

# Cell Phones Usage for Academic Activities amongst Undergraduate Students of the Federal University of Technology, Minna, Nigeria

**Abdulhameed Kayode Agboola<sup>1</sup>, Amoto Ezekiel Sunday<sup>2</sup>**

*<sup>1,2</sup>Department of Information and Media Technology, School of Information and Communication Technology, Federal University of Technology, Minna, Nigeria.*

**ABSTRACT :** This study investigated the use of cell phones for academic activities amongst the undergraduate students of the Federal University of Technology Minna (FUTM). Survey questionnaire was used for collecting data from 379 respondents drawn based on stratified random sampling. The response rate was 99%. Findings show that the majority 246(65.6%) of the respondents were very strongly agreed that they have awareness on the usage of cell phones for making calls, while 224(59.7%) of them were very strongly agreed that they have used cell phones to access the Internet. Whereas, 122(32.5%) of the respondents were very strongly agreed that spending more time on cell phone reduces academic performance. Also 209(55.7%) of the respondents were very strongly agreed that most students of FUTM faced the challenges of slow Internet connection, 252(67.2%) respondents were very strongly agreed that the wireless Internet infrastructure in the university should be upgraded to ensure quality and faster download, and should be available to students for use all times.

**Keywords :** Cell phone, academic activities, internet connection, wireless internet, internet infrastructure, academic performance, awareness, internet access, high broadband, internet speed

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## 1. INTRODUCTION

### 1.1 Background of the Study

Cell phones have become an essential part of our daily life and a valuable means of information dissemination in Nigeria and in most developing countries since its evolution in the late 1990s. Research shows that cell phones are majorly used by youth particularly students. In Nigeria, the emergence of cell phones with Internet services has brought about a profound and diverse pool of knowledge (Mojaye, 2015). Cell phone technology with its rapid development is capable of contributing to students' learning and improves academic performance. For example, modern "smartphones" provide students with immediate, portable access to many of the same education-enhancing capabilities as an Internet-connected computer, such as online information retrieval, file sharing, and interacting with professors and fellow students (Tao&Yeh, 2013, as cited in Lepp, Barkley & Karpinski, 2015).

Cell phones with its increasing computing power, now present a great avenue for engaging learners on and off school or college campuses. They provide students with a great opportunity of extending their access to academic content beyond the walls and corridors of campuses of their universities, colleges and libraries. On the whole, a lot of education-related apps are being developed, hence giving cell phones the ability to retrieve

and open nearly all the formats of information via Wi-Fi networks and mobile Internet (Ensley & Kaskosz, 2013). This study delves into investigating the use of cell phones for academic activities amongst the Undergraduate students of the Federal University of Technology, Minna.

### **1.2 STATEMENT OF THE PROBLEM**

We are in the era of technologies, which cannot be imagined without a cell phone, as the young population is the future of the country and their views are of utmost importance. Education is regarded to be the backbone of any country and in this modern time education (whether regular or distant education) is inarguably interrelated with technology. Cell phones has an important role to play in the educational life of students which leads to this research study on whether it is useful for students particularly for educational purpose (Halder, Halder & Guha, 2015).

According to Lepp, Li and Barkley (2015), recent researches suggest that many university students perceive cell phones primarily as a leisure device, and most commonly use cell phones for social networking, surfing the Internet, watching videos and playing games. Levine, Waite and Bowman (2007) said if typically utilized for leisure rather than education, then cell phones may disrupt learning within academic settings. Thus, the potential relationships between cell phones use and academic activities will become ambiguous and difficult to define.

Despite the prevalent usage of cell phones amongst the University students, the level at which the technology has either contributed or caused havoc to students' academic activities is still inconclusive. It is, therefore, against this backdrop that this study delves into investigating the use of cell phones for academic activities by the Undergraduate students of the Federal University of Technology, Minna.

### **1.3 Aim and objectives of the Study**

The aim of the study is to find out the use of cell phones for academic activities amongst the undergraduate students of Federal University of Technology, Minna (FUTM). The specific objectives of the study are:

1. To investigate the level of awareness of usage of cell phones by the undergraduate students of the University for academic activities.
2. To find out what kind of use do the undergraduate students of FUTM put their cell phones.
3. To determine whether cell phones have any influences on academic activities of the undergraduate students of FUTM.
4. To identify the challenges faced by the undergraduate students of FUTM in using cell phones for academic activities.
5. To suggest solutions on challenges faced by the undergraduate students of FUTM in using cell phones for academic activities.

