. Zhao and Cziko (2001) contend that for teachers to effectively integrate ICT in the classroom, three prerequisites must be satisfied: firstly, teachers must possess a firm conviction in the effectiveness of technology; secondly, the use of technology should not lead to any disturbances; and thirdly, teachers must have authority over the technology.

According to Tondeur *et al.* (2017), the integration of ICT in the classroom enables diverse instructional strategies, philosophies, and approaches, although it is not a method in itself. The statement posits that the rate of adoption of ICTs is contingent upon the underlying rationales and modalities employed in their integration and implementation, as posited by Salehi and Salehi (2012). The utilization of mass media engenders a domain of communal knowledge wherein all participants within the system possess awareness of the knowledge held by others, thereby facilitating a modification in the pace and manner of decision-making. The undeniable capabilities of the media include directing attention, increasing awareness, and disseminating information. Cullen-Knox *et al.* (2017) conducted a study on the topic.

Various forms of mobile communication, such as web-based learning, mobile social networks, and instant messaging, are currently being implemented in higher education to enhance online interactions between students and faculty (Cullen-Knox *et al.*, 2017). Gasaymeh (2017) conducted research on the utilization of WhatsApp by students for social, personal, and academic purposes. The findings revealed that the usage of WhatsApp for social and personal purposes was more prevalent than for academic purposes. Additionally, the study explored the students' viewpoints on the integration of WhatsApp into the educational process.

Social networking sites (SNSs) are currently experiencing unparalleled levels of popularity among contemporary college students. The extensive utilization of social networking platforms can be attributed to their numerous pragmatic advantages, such as enabling communication, fulfilling recreational needs, and circulating diverse types of media (Khan, 2017). Social networking sites (SNSs) are widely accessible, free to join, and offer a plethora of useful features. They are a source of entertainment and require minimal technical expertise to operate. The exploration of novel pedagogical opportunities enabled by mobile learning could be advantageous for both educators and learners (Baran, 2014). The utilization of information and communication technology exemplified by New Media is considered an instance of "innovative pedagogy" within this particular framework. Some educators remain apprehensive about certain types of technology, which hinders their integration into classroom settings. This study specifically focused on WhatsApp, despite the widespread availability of various social media platforms such as Twitter, Facebook, LinkedIn, and numerous others.

Reuter (2019) reported that the global active monthly user count for WhatsApp was approximately 1.2 billion as of 2017. There exist a multitude of rationales behind individuals electing to utilize WhatsApp as their principal mode of communication. Bouhnik and Deshen Amelia (2020) assert that a significant number of individuals opt for WhatsApp due to its cost-effectiveness, capacity to send an unlimited number of messages, instantaneous feedback, ability to facilitate continuous conversations with numerous friends simultaneously, promotion of social cohesion, and provision of enhanced privacy compared to other social media platforms.

In response to the Covid-19 pandemic, the Ministry of Education in Kenya implemented measures to facilitate the continuity of students' education. These measures included the broadcasting of instructional programming on various platforms such as television, radio, and YouTube (Ochieng & Waithanji, 2022). As per the statement, The University of Nairobi ensured the continuity of education through the utilization of various online platforms, despite the absence of students on campus. Many African countries, including Kenya, experienced a state of unpreparedness among both educators and students. According to the respondents,

there was a perceived need to rapidly adjust to novel models and technologies to proficiently utilize online educational platforms such as Microsoft Teams, Google Hangouts, Zoom, and other similar tools. Notwithstanding the widespread use of WhatsApp among Kenyan individuals prior to and following the Covid-19 era, its impact on the realm of education has been subject to limited scholarly inquiry.

The revision of existing policies in institutions of higher learning (IHL) was necessary to facilitate the adoption of online or remote learning as a temporary solution. Francisco (2020) found that stakeholders, including policymakers, service providers, and students, held differing viewpoints regarding the implementation of novel teaching approaches. However, through negotiation and agreement, virtual learning has now become the norm in the majority of educational institutions. The University of Nairobi's Senate responded to the challenges presented by the Covid-19 pandemic by approving policies and procedures for online examinations on May 8, 2020. In March, the University commenced the provision of online courses in response to the government's directive to prohibit gatherings and meetings as a measure to curb the spread of the disease. According to the Nairobi College of Agriculture, the information provided is from the year 2020.

