

STUDENTS' PERCEPTION OF MOBILE LEARNING AT UNIVERSITY OF CAPE COAST, GHANA

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ABSTRACT

Many students use mobile devices both in their free time and personal use. However, Mobile devices have the potential to be used for learning purposes as well. A quantitative research methodology influenced this study. A total of six hundred (600) undergraduate students of the University of Cape Coast (UCC) in Ghana participated in the study. Stratified method of sampling was used to group students into faculty/school and simple random sampling was employed. The results showed that majority of the students perceived that mobile technology will enable them to access learning resources quickly and are willingly to adopt mobile learning (m-learning) as a platform for learning. In addition, the study opens up key activities such as ability to view lecture slides; download and view recordings both audio or video for learning which developers must consider when developing a mobile learning platform for students. This study recommends that Smartphone's and mobile devices should be permissible to students, lecturer to start virtual classroom, discussion forums and using pre-recorded lecturers with PowerPoint so that the students can also benefit from these functionalities since they were ranked among the last three (3) services not used.

Keywords: mobile learning; students' perceptions; Ghana.

INTRODUCTION

Historically, the realm of education had changed drastically with the years, which ICT had played a major role in several cases. E-learning emerged in the late 80s and had adverted most important concepts in education. In the mid-90s many computerized companies emerged and led to a massive built of power desktop and handheld devices (Tatnall, 2012). Computers then grew significantly and became more affordable and ubiquitous, e-learning became even more widespread (Hashemi, Azizinezhad, Najafi, & Nesari, 2011). According to Vrana (2018) mobile learning (m-learning) is the latest developed form of e-learning. Mobile Learning is an educational system conducted by means of portable computing devices such as mobile or wireless handheld devices for learning (Seipold, 2014). Primarily, mobile learning enables learners to have control of how to learn; a learner can choose when to learn and from which location to learn. Mobile technologies especially mobile phones have become prevalent in recent times (Vrana, 2018). Globally, mobile telephone penetration between 2005 and 2014 was increased by 68% (ITU, 2016). The number of mobile phone subscriptions globally as at 2017 reached five (5) billion and was expected to increase to 5.9 billion by 2025 equivalent to 71% of the World's population. (GSMA, 2018).

As at the end of 2016, mobile penetration in Ghana was estimated at 136.34% (NCA, Voice Statistics, 2016). Interestingly, in a span of 3 years (2014-2016), the rate of mobile phone usage in Ghana has increased at a rate of over 22.97% and was expected to increase at an expedient rate within a short period (NCA, Voice Statistics, 2016) (NCA, Voice Statistics, 2015) (NCA, Voice Statistics, 2014). Obviously, one cannot downplay the importance and attachment people have to the use of mobile phone. Clearly these figures indicate a high and fast-growing use of mobile phone in the Ghanaian economy. Majority of Ghanaians are increasingly subscribing to mobile voice telephone; this may be due to the fact that mobile devices have become networked and activated with Bluetooth, Wireless Internet via Wi-Fi, and Global System for Mobile (GSM). This has led to the addition of enhanced web 2.0/social media applications such as Skype, Facebook, Twitter and WhatsApp. These enhanced features enable the user to receive and make calls, receive and send short messages, surf the internet, stream video, chat and use other data services. One cannot lose sight of the use of mobile phones and these enhanced features in mobile devices however, have the capacity to support mobile learning.

Generally, ownership of mobile device among Ghanaians especially students has been observed to be on the increase. As a means of communication and to get connected to family and friends at home, almost every

tertiary student in Ghana owns at least a mobile device, which may not be used for learning purposes. It is therefore imperative that this study sought to find out how students perceive the use of mobile technology in learning. This paper seeks to answer the following research questions:

- To what extent do students have access to mobile resources?
- To what extent are UCC students aware of m-learning?
- How do students perceive the use of mobile technology in learning?
- To what extent will student be willing to adopt m-learning?
- What m-learning facilities would UCC students like to be implemented?

For the university to keep pace with the increasing number of students' population, and to meet the students' needs in teaching and learning, as well as the demands of the development of Ghana's human resource base, there is the need for the university to embrace new forms of instructional delivery. M-learning will be one of the approaches for the university to adopt in order to maximize learning and to meet the different learning speed of students. The attitudes and perception of students are very crucial for the successful implementation of the m learning platform. This is because, they will be the primary users of it when it is implemented. Therefore, this study will help the authorities of UCC to know the perception of students before implementing this technology.