### **1.4 Research Question**

1. What is the level of awareness of cell phones usage amongst the undergraduate students of FUTM?
2. What kinds of use do the undergraduate students of FUTM put their cell phones?
3. In what ways have cell phones influenced the academic activities of the undergraduate students of FUTM?
4. What are the challenges faced by the undergraduate students of FUTM in using their cell phones for academic activities?
5. What are the possible solutions for surmounting the challenges faced by the undergraduate students of FUTM in using cell phones for academic activities?

## **2. LITERATURE REVIEW**

### **2.1 The Concept of Cell Phones**

Cell phones is one of the major device used in communication in this contemporary age, and every individual tries to own one today and make use of it in their daily activities. Cell phones are used for different purposes by different people in the world.

According to (Park & Chen, 2007 as cited in Saraswathi, 2017) who defined cell phones as a cellular telephone with in-built applications and with the Internet access. In addition to digital voice service, cell phones provide text messaging, e-mail, web browsing, still and video cameras, mp3 player and video playback and calling. Cell phone was developed in the early 1990's and became rampant in 2007, which was dominated with different operating systems with interactive features by various producers. While cell phone is essential for people, and considering its benefit, it has increased the demand in the market place.

Cell phone is a mobile phone that has the ability of a computer. This device provides user with advance communication and computing ability than the traditional mobile phone, also equipped with the Internet access, cameras with high quality and management tools (Boulos, Wheeler, Tavors& Jones 2011). Latest cell phones are taken to be a handheld computer rather than just an ordinary phone because of its' powerful computing ability and its' large memory. The capability of running applications on cell phones makes it a more powerful device which is replacing many devices such as alarms clocks, calculator, laptops, GPS navigator and digital cameras (Miller, 2012 as cited in Kaur, Singh & Samah, 2018).

### **2.2 Overview of the Use of Cell Phones**

The use of cell phones is not limited to speaking alone; cell phones are used for various purposes, which include conducting business, keeping in touch with family members and having access to phone for emergency purpose. It can also be used for making video, recording information and transmitting it to another phone or a computer as was being done by a computer, it is also used for mobile banking and payment, surveillance and GPS services, ticket booking etc. Student in particular can use cell phones for discussions pertaining to their assignment or project works over the phone. Though this kind of discussion may prove lengthy or boring. University students in their studies use electronic media (cell phones) for studying or in doing their assignment (Jacobsen &Forste, 2011 as cited in Halder, Halder & Guha, 2015).

### **2.3 Overview of the Relationship between Cell Phones Use and Academic Activities**

The relationships between cell phones use and academic activities is like a two-edged sword where one phase takes the positive aspect and the other side is a negative one.

Bull and McCormick (2012) explained that cell phones have relationship with academic activities by contributing to student learning and improved academic performance, for instance, where modern cell phones provide students with immediate, portable access to many of the same computer such as online information retrieval, sharing of files and having interactions with lecturers and other fellow students.

Lepp (2015) went further to explain that recent research suggested that many college students use or perceive the cell phone as a leisure device and mostly used for social networking, surfing the Internet among others. Levine, Waite and Bowman (2007) then concluded by saying that, if cell phones are typically used for leisure other than education, then it has not fulfilled its actual purpose of enhancing academic activities (Lepp, Barkley &Karpinski, 2015).

However, plethora of studies have been documented on the use of Cell Phones for academic activities amongst Undergraduate Students where the Students of the Federal University of Technology Minna are not exceptional. For example, in a study conducted by Njagi and Silas (2016) on the Effects of Use of Mobile Phones on Learning Activities and Social life among University Students in Kenya, the findings of the study reported that learning should create a felicitous balance between cell phone usages, students should pay more

attention to their learning activities and their social life. The study concluded that cell phones have positive and negative effects on students learning activities including their social life.

One study by Mahamud, Andrew and Rockson (2015) on the Use of Mobile Phones to Support Coursework: Evidence from Wa Polytechnic, Ghana revealed that 82% of the students used mobile phones to support their course work. They discovered that the major challenges faced by the students were as a result of poor network service. They concluded that the study has revealed how effectively the students of Wa polytechnic use mobile phones for academic purposes, such as, storage and retrieval of e-books, taking of lecture notes, taking online evaluation and submission of assignments.

