

## **CHALLENGES FACING UTILIZATION OF MOBILE TELEPHONY IN LEARNING IN SOME SELECTED HIGHER INSTITUTIONS OF LEARNING IN NIGERIA**

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### **Abstract**

The study investigated challenges facing the utilization of mobile telephony in learning in some selected higher institutions of learning in Nigeria. The study adopted a descriptive survey using questionnaire to collect data. The population of the study consists of 355 students which were randomly picked from some selected higher institutions of learning in Nigeria. A total of the 355 questionnaires were distributed only 309 were retrieved. Descriptive statistics, (mean and percentage) were used for analysis. A mean score of 2.5 and above and a percentage score of 50% were considered for decision making. The study revealed the following as the prospects of using mobile telephony in learning as it increases academic performance, enhances learning, fostering creativity, ease communication, and provide access to vast information. The study further affirmed the challenges facing the utilization of mobile telephony in learning in some selected higher institutions of learning in Nigeria as issues of digital literacy of smartphones usage among students, issues of internet connectivity among students in higher education in Nigeria, issues of affordability of smartphones among students in higher education in Nigeria, battery-related problem, and speed-related problem. The study recommends that every institution of higher learning should make mobile telephony mandatory for all students to ease learning and the awareness of digital literacy should be spread to all students.

**Keywords: Challenges, utilization, mobile telephony, learning, higher institutions, Nigeria**

### **Introduction**

The use of mobile telephone (smartphones) in learning has become the latest trend in higher education where an individual may not necessarily need a computer set to access electronic learning materials. The phenomenal roles of the smartphone in learning have been

revealed by numerous authors such as in the works of Valk, Rashid, & Elder (2020), that, smartphones have made learning more flexible, easy and have helped to reduce the ultimate inherent conventional classroom learning. For instance, a smartphone makes it possible for students to access educational materials at anytime, anywhere and it is highly cost-effective since this opportunity is just a function of smartphones. Duke et al (2015) also brought to bear that smartphone users are able to download recorded online lectures, and electronic books to enhance learning.

The majority of college students have mobile phones these days; this is because mobile phones are becoming more and more places where academics from all around the world may do their work more effectively. Dukic et al. (2015) found that students use their cellphones to communicate, collaborate, socialize, entertain, exchange, and receive information to meet their academic expectations in their study on the usefulness of smartphones among library and information science students in Hong Kong and Japan. As per the findings of Dukic et al. (2015), students utilize their cellphones to take notes, checkup library catalogs, speak with peers regarding homework, and access course materials. Students in Nigeria use cellphones to stay in touch with friends, family, teachers, and other students, according to studies by Olukotun et al. (2013) and Nwachukwu & Onyenankaya (2017).

Despite the numerous advance of mobile phones usage in learning there are still factors that inhibit the usage among students in learning. For example, a college student without the necessary computer literacy will find it very difficult to utilize the potential advantages of social media and smartphones. It is in light of this that prompted the researcher to embark on this topic

on the challenges facing the utilization of mobile telephony in learning in some selected higher institutions of learning in Nigeria.

### **Statement of the problem**

Students scheduling group activities on their phones is another breakthrough that could impact their learning, despite the many obstacles they face. Some students use technology for communication with friends, entertainment, and information because they are accustomed to it being a part of their daily lives. Students prefer to facilitate agreements using convergent technologies that offer texting and other non-synchronous communication channels because of their more flexible and dynamic lifestyles. They use the phone's calendar, reminder, and note functions (applications) to stay on top of their to-do list. The use of smartphones has an impact on study-related activities such as collaborative learning and virtual teams. By using its potential, educators may take advantage of young students' inclinations for experiential learning, improve collaborative learning, and foster a sense of community within disciplines.

It has been observed that research topics on challenges facing the utilization of mobile telephony in learning exist, but no one has carried a study on the challenges facing the utilization of mobile telephony in learning among Nigerian in some selected higher institutions of learning in Nigeria, hence the need for this research.

### **Research Questions**

1. What are the prospects of using mobile telephone in learning in some selected higher institutions of learning in Nigeria?

2. What are the challenges facing the utilization of mobile telephony in learning in some selected higher institutions of learning in Nigeria.

### **Literature review**

In order to establish a firm framework for the study, the researcher critically analyzed literature done on the following area: Mobile telephony in learning and the challenges affecting the utilization of mobile telephony in learning

#### ***Mobile telephony in learning***

It is anticipated that smartphones will continue to become more widely available and versatile as convergent devices for personal coordination. According to Wood et al. (2012), students are more likely to utilize new technology, such as smartphones, because they are prone to following fads, trends, and fashions. Student study habits are developing along with new technology. Smartphones have changed the traditional college experience, and educational institutions need to adapt to these changes by utilizing new learning technologies. According to Domingo and Garganté (2016), students represent one of the most important markets and the largest consumer group for mobile phone services. This is because the use of cell phones has increased across all age and economic groups, transforming education into a "anytime, anywhere experience" (Cochrane & Bateman, 2010).