In contrast to earlier educational pedagogies that prioritized teacher-centered approaches and the dissemination of knowledge as determined by the instructor, contemporary technologies have facilitated a more participatory learning milieu that affords students greater agency in their own educational pursuits. On the contrary, it is noteworthy that certain students may find themselves excessively engrossed in the use of this technology, leading to addictive tendencies (Lasry *et al.*, 2014). Further research is required to examine the language utilized in these discussions, particularly within the context of Kenya.

The Covid-19 pandemic necessitated a transformation in human interaction, subsequently impacting pedagogical methods and educational practices. Due to the implementation of lockdowns worldwide, a significant number of educational institutions were closed, resulting in the absence of face-to-face teaching and learning opportunities for students (Tam & El-Azar, 2020). According to UNESCO (2020), the closure of schools and universities can result in adverse effects for students, such as interruptions to their academic progress and the deprivation of chances for individual and occupational growth. Amidst the Covid-19 pandemic, a number of individuals sought alternative approaches to education, prompting the need for an assessment.

The utilization of email groups, social networks, and virtual chat rooms is increasingly prevalent in contemporary society (Sajithra & Patil, 2013). Castells (1996) argues that ethnographic research is more suitable for investigating the phenomenon of "network societies." Ethnographers engage in an in-depth exploration of individuals' lives to gain insight into their values and priorities. The act of "delving into" enables the researcher to gain insight into how individuals engage in routine behaviors, prioritize their beliefs, navigate their daily lives, and construct personal significance. The research investigated the utilization of WhatsApp by graduate students for educational purposes at the University of Nairobi, encompassing its advantages, limitations, and prospective implications. This evaluation is also essential as novel pedagogical approaches are being explored in response to the COVID-19 outbreak. This research investigates the utilization of WhatsApp by graduate students as a tool

for learning within the School of Journalism and Mass Communication at the University of Nairobi.

Statement of the Problem

WhatsApp enables novel ways of incorporating computer-based technologies in education. However, as elucidated in the contextual framework, the efficacy of ICT in facilitating pedagogy and knowledge acquisition is not without limitations (Bidarra & Rusman, 2017). In the event that students lack the ability to effectively categorize information based on its relevance or to coherently synthesize it, they may encounter an excess of information. Despite the existence of numerous studies that have demonstrated the utilization of WhatsApp as a tool for learning, a comprehensive investigation into its efficacy for educational purposes, particularly during the Covid-19 pandemic, has yet to be conducted. Therefore the aim of this study is to assess the use of WhatsApp in the learning process among graduate students in the University of Nairobi, Kenya.

LITERATURE REVIEW

Theoretical Review

Social Constructivism Theory

Social constructivism theory posits that learning is an active process where individuals construct their own understanding of the world through their experiences and interactions with others. According to this approach, information is not passed on from instructor to student; rather, it is constructed by the learner through their own experiences and interactions with the environment in which they find themselves (Galbin, 2014).

The social constructivism theory suggests that WhatsApp can potentially serve as a valuable tool within the educational process, enabling students to construct their own knowledge by participating in dialogues with their peers and instructors (Tyrer, 2019). Through the utilization of WhatsApp as a platform, students are capable of engaging in collaborative projects, exchanging ideas with peers, and seeking guidance from both their instructors and fellow classmates. When learners engage in such conversations, they are capable of constructing their own comprehension of the subject matter and formulating their own perspectives. Enhancing comprehension can be facilitated by engaging in group discussions and receiving feedback from peers, which can provide novel insights from diverse viewpoints.