Another by Mojaye (2015) on Mobile Phone Usage Amongst Nigerian University Students and Its Impact on Teaching and Learning showed that use of mobile phone among college/university students has brought about a profound and diverse pool of knowledge. The study then concluded that though mobile phones have positive effects on the educational and socio-economic development of Nigerian students, university authorities should take a more proactive role to reduce its adverse effects by either prohibiting the use of mobile phones during lecture hours or encouraging students to switch off their phones or put them on silence mode while receiving lectures.

Yet another study by Iqbal, Khan and Malik (2017) on Mobile Phone Usage and Students' Perception Towards M-Learning: A Case of Undergraduate Students In Pakistan found out that students have positive attitude towards m-learning. The study further went on to check the significant difference between the students' perceptions towards m-learning. The study concluded that majority of students use different mobile phones that are suitable for usage in m-learning i.e smart phones. Many use the cell phones for conducting research using Internet / google, communicate through SMS, creating content by taking pictures, using the alarm function and calculator while some never used it for lecture recording, note-taking and making use of the MS office with cell phones.

In addition, a study by Mahmudu and Oyewo (2015) on the Use of Mobile Phones for Academic Purposes by Law Students of Igbinedion University, Okada, Nigeria reported that the majority of the students use their mobile phones to search for academic information, the next highly used function of the mobile phone was for social networking, chatting and reading online news. The researchers concluded that it will be of good benefit if only mobile learning is introduced in the university.

More so, Saraswathi (2017) study on Smartphone Usage Among Students revealed that students make use of smartphones in the college for taking pictures, making calls, sending text messages and studying, while at home they use to download software, listen to music and watching videos. The study concluded that in the college, taking of photograph, making calls, sending text messages and studying are among the top purposes for which smartphones are used for. Majority of the students opined that smartphones are useful for educational purposes.

However, a study by Johnson and Radhakrishan (2017) on Academic Use of Smart Phones Among the Students of Business Schools In UAE highlighted that the use of smart phones motivated the students to attend classes and participate in lectures. It also found out that smart phones improve learning skills and help to complete assignments on time, which also help to create positive feelings among the classmates as a whole. The researcher concluded that there are many applications for academic purposes that are freely available online such that when they are downloaded and stored on their device, they can use their smart phones for academic purposes extensively from simple reading, browsing and downloading academic materials to enhancement of learning skills, participation in the class, preparation and submission of assignment on time.

In the meanwhile, Halder, Halder and Guhu (2015) study on Undergraduate Students' Use of Mobile Phones: Exploring Use of Advanced Technology aids for Educational Purpose found out that the attitude of undergraduate students towards using mobile phones for educational purpose varies according to gender, medium of education and residence though the academic discipline (science or art) does not impose any significant difference according to the study. The researcher concluded that the attitude of undergraduate

students towards using mobile phones for educational purpose varies according to gender, medium of education and residence. However, the academic discipline does not impose any significant difference according to the study.

Additionally, the study of Kibona and Mgaya (2015) on Smartphone's Effect on Academic Performance of Higher Learning Students: A Case of Ruaha Catholic University Iringa, Tanzania revealed that almost 48% of students used smart phones for about 5-7 hours per day on social communication sites, also females are more addicted than the males because 57% of the respondents were females. The researcher concluded that impact of smart phones on academic performance of the students brings a negative results or progression on students' performance academically.

Finally, Al-fawareth and Jusoh (2014) study on Smartphone's Usage among University Students: Najran University Case reported that most students fully utilize their smart phones as a means to get connected to online social networks rather than utilizing it for learning purpose. The researcher concluded that nearly every student can afford a smart phone at the university.

### **3. THEORETICAL FRAMEWORK**

The purpose of theoretical framework in a research is to establish a structure for the research in order for the readers to understand how it contributes to the society and how it links to other research works. In this research study, the theoretical framework is anchored on uses and gratification theory.

Uses and gratification theory was propounded by Jay Blumler and Denis McQuail (1969) as an approach to understanding why and how people actively seek out specific media in satisfying their specific needs. Uses and gratification theory posits that media exposure leads to certain behaviours, sometimes without a user's conscious control. The theory proposes that users or media consumers are actively choosing specific media content according to their needs (David, 2016).