Deploying modern mobile technology without considering end users' or stakeholders' opinions, expectations, and desires would not be sufficient. However, actual evidence seems to suggest that university students use their phones mostly for social contact. Students now

frequently use their GSMs for social networking, per the research conducted in 2014 by Harrasi and AlBadi. According to 71% of college students, they prefer chatting with friends on social media above spending time with family and other loved ones, up to 96% of them admit that they use their smartphones for social networking reasons of all types. GSM-capable smartphones have led to a surge in the quantity and intensity of social networking activity. These days, using a cellphone has a huge impact on learning and education. For example, learning management systems allow students to surf websites, access academic databases, and quickly obtain online material to meet their needs. On their cellphones, they can also access the lesson materials.

Among the higher education level students in Bangladesh, approximately 87% have smartphones (Ahmed, 2020). The ownership of mobile phones is rapidly increasing among university students (Dahlstrom & DiFilipo, 2013). University students use mobile phones for various purposes such as social media, communication, academic activities, etc. (Rahman, 2014). Results from an earlier survey indicated that students' primary uses of their phones were for contact and conversation, followed by information retrieval or search (Yasan-Ak & Yildirim, 2024). The usage of mobile phones among university students impacted their academic performance from both positive and negative dimensions based on their purpose and duration of usage (Amez & Baert, 2020). There is a conflict between attitudes toward smartphones as a useful tool for learning and socialization in the digitally transformed classroom and as an anomaly to the intended digital transformation, possibly endangering the classroom's social and disciplinary order (Wikström et al., 2024).

### **Challenges affecting the utilization of mobile telephony in learning**

According to Olatokun (2008), the biggest barriers to using a mobile phone for internet use are insufficient data, accessibility issues, issues with fraud and pornography, and other challenges. Despite research showing that students prefer internet services to traditional media, these conclusions have encountered criticism (Siraj et al., 2015). Teachers or lecturers may point students to the internet if they have continuous access to it in order to provide them with more in-depth knowledge (Osunnade, 2013). It was found that there is insufficient internet access for SHS students. Apart from entry, it depresses to learn that some students cannot even use a computer, even after years of schooling (Samual, 2010). On the other hand, some people have different opinions about internet access. According to Apuke and Iyendo (2018), the use of the internet in a university is not affected by an ineffective internet facility. Another study (Ahmed et al., 2017) discussed the significance of improved internet access for e-learning, particularly in rural locations. The literature (Aboagye et al.,) noticed the demands and difficulties of internet connections among students and validated the thesis of this study.

Conversely, Bruce (2016) enumerates the subsequent drawbacks associated with the utilization of social media and mobile devices: disruptions to the teaching process; the publication of inappropriate materials that jeopardize students' ability to engage in face-to-face communication. All of these are possible drawbacks of students using mobile devices and social media. Firmansyah and Timmis (2016), on the other hand, wrote an essay whose main objective was to report on a qualitative study conducted to examine and comprehend what actually occurs in Indonesia's IDCourseians, an autonomous learning community. Additionally, they discussed the community of practice and collaborative learning in relation to their findings. When English is not the dominant language of communication and the hub model is not currently in use, the

authors concluded that enhancing face-to-face contact within local communities must be a key priority. The study suggests that this may be an effective strategy for addressing some of the issues that Massive Open Online Courses, or MOOCs, commonly face, including poor motivation and trouble grasping the course material. Therefore, there are obstacles for students in some countries who want to use cellphones for learning. Numerous African first-year students have never used a smartphone before attending the institution (Oyedemi & Mogano, 2018). The digital gap, whereby some Africans may have "perceived" access but lack the ICT devices required for "actual" access, persists across the continent even though many Africans now own mobile phones (Oyedemi & Mogano, 2018). Furthermore, a number of African towns and villages have inadequate ICT infrastructure and no access to internet services (Oyedemi & Mogano, 2018).

Soyemi, Oloruntoba, and Okafor (2015) conducted research on phone usage and determined the effects internet-enabled mobile phones have on students' academic performance at tertiary institutions using the Federal Polytechnic students of Ilaro, Ogun State, Nigeria as their focus group. According to their research, mobile devices have a substantial negative influence on 56% of students because they divert attention away from their academic work and toward conversing, listening to music, and other activities. The poll also revealed that the primary cause of pupils' poor academic performance is their unrestricted use of mobile phones. To ascertain the relationship between using a cell phone while teaching and learning.