Furthermore, WhatsApp has the potential to facilitate the formation of educational communities, where students can provide mutual motivation and assistance, as well as share their thoughts and concepts. The sense of affiliation with a community holds significant importance, particularly in the context of online learning, where learners may encounter emotions of seclusion. According to the Social Constructivism theory, WhatsApp could potentially have a significant role in facilitating the educational process. The reason for this is that it functions as a medium for pupils to develop their own comprehension by means of engagement with their fellow students and educators, and it additionally aids in fostering the establishment of educational communities (Mpungose, 2020).

Activity Theory

Activity Theory suggests that learning is a process of engaging in a specific activity within a specific context. This idea proposes that learning is not merely a process that occurs within an

individual's head, but rather that it is influenced by the social and cultural surroundings in which it takes place (Cook & Artino, 2016). Activity Theory posits that WhatsApp can serve as a valuable instrument to support specific educational endeavors within the learning process. Several instances of such activities comprise of collective discussions, mutual evaluations, and joint assignments.

Several ways in which WhatsApp can be utilized to facilitate educational endeavors are as follows: Students have the ability to employ WhatsApp as a means of conducting group discussions pertaining to various topics that are closely linked to the course material. Throughout these exchanges, students are afforded the chance to participate in critical analysis, express their perspectives, and pose inquiries. WhatsApp has the potential to serve as a tool for enabling peer feedback among students in relation to their assignments, projects, or presentations. Enhancing one's comprehension of the subject matter and reinforcing their communication skills can be facilitated through this approach. The utilization of WhatsApp can serve as a means to enable peer feedback amongst students. The application enables students to share their work and receive feedback from their peers. Enhancing analytical and problem-solving abilities can potentially enhance the overall quality of one's work. WhatsApp can be employed by students to facilitate the completion of group assignments. The application facilitates learners to engage in collaborative work, exchange ideas, and delegate tasks among themselves. According to Zheng and Warschauer (2015), this can facilitate the development of teamwork skills and collaboration abilities among individuals.

Empirical Review

Morsidi (2021) conducted a study on WhatsApp and its potential to develop communication skills among University students. The WhatsApp application is perceived as having the capacity to enhance these abilities due to its robust functionalities and features, user-friendly interface, and cost-free nature. Notwithstanding, there exist challenges in the implementation of this application as a means of enhancing communication proficiency among UTM students for educational objectives. The present investigation utilized a quantitative research approach through the implementation of a survey design. A total of 400 UTM students were selected through a simple random sampling technique to participate in the study by completing online questionnaires. The results indicate a significant prevalence of WhatsApp usage in the realm of education among students at UTM, as well as a notable proficiency in communication skills through the utilization of this platform for educational purposes among the same student population. The presence of a robust positive linear correlation between the two variables was substantiated. The employment of WhatsApp in education was positively perceived by students as a means to enhance their communication abilities.

Ali Ta'amneh (2017) sought to investigate the effect of using WhatsApp messenger in learning English language among university students. The study's sample comprised 40 freshmen enrolled in a university. The participants were segregated into two distinct cohorts. The study employed a control group comprising of 21 students who received traditional instruction, while the experimental group comprised of 19 students who received a blended learning approach that incorporated the use of WhatsApp and traditional teaching methods. The study's findings indicate that there were discernible disparities in the academic performance of the students belonging to the experimental group and those belonging to the control group. The experimental group exhibited a favorable difference. The findings suggest that the

incorporation of the WhatsApp application in English language instruction resulted in enhanced proficiency levels among participants in the experimental group, as compared to the control group.

Abraham (2019) conducted a study on social media in teaching- learning process: investigation of the use of WhatsApp in teaching and learning in University of Port Harcourt. The aim is to identify any significant obstacles that may hinder the successful implementation of this approach in the context of education. The research methodology employed was the utilization of a descriptive survey approach. The utilized research tool consisted of a 12-item questionnaire that was administered to both the lecturers and students in a corresponding manner. The researchers utilized an in-depth interview technique to address any inconsistencies in the structured questionnaire that was distributed to both the lecturers and students. The findings indicate that despite the possession of Internet-enabled mobile phones by both lecturers and students, WhatsApp instant messaging is not being utilized effectively for academic activities. Specifically, only a small proportion of lecturers (11.7%) and students (22.9%) reported using the platform for academic purposes. The findings indicate that all of the lecturers and students surveyed did not receive any formal instruction on the utilization of WhatsApp mobile technology.