The tenet of Uses and gratification theory is based on five assumptions:

1. The goal of media use is direct; people are motivated to consume media.
2. The selection of media is based on the expectation that it will satisfy specific needs and desire.
3. Influence of media on the behaviour is being filtered through psychological and social factors.
4. Media itself is in competition with other forms of communication for an individual's attention.
5. People are in control of media thereby are not particularly influenced by it.

In line with this study, Uses and gratification theory becomes very relevant in the sense that users are active in their selection of the media they consume and are aware of the reasons for selecting different media options, they rely on their knowledge of motivation in making media choices that helps them meet their needs and wants. As a result of this, the use of cell phones for academic activity especially in the Federal University of Technology, Minna is being examined and studied as to whether it is serving the students' expected needs and wants.

### **4. RESEARCH DESIGN**

A survey method was employed in this study, the population for this study comprises of 20,880 undergraduate students of the Federal University of Technology, Minna, Niger State. The sample size of the study was 379 students of FUTM. Krejcie and Morgan's (1970) table for determining an appropriate sample size was used to derive the sample size. The study employed a self-structured questionnaire based on the 7-point Likert Scale ranging from Very Strongly Disagree (VSD) to Very Strongly Agree (VSA). Split-half reliability method was used to determine the reliability of the research instrument and the correlation coefficient was 0.98%, which indicates that the instrument was reliable. The Statistical Package for Social Science (SPSS) was used to analyse the data of the study. Findings from the study were tabulated and reported accordingly.

## 5. FINDINGS

Findings from the demographic characteristics of the respondents show that the majority (73.9%) were male students, while female respondents were (26.1%). That is, male undergraduate students were more populated than the female undergraduate students in the Federal University of Technology, Minna. Data on the variables of Age indicates that more of the respondents (65.6%) were in the age bracket of 20-30 years old and this was followed by (33.3%) which were in the age bracket of below 20 years old. The respondents in the age bracket 31-40 years old were (1.1%) and followed by the age bracket 41 - 50 and above. As for the marital status, the majority (98.7%) of the respondents were single, followed by married (1.3%), while there were no divorcees and widows or widowers.

Considering the responses from various schools, student with the highest number of respondents were from School of Physical Science (SPS) which were (16.3%) followed by School of Environmental Technology (SET) and School of Infrastructure and Process Engineering Technology (SIPET) both amounting to (14.9%). The next was from School of Agriculture and Agricultural Technology which was (13.9%). Whereas, respondents from the School of Life Science (SLS) were (11.7%), followed by School of Electrical and Engineering Technology (SEET) (8.8%). Respondents from School of Science and Technology Education (SSTE) were (8.5%), followed by the School of Information and Communication Technology (SICT) which were (6.4%), while the School of Entrepreneurship and Management Technology (SEMT) were (4.5%).

In terms of the educational qualification of the respondents, the majority (89.6%) of them had SSCE/WASSCE as their qualification, while (9.6%) had ND as their qualification, whereas those having HND were (0.3%) and NCE holders were (0.5%) respectively.

### Answering Research Questions

R.Q. 1: What is the level of awareness of cell phones usage amongst the undergraduate students of FUTM?

Table 1: Level of awareness of cell phones usage

	VSD 1	SD 2	D 3	N 4	A 5	SA 6	VSA 7
I believe most students of FUTMX have awareness on the usage of cell phones for accessing the internet	8(2.1)	8(2.1)	6(1.6)	5(1.3)	49(13.1)	80(21.3)	219(58.4)
I believe most students of FUTMX have awareness on the usage of cell phones for making calls	11(2.9)	1(0.3)	2(0.5)	6(1.6)	34(9.1)	75(20.0)	246(66)
I believe most students of FUTMX have awareness on the usage of cell phone for reading documents files	5(1.3)	6(1.6)	4(1.1)	7(1.9)	58(16)	108(29)	187(50)
I believe most students of FUTMX have awareness on the usage of cell phones for sending and receiving media files	5(1.3)	4(1.1)	6(1.6)	7(1.9)	54(14.4)	77(21)	222(59)
I believe most students of FUTMX have awareness on the usage of cell phone in communicating with lecturers and course mates	6(1.6)	8(2.1)	12(3.2)	28(7.5)	77(21)	76(20)	168(45)

Table 1 (above) shows the distribution of respondents according to level of their awareness of cell phones usage. According to the Table, the majority 246 (66%) of the respondents were very strongly agreed that most students of FUTM have awareness on the usage of cell phones for accessing the Internet, while 222(59%) claimed that they have awareness on the usage of cell phones for sending and receiving media files. Whereas, meagre amount 11(2.9) of them were very strongly disagreed about awareness on the usage of cell phones for making calls.