LITERATURE REVIEW

Mobile phone ownership has growing visibility among students in higher education. A study conducted by (Wilhelm, Yankov, & Magee, 2011) established that all respondents who happen to be students of Northwest University owned at least one mobile phone. A similar research by (Wilhem, 2012) on the analysis on phone consumption further reiterates the fact that college students have owned an average of 4.4 mobile phones in their lifetime as students. Asuamah (2013) also established that students of Sunyani Polytechnic had used mobile phones and have between 3 and 5 phones. The study further revealed that 95.6% of the respondents agreed that ownership of mobile phone was very significant (Asuamah, 2013). Clearly the 3 studies conducted in different settings go to enunciate that, the ownership and use of mobile phones in tertiary institutions cannot be over emphasised.

Mobile learning is gradually gaining grounds with regards to its visibility, significance and usage among students in higher education. An m-learning survey in UK's schools and higher education points to the fact that young adults (16-24 years) are switching onto learning by mobile phones and Personal Digital Assistants (PDAs) (Mitchell & Savill-Smith, 2004). In a study conducted (Suki & Suki, 2010) in University Industri Selangor (Unisel), Malaysia, majority of the students who participated in the study agreed that the mobility of the mobile phone was a key factor for the use of mobile technology as the medium for learning. The study further highlights interactivity nature of mobile technology whereby students and lecturers are able to share their learning tasks and other related activities which was found to be one of the reasons that informed their usage of mobile devices in learning (Suki & Suki, 2010).

Tan and Lui (2004) conducted a research based on a developed Mobile Learning System (MLS) to assist learning of English language in an elementary school in Taiwan. The focus of the research was to explore the applicability and benefits of mobile technology to elementary school English learning activities in Taiwan. Experimental results obtained indicated that the effect of learning English using MLS is better than that of the traditional manner. Most students according to the study prefer using MLS since it is easy to use and can increase learning interest (Tan & Liu, 2004). Another research conducted by (Al-Said, 2015) revealed that undergraduate students at Taibah University in Saudi Arabia have positive perceptions towards mobile learning. The students were of the view that the use of mobile learning will facilitate and increase effective communication of learning and allow them to learn at the right time (Al-Said, 2015).

The discussions above indicate several advantages with regards to the use of mobile phones for learning.

Attewell (2005) summarizes some of the advantages as follows:

- allows truly anywhere, anytime, personalised learning;
- can be used to enliven, or add variety to, conventional lessons or courses;
- can be used to remove some of the formality which non-traditional learners may find unattractive or frightening and can make learning fun;
- facilitates both individual and collaborative learning experiences;
- enables discrete learning in the sensitive area of literacy;
- has been observed to help young disconnected learners to remain more focused for longer periods;

- can help to raise self-confidence and self-esteem by recognising uncelebrated skills, enabling non-threatening, personalised learning experiences and enabling peer-to-peer learning and support.

Undoubtedly, mobile phone usage among tertiary students has the potential of aiding mobile learning. In view of this the paper posits that students' perception of mobile learning is critical in determining the future usage of mobile learning in tertiary institutions especially in Ghana.

THEORETICAL PERSPECTIVES OF MOBILE LEARNING

Social constructivism is one of the several pedagogical principles that underpin the concept of mobile learning. It is an educational theory that proposes that knowledge is constructed by individuals based on their own prior experiences in a particular context (Honebein, Duffy, & Fishman, 1993). According to (Mifsud, 2003), whose work is similar to a prior work by (Soloway, Norris, Blumenfeld, Fishman, & Marx, 2001), flexible access to handheld technology such as mobile device will provide the tools to help learners construct knowledge throughout their daily activities, thereby making this technology an integral part of daily learning. A simulation game which enables learning to take place in a simulation environment was developed by (Colella, 2000). Students participating in the game become agents in the simulation. They gathered evidence, define the problem at hand and set and test hypotheses about the rules of the simulation environment. They learned from experience and develop solutions to the problems they encountered (Colella, 2000).

Situated learning focuses on activities that promote learning within an authentic context and culture (Herrington & Herrington, 2007). A research work conducted by (Rogers, et al., 2002) based on situated learning theory created an authentic ambient wood environment which enabled children using Personal Digital Assistant (PDA) and probing device to learn, discover, reflect and experiment in the environment. Collaborative learning is a learning situation, which involves two or more people that learn something together (Dillenbourg, 1999). A Mobile Computer Supported Collaborative Learning (MCSCCL) system based on collaborative learning theory to support student collaboration was developed by (Cortez, et al., 2004). The MCSCCL provided an enabling collaborative class environment that help students to participate in a task (Cortez, et al., 2004).

An activity involves the relationship between a subject or an actor and the object mediated by a tool. A tool is used in the transformation process to transform the object into an outcome (