Mistar (2016) conducted a study on students' perception on the use of WhatsApp as a learning tool in ESL classroom. The utilization of WhatsApp among students has been found to enhance idea contribution and facilitate expedited communication. The objective of this study is to investigate the utilization of WhatsApp as an educational instrument and its potential to facilitate language acquisition among students. Moreover, the study explores the importance of utilizing the aforementioned tool and establishes its application in accordance with the attitudes of students, aligning with the contemporary lifestyle of younger generations. The present study involved the collection of data through a survey administered to a sample of 20 participants who were students enrolled in a pre-university program in Kuala Pilah. The participants were provided with a set of questionnaires and given a time frame of 15 to 20 minutes to complete the survey. A preliminary investigation involving 30 participants was conducted to assess the reliability of the research instruments utilized in this study. Quantitative data was gathered and the outcome comprises the aggregate size of the sample along with the percentages of responses. The data has been condensed in order to ascertain the efficacy of the educational instrument for the students. The study's results indicate that the utilization of WhatsApp has a noteworthy impact on students' language acquisition and proficiency in English language usage.

Chesnay (2014) studied the impact of WhatsApp on studying habits amongst university students in Ghana. The objective of this research is to enhance the overall understanding of ICT by assessing the impact of WhatsApp on college students residing in the urban center of Kumasi, Ghana. The researchers employed a descriptive research design and utilized a quota sampling method to select a sample of 200 participants from four universities, comprising of two public and two private institutions. According to the findings, a significant proportion of students, specifically 46.7%, utilize WhatsApp at a frequency of ten or more instances on a daily basis. Forty percent of the participants allocate a time frame ranging from 15 to 30 minutes per visit, whereas 20 percent of the participants dedicate a time frame ranging from 30 to 45 minutes per visit. Forty percent of students utilize WhatsApp while on campus and during lessons, while 33.3 percent use the application in their respective shelters.

Oganji, Okoyeukwu, Wanjiru and Osiri (2017) carried out a study on the pattern of usage of SM by pharmacy students at Kenyatta University. The data was gathered through the administration of a questionnaire, indicating that the study was of a descriptive nature. As per the results, WhatsApp garnered greater favor among students and was predominantly utilized for communication with acquaintances in the physical realm. Conversely, Facebook served as a means of contacting both tangible and virtual companions. According to the survey findings, Pharmacy students exhibit a pragmatic approach towards the utilization of social networking sites, viewing them as less formal channels of communication. Consequently, the majority of students tend to participate in social networking activities over the weekends as opposed to weekdays when they are in school.

Baishya (2020) did a study on WhatsApp groups in academic context; exploring the academic uses of WhatsApp groups among the students. The investigation additionally examines the potential impact of teacher presence on group dynamics. The present study involved the analysis of chat conversations from four WhatsApp groups over the course of one year. Two of the groups were facilitated by a teacher, while the other two groups were not. The second study involved conducting interviews with two participants from each group, resulting in a total of eight participants. The findings of the research indicate that the primary roles fulfilled by these groups are predominantly associated with education. In addition to its academic applications, students utilize this platform for expressing well-wishes and congratulations, engaging in extracurricular pursuits, and seeking entertainment. Furthermore, the findings indicate that the teacher's presence has a substantial impact on the group discussion. Despite acknowledging that WhatsApp groups can sometimes be burdensome and time-consuming, students maintain that they are indispensable due to the valuable academic information they provide, such as updates on classes, exams, and holidays. Additionally, these groups facilitate social connections and non-academic engagement among members.