**Table 2: Mean score responses of the level of awareness of cell phones usage amongst the undergraduate students of Futminna**

Item	Mean score (x)	Remarks
Awareness on the usage of cell phones for accessing the internet	6.2	Accepted
Awareness on the usage of cell phones for making calls	6.4	Accepted
Awareness on the usage of cell phone for reading documents files	6.1	Accepted
Awareness on the usage of cell phones for sending and receiving media files	6.3	Accepted
Awareness on the usage of cell phone in communicating with lecturers and course mates	5.8	Accepted
Average Mean score = 6.2	Cut off mean = 3.5	

Table 2 (above) shows the respondents' level of awareness of cell phones usage in accessing the Internet. The calculated (Mean = 6.2), while "Awareness on the usage of cell phones for making calls" (Mean=6.4). Whereas, "Awareness on the usage of cell phone for reading documents files" (Mean= 6.1). As for "Awareness on the usage of cell phones for sending and receiving media files" (Mean= 6.3) and "Awareness on the usage of cell phone in communicating with lecturers and course mates" is 5.8.All are accepted because they are greater than the minimum (Mean = 3.5).

**Research Question Two:**What kinds of use do undergraduate students of Futminna put their cell phones?

**Table 3: Kind of use of the Cell Phones**

Scale	Questions				
	1	2	3	4	5
Very strongly disagree	9	8	8	6	8
Strongly disagree	3	1	3	4	3
Disagree	6	0	8	4	11
Neutral	20	10	12	15	44
Agree	58	47	63	75	86
Strongly agree	96	85	96	102	81
Very strongly agree	183	224	185	169	142
Total	375	375	375	375	375

Table 3 (above) shows the distribution of respondents according to kind of use of the cell phones. According to the Table, the majority 224 (59.7%) of the respondents were very strongly agreed that they use cell phones for academic activities, while 11(2.9%) were disagreed with the statement.

**Table 4: Mean score response of what kinds of use do undergraduate students of Futminna put their cell phones**

Item	Mean score (x)	Remarks
I use cell phones for academic activities	6.0	Accepted
I use cell phone to access internet connection services	6.3	Accepted
I use cell phone to download related academic materials	6.0	Accepted
I use cell phone to study related course materials	6.0	Accepted
I use cell phone to communicate with my lecturers and course mates	5.7	Accepted
Average Mean score = 6.0	Cut off mean = 3.5	

Table 4 (above) shows the respondents' level of the kinds of use of cell phones and the calculated mean on "I use cell phones for academic activities" (Mean=6.0), "I use cell phone to access internet connection services" (Mean=6.3), "I use cell phone to download related academic materials" (Mean=6.0), "I use cell phone to study related course materials" (Mean=6.0) and "I use cell phone to communicate with my lecturers and course mates" (Mean= 5.7). All are accepted because they are greater than the minimum Mean score of 3.5.

**Research Question Three:**What influence do cell phones have on academic activities of undergraduate students of Futminna?

**Table 5: Influence of cell phones on academic activities**

Scale	Questions				
	1	2	3	4	5
Very strongly disagree	8	8	19	19	20
Strongly disagree	12	5	20	9	12
Disagree	30	31	44	13	22
Neutral	59	58	69	29	64
Agree	87	95	77	54	68
Strongly agree	90	93	79	72	67
Very strongly agree	89	85	67	184	122
Total	375	375	375	375	375

Table 5 (above) shows the distribution of the respondents according to Influence of cell phones on academic activities. According to the Table, the majority 184(49.1%) of the respondents were very strongly agreed that using cell phone during class causes distraction, while 44(11.8%) of them disagreed with the statement.