Also, irregular power supply could also be an issue, especially in developing countries where inadequate power supplies and power disruptions can reduce smartphone battery efficiency (Bruce, 2016). Students use their smartphones and social media for extended periods

of time every day. If not closely monitored, this could develop into an addiction. In another development, Gladden (2018), citing Al-Badi et al. (2012), asserts that individuals with social media and smartphone addictions may experience distraction and reduced productivity. Conversely, Bruce (2016) enumerates the following drawbacks of social media and mobile devices use in the classroom: disruptions of the lesson plan; the uploading of inappropriate items that jeopardize students' ability to engage with others face-to-face. All of these are possible challenges of students using mobile devices and social media

Digital devices are actual pieces of hardware for computing that include a built-in computer or microcontroller. There are several digital gadgets, including smartphones, tablets, laptops, and smartwatches. Nagel (2013) provided evidence to support this claim, stating that students utilize a variety of digital devices for learning, including netbooks, cellphones, small tablets, big tablets, desktop computers, and small and large tablets. The way undergraduate students study is changing as a result of the widespread adoption of digital devices in higher education. According to Kindra (2021), digital literacy has also been referred to as information literacy or media literacy, and they all typically pertain to the capacity to recognize, locate, assess, and use information well. Smartphones improve students' ability to manage digital information since not all students have access to laptops and desktop computers, but every single student has a smartphone. The capacity to recognize the need for, access, and assess electronic information is known as digital information literacy (DIL). The ability to effectively utilize, manage, produce, quote from, and share digital information sources is a skill that comes with digital literacy, according to Konappa (2013). For university students who lack adequate



computer literacy skills, paying other students to complete their homework has become the standard (Kajee and Balfour, 2011).

## Methodology

The study adopted a descriptive survey using questionnaire to collect data. The population of the study consists of 355 students which were randomly picked from some selected higher institutions of learning in Nigeria. A total of the 355 questionnaires were distributed only 309 were retrieved. Descriptive statistics, (mean and percentage) were used for analysis. A mean score of 2.5 and above and a percentage score of 50% were considered for decision making.

**Table 1: Population of the study**

S/N	Higher Education in Nigeria	Population of Students
1	University of Nigeria Nsukka	92
2	Delta State University Abraka	71
3	Ahmadu Bello University, Kano	89
4	University of Benin, Edo State	57
	<b>Total</b>	<b>309</b>

Table one above shows the population of students which were randomly picked for the study as: University of Nigeria Nsukka (92), Delta State University Abraka (71), Ahmadu Bello University, Kano (89) and University of Benin, Edo State (57) respectively.

**Table 2:** Prospect of using mobile telephone in learning in some selected higher institutions of learning in Nigeria

S/N	Items Statement	A	SA	D	SD	X
1	It increases academic performance	103	112	67	27	2.9
2	It enhances learning	178	78	34	19	3.3
3	Fostering creativity	144	88	43	34	3.1
4	Ease communication	79	120	102	8	2.8

5	Provide access to vast information	121	143	42	3	3.2
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Table 2 depicts the prospect of using mobile telephone in learning in some selected higher institutions of learning in Nigeria as it increases academic (2.9), it enhances learning (3.3), Fostering creativity (3.1), ease communication, (2.8) and provide access to vast information (3.2) respectively.

**Table 3:** Challenges facing the utilization of mobile telephony in learning in some selected higher institutions of learning in Nigeria.

S/N	Items Statement	A	SA	D	SD	X
1	Issues of digital literacy of smartphones usage among students	126	123	36	24	3.1
2	Issues of internet connectivity among students in higher education in Nigeria	117	122	23	47	3.0
3	Issues of affordability of smartphones among students in higher education in Nigeria	109	69	78	53	2.7
4	Battery-related problem	111	145	18	35	3.0
5	Speed-related problem	78	56	123	52	2.5

Table 3 shown the Challenges facing the utilization of mobile telephony in learning in some selected higher institutions of learning in Nigeria as Issues of digital literacy of smartphones usage among students (3.1), Issues of internet connectivity among students in higher education in Nigeria, (3.0), Issues of affordability of smartphones among students in higher education in Nigeria, (2.7) Battery-related problem (3.0) and Speed-related problem (2.5).

## Conclusion

Technology is developing rapidly in Nigeria in many areas of modern life, including education. In line with this trend, information and communication technology is being employed as a teaching and learning tool in educational activities more frequently. Academic institutions, like learning organizations, place a strong focus on utilizing cutting-edge technology to advance, especially in the areas of teaching and learning. Since the invention of cell phones, the work that students do in and out of the classroom is nearly identical.

In order to determine the connection between mobile phone use and teaching and learning, the researcher identified both prospects and challenges mobile telephone in learning in higher institutions in Nigeria, with the former showing the following advantages as It increases academic performance, enhances learning, fostering creativity, ease communication, and provide access to vast information. The study came to the conclusion that while mobile phones benefit Nigerian students' socioeconomic and educational growth, their negative impacts have a significant detrimental impact on their academic performance.

## **Recommendation**

### **The study recommends thus:**

1. Every institution of higher learning should make mobile telephony mandatory for all students to ease learning
2. The awareness of digital literacy should be spread to all students
3. There should be adequate internet coverage

4. Due to the financial constraint in Nigeria economy, students should acquire the cheapest ones they can afford
5. A legal policy should be formulated to guide students using mobile phones for learning in higher institutions
6. Students and parents should engage in any conference, seminar workshops about the impacts of mobile phone usage in academic performance.

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