Pixel (2016) studied the imposition of the WhatsApp messenger to Students at the Begum Rokeya University, in, Bangladesh the yearn 2015. The present investigation was conducted utilizing a sample size of 200 questionnaires as the primary instrument for data collection in the survey. Based on the research results, WhatsApp has a noteworthy adverse influence on students, which has an unfavorable impact on their academic performance, behavior, and everyday routine. The findings of the study indicate that a significant proportion of the time allocated for studying and completing tasks is disrupted by various distractions, thereby rendering the employed methods less effective. The research findings suggest that effective utilization of online platforms, such as WhatsApp, for educational purposes is contingent upon the implementation of sound time management practices.

Okwuchukwu and Ngozi (2014) studied WhatsApp's usefulness as a collaborative learning tool among graduate students at the University of Uyo in Akwa Ibom State. The study employed a quasi-experimental design for the investigation. The study questions were addressed by employing the mean and standard deviation, whereas the Z-test and T-test were utilized to test the null hypotheses. The research sample consisted of 60 participants who were enrolled in the 400-level science education program within the Faculty of Education at the University of Uyo. The results indicate a statistically significant disparity in retention rates between pupils instructed through WhatsApp and those taught through conventional means. Additionally, no statistically significant distinction was observed between male and female students who employed WhatsApp as a learning tool.

METHODOLOGY

The study adopted a desktop methodology. Desk research refers to secondary data or that which can be collected without fieldwork. Desk research is basically involved in collecting data from existing resources hence it is often considered a low cost technique as compared to field research, as the main cost is involved in executive's time, telephone charges and directories. Thus, the study relied on already published studies, reports and statistics. This secondary data was easily accessed through the online journals and library.

FINDINGS

This study presents both a contextual and methodological gap.

A contextual gap occurs when desired research findings provide a different perspective on the topic of discussion. Mistar (2016) conducted a study regarding students' perceptions of WhatsApp as a learning tool in the context of an ESL classroom. Moreover, the study explores the importance of utilizing the aforementioned tool and establishes its application in accordance with the attitudes of students, aligning with the contemporary lifestyle of younger generations. The study collected data through a survey administered to 20 participants who were pre-university students from Kuala Pilah. The participants were given a set of questionnaires and allotted 15 to 20 minutes to complete them. The study's results indicate that the utilization of WhatsApp has a noteworthy impact on students' language acquisition and proficiency in English language usage. On the other hand, our current study focuses on the use of WhatsApp in the learning process among graduate students in the University of Nairobi, Kenya.

A methodological gap is also present, for example, in the study conducted by Abraham (2019) on social media in teaching- learning process: investigation of the use of WhatsApp in teaching and learning in University of Port Harcourt. The study employed a descriptive survey methodology. The utilized research tool consisted of a 12-item questionnaire that was administered to both the lecturers and students in a corresponding manner. The researchers utilized an in-depth interview technique to address any inconsistencies found in the structured questionnaire that was distributed to both the lecturers and students. The findings indicate that despite the possession of Internet-enabled mobile phones by both the lecturers and students, the utilization of WhatsApp instant messaging for academic activities is inadequate. Specifically, only a small proportion of lecturers (11.7%) and students (22.9%) reported using the platform for academic purposes. On the other hand, our current study adopted a desk research method.

CONCLUSION AND RECOMMENDATIONS

Undoubtedly, the importance of digital technology in contemporary education cannot be overstated. The utilization of WhatsApp mobile technology is highly advantageous in this context, given its widespread and extensive use in online higher education. Moreover, it offers a wider range of alternatives and opportunities for students within the framework of virtual education. The vast majority of entities in the contemporary world have undergone a transition to digital formats. Numerous nations globally have initiated the implementation of a digitalized education system due to contemporary technological advancements. Given the current democratization of education and subsequent admission predicament, Kenya cannot afford to lag behind and observe the global shift towards digital education.

Consequently, it is imperative to fully embrace WhatsApp, as a technological innovation, within Kenyan educational institutions to facilitate efficient electronic pedagogy and scholarship. To enhance the efficacy of electronic education delivery in this region, it is imperative for the Faculty and the University to furnish the requisite resources, generate ample awareness, and impart adequate training to remain competitive with time. The survey reveals that although a significant number of professors and students possess mobile phones that are equipped with Internet access, their primary purpose is not necessarily academic in nature. The WhatsApp mobile application technology has been identified as a highly beneficial tool for educational purposes.