**Table 6: Mean score response of what influence do cell phones have on academic activities of undergraduate students of Futminna**

Item	Mean score (x)	Remarks
Cell phone has improved my reading ability	5.2	Accepted
Cell phone has helped build my academic performance	5.3	Accepted
Cell phone has helped in contributing more in class room	4.8	Accepted
Using cell phone during class causes distraction	5.8	Accepted
Spending more time on cell phone reduces academic performance	5.2	Accepted
Average Mean score = 5.3	Cut off mean = 3.5	

Table 6 (above) shows that the respondents' level of Influence of cell phones on academic activities and the calculated mean on "Cell phone has improved my reading ability" (Mean= 5.2), "Cell phone has helped build my academic performance" (Mean=5.3), "Cell phone has helped in contributing more in class room" (Mean= 4.8), "Using cell phone during class causes distraction" (Mean=5.8) and "Spending more time on cell phone reduces academic performance" (Mean=5.2). All are accepted because they are greater than the minimum Mean score of 3.5.

**Research Question Four:** What are the challenges faced by undergraduate students of Futminna in using their cell phones for academic activities?

**Table 7: Challenges faced when using the cell phones for academic activities**

Scale	Questions				
	1	2	3	4	5
Very strongly disagree	9	8	15	9	2
Strongly disagree	1	6	8	4	0
Disagree	2	5	20	17	4
Neutral	19	19	41	42	20
Agree	57	83	89	108	56
Strongly agree	78	88	88	98	97
Very strongly agree	209	166	114	97	196
Total	375	375	375	375	375

Table 7 (above), shows the distribution of respondents according to Challenges faced when using the cell phones for academic activities. According to the Table, the majority 209(55.7%) of the respondents were very strongly agreed that most students of FUTM face the challenges of slow Internet connection, while meagre amount 20(5.3%) of them disagreed with the statement.

**Table 8: Mean score response of Challenges faced when using the cell phones for academic activities**

Item	Mean score (x)	Remarks
Most students of FUTMX face the challenges of slow internet connection.	6.2	Accepted
Most students of FUTMX face the challenges of limited battery life.	5.9	Accepted
Most students of FUTMX can't enter large amount of text on cell phone like when using laptop.	5.4	Accepted
Most students of FUTMX face challenges of running some major application on cell phone.	5.4	Accepted
Most student of FUTMX is faced with the challenge of network service.	6.2	Accepted
Average Mean score = 5.8	Cut off mean = 3.5	

Table 8 (above) shows the respondents' level of challenges faced when using the cell phones for academic activities and the calculated Mean. On the item "Most students of FUTM face the challenges of slow Internet connection" (Mean= 6.2). For item on "Most students of FUTM face the challenges of limited battery life" (Mean= 5.9). As for item on "Most students of FUTM can't enter large amount of text on cell phone like when using a Laptop" (Mean=5.4). For item on "Most students of FUTM face challenges of running some major application on cell phone" (Mean= 5.4), while item on "Most student of FUTM is faced with the challenge of network service" (Mean= 6.2). All are accepted because they are greater than the minimum score of 3.5.

**Research Question Five:** What are the possible solutions for curbing the challenges faced by undergraduate students of Futminna in using cell phones for academic activities?

**Table 9: Possible solutions in curbing the challenges faced**

Scale	Questions				
	1	2	3	4	5
Very strongly disagree	4	1	3	5	11
Strongly disagree	6	9	4	1	1
Disagree	9	16	4	14	2
Neutral	25	44	4	30	6
Agree	101	95	45	70	36
Strongly agree	126	82	63	76	75
Very strongly agree	104	128	252	179	246
Total	375	375	375	375	375

Table 9 (above) shows the distribution of respondents according to possible solutions in curbing the challenges that they faced. According to the Table, the majority 252(67.2%) of the respondents were very strongly agreed that wireless Internet infrastructure in the University should be upgraded to ensure quality, speedy and availability to students, while few number 16(4.2%) of them disagreed with the statement.