The use of WhatsApp group participation may be deemed more advantageous for students when compared to traditional classroom learning, as it affords them the opportunity to communicate without the constraints of geographical distance or time limitations. WhatsApp's compatibility with various multimedia formats such as PowerPoint presentations, videos, files, and images facilitates the effortless sharing of class and lesson materials among group members. Consequently, learners have the ability to exchange significant multimedia content such as videos or hyperlinks to websites. A quantitative survey is required to determine the statistical significance of the impact of utilizing WhatsApp as a learning tool among graduate-level students. A comparative analysis is required to assess the efficacy of WhatsApp as a learning tool in comparison to conventional modes of instruction.

REFERENCES

- Al-Qallaf, C. L., & Ridha, A. (2019). A comprehensive analysis of academic library websites: design, navigation, content, services, and web 2.0 tools. *International Information & Library Review*, 51(2), 93-106.
- Amelia, M. (2020). Whatsapp Goes To Classroom: Using WhatsApp to Foster Students 'speaking Skill in Speech. *Proceeding Iain Batusangkar*, 1(3), 153-158.
- Baishya, D., & Maheshwari, S. (2020). WhatsApp groups in academic context: Exploring the academic uses of WhatsApp groups among the students. *Contemporary Educational Technology*, 11(1), 31-46.
- Baran, E. (2014). A review of research on mobile learning in teacher education. *Journal of Educational Technology & Society*, 17(4), 17-32.
- Bebbington, W. (2021). Leadership strategies for a higher education sector in flux. *Studies in Higher Education*, 46(1), 158-165.
- Bidarra, J., & Rusman, E. (2017). Towards a pedagogical model for science education: bridging educational contexts through a blended learning approach. *Open Learning: the journal of open, distance and e-learning*, 32(1), 6-20.
- Binti Mistar, I., & Embi, M. A. (2016). Students 'perception on the use of WhatsApp as a learning tool in ESL classroom. *Journal of Education and Social Sciences*, 4(6), 96-104.
- Chen, C. H., Lee, I. J., & Lin, L. Y. (2016). Augmented reality-based video-modeling storybook of nonverbal facial cues for children with autism spectrum disorder to improve their perceptions and judgments of facial expressions and emotions. *Computers in Human Behavior*, 55, 477-485.
- Cook, D. A., & Artino Jr, A. R. (2016). Motivation to learn: an overview of contemporary theories. *Medical education*, 50(10), 997-1014.
- Cullen-Knox, C., Eccleston, R., Haward, M., Lester, E., & Vince, J. (2017). Contemporary Challenges in Environmental Governance: Technology, governance and the social licence. *Environmental Policy and Governance*, 27(1), 3-13.
- Elumalai, K. V., Sankar, J. P., Kalaichelvi, R., John, J. A., Menon, N., Alqahtani, M. S. M., & Abumelha, M. A. (2021). Factors affecting the quality of e-learning during the COVID-19 pandemic from the perspective of higher education students. *COVID-19 and Education: Learning and Teaching in a Pandemic-Constrained Environment*, 189.
- Francisco, M. P. B., Hartman, M., & Wang, Y. (2020). Inclusion and special education. *Education Sciences*, 10(9), 238.
- Galbin, A. (2014). An introduction to social constructionism. *Social research reports*, 6(26), 82-92.
- Hadullo, K., Oboko, R., & Omwenga, E. (2018). Factors affecting asynchronous e-learning quality in developing countries university settings. *International journal of Education and Development using ICT*, 14(1).
- Hoq, M. Z. (2020). E-Learning during the period of pandemic (COVID-19) in the kingdom of