**Table 10: Mean score response of possible solutions in curbing the challenges faced**

Item	Mean score (x)	Remarks
Provision of mobile network services can help in curbing challenges of cell phone usage for academic activities.	5.9	Accepted
Creating contents compatible with cell phones can help in curbing challenges of cell phone usage for academic activities.	5.7	Accepted
Introducing a platform for interaction with the lecturer and course mates can help in curbing challenges of cell phone usage for academic activities.	5.6	Accepted
Wireless internet infrastructure in the university should be upgraded to ensure quality, speed and availability to students.	6.4	Accepted
Introducing mobile learning in the curriculum of the school at various levels can help in curbing challenges of cell phone usage for academic activities.	5.9	Accepted
Average Mean score = 5.9	Cut off mean = 3.5	

Table 10 (above) shows the respondents' level of possible solutions in curbing the challenges faced and the calculated Mean on "Provision of mobile network services can help in curbing challenges of cell phone usage for academic activities" (Mean= 5.9), "Creating contents compatible with cell phones can help in curbing challenges of cell phone usage for academic activities" (Mean= 5.7), "Introducing a platform for interaction with the lecturer and course mates can help in curbing challenges of cell phone usage for academic activities" (Mean= 5.6), "Wireless internet infrastructure in the university should be upgraded to ensure quality, speed and availability to students" (Mean= 6.4) and "Introducing mobile learning in the curriculum of the school at various levels can help in curbing challenges of cell phone usage for academic activities" (Mean= 5.9). All are accepted because they are higher than the minimum Mean score of 3.5.

## 6. DISCUSSION OF FINDINGS

Findings from the study has revealed that the majority of the undergraduate students were aware of various usages of cell phones in their daily activities. This finding concurs with the research of Mahmudu and Oyewo (2015) which reported that most students have knowledge about cell phones and also about ICT and are aware on the usage of cell phones for academic purpose.

Another finding shows that the majority of the undergraduate students of FUTM are using their cell phones for various purposes which include: accessing the Internet connection services, download related academic materials, study related course materials, communicate with lectures and students colleagues, as well as for other academic activities. This finding was in agreement with Njagi and Silas (2016) who reported that most students use their cell phones for academic purpose like communicating with their lecturers and their fellow course mates to discourse academic matters.

Yet another finding revealed that there are some positive influences the cell phone has on students, these include, improvement on their reading ability, it has help build their academic performance and also helped them to contribute more while in class room. Nevertheless, it has a negative influence, such as, spending more time with cell phones reduces academic performance and causes distraction while using cell phone during class sessions. This finding was in agreement with the study of Mojaye (2015), who reported that the concomitant positive and adverse effects of cell phones usage amongst students in tertiary institutions. Mojaye's study identified the positive effects to include easy access to information, instructional usage and

personal convenience, while the adverse effects include distraction in the classroom, reduced cognitive ability, poor writing skills and addiction.

In addition, finding has shown that there are some major challenges students of FUTM faced when using their cell phones, which include challenges of slow Internet connection, limited battery life, inability to access or input large amount of text on cell phones unlike Laptops, and running some major applications on cell phones, coupled with problem of network connection.

Finally, finding revealed that provision of mobile network services, creating content compactible with cell phones, creating platform for interaction with lecturers and course mates, upgrading wireless infrastructure and introducing mobile learning at various level in the curriculum can help curb challenges that are faced by students.

## 7. Conclusion

In conclusion, based on the findings obtained in this study, it is imperative to conclude that, to a great extent, undergraduate students of the Federal University of Technology (FUTM) have a great level of awareness on the usage of cell phones for academic activities, as a result of the fact that most of the students can access the Internet connection service, download related academic materials, study related course materials and communicate with lecturers and course mates. However, the usage of cell phone for academic activities has its influence on the students due to the fact that it can help improved their reading ability, helped build their academic performance and may help them in participating more in class room activities. But negatively, it cell phone usage has caused distraction during classroom session, while spending more time on cell phone reduces academic performance.

## Recommendations

Based on the findings and conclusion above, the following recommendations are made

1. Mobile learning should be incorporated into the school curriculum and be taught at various levels to enhance better knowledge on how to make use of cell phones for academic purpose.
2. There is need for the University to upgrade and expand their wireless Internet connection as to enhance students' access to the Web to download academic materials even while they are at their hostels.
3. There is a need for students who use their cell phones to access the Internet connection to pay more attention to time they spend on the Internet for relevant purposes rather than irrelevant activities.

## 8. Reference

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### **INFO:-**

***Corresponding Author: Abdulhameed Kayode Agboola, 2 Department of Information and Media Technology, School of Information and Communication Technology, Federal University of Technology, Minna, Nigeria.***

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