- Saudi Arabia: an empirical study. *American Journal of Educational Research*, 8(7), 457-464.
- Khan, G. F. (2017). Social media for Government. *Social Media for Government*, 7-21.
- Kohnke, L., & Moorhouse, B. L. (2021). Adopting HyFlex in higher education in response to COVID-19: students' perspectives. *Open Learning: The Journal of Open, Distance and e-Learning*, 36(3), 231-244.
- Lasry, N., Charles, E., & Whittaker, C. (2014). When teacher-centered instructors are assigned to student-centered classrooms. *Physical Review Special Topics-Physics Education Research*, 10(1), 010116.
- Lupton, D. (2016). The use and value of digital media for information about pregnancy and early motherhood: a focus group study. *BMC pregnancy and childbirth*, 16(1), 1-10.
- Maphosa, V. (2021). Teachers' perspectives on remote-based teaching and learning in the COVID-19 era: Rethinking technology availability and suitability in Zimbabwe. *European Journal of Interactive Multimedia and Education*, 2(1), e02105.
- Martínez-López, F. J., Anaya-Sánchez, R., Aguilar-Illescas, R., & Molinillo, S. (2016). Online brand communities. *Gewerbestrass, Switzerland: Springer International Publishing*.
- Meyer, I. A., & Gent, P. R. (2016). The status of ICT in education in South Africa and the way forward. *National Education Collaboration Trust*.
- Molinillo, S., Aguilar-Illescas, R., Anaya-Sánchez, R., & Vallespín-Arán, M. (2018). Exploring the impacts of interactions, social presence and emotional engagement on active collaborative learning in a social web-based environment. *Computers & Education*, 123, 41-52.
- Morsidi, S., Samah, N. A., Rahman, K. A. A., Ashari, Z. M., Jumaat, N. F., & Abdullah, A. H. (2021). WhatsApp and Its Potential to Develop Communication Skills among University Students. *International Journal of Interactive Mobile Technologies*, 15(23).
- Mpungose, C. B. (2020). Is Moodle or WhatsApp the preferred e-learning platform at a South African university? First-year students' experiences. *Education and information technologies*, 25(2), 927-941.
- Ochieng, V. O., & Waithanji Ngware, M. (2022). Adoption of education technologies for learning during COVID-19 pandemic: The experiences of marginalized and vulnerable learner populations in Kenya. *International Journal of Educational Reform*, 10567879221076081.
- Oriji, A., & Anikpo, F. (2019). Social media in teaching-learning process: Investigation of the use of Whatsapp in teaching and learning in University of Port Harcourt. *European Scientific Journal*, 15(4), 15-39.
- Reuter, C., Kaufhold, M. A., Schmid, S., Spielhofer, T., & Hahne, A. S. (2019). The impact of risk cultures: Citizens' perception of social media use in emergencies across Europe. *Technological Forecasting and Social Change*, 148(1), 1-17.
- Sadeghi, M. (2019). A shift from classroom to distance learning: Advantages and limitations. *International Journal of Research in English Education*, 4(1), 80-88.

- Sajithra, K., & Patil, R. (2013). Social media–history and components. *Journal of Business and Management*, 7(1), 69-74.
- Sauke, G. (2021). *The Role of Whatsapp in Learning by University of Nairobi Graduate Students* (Doctoral dissertation, University of Nairobi).
- Ta'amneh, M. A. A. A. (2017). The effect of using WhatsApp messenger in learning English language among university students. *International Research in Education*, 5(1), 143-151.
- Tondeur, J., Van Braak, J., Ertmer, P. A., & Ottenbreit-Leftwich, A. (2017). Understanding the relationship between teachers' pedagogical beliefs and technology use in education: a systematic review of qualitative evidence. *Educational technology research and development*, 65, 555-575.
- Tyrer, C. (2019). Beyond social chit chat? Analysing the social practice of a mobile messaging service on a higher education teacher development course. *International Journal of Educational Technology in Higher Education*, 16(1), 1-20.
- Yang, F., & Lin, J. (2016). A Chinese Tai Chi model: An integrative model beyond the dichotomy of student-centered learning and teacher-centered learning. *Asian Education Studies*, 1(2), 44.
- Zheng, B., Niiya, M., & Warschauer, M. (2015). Wikis and collaborative learning in higher education. *Technology, Pedagogy and Education*, 24(3), 357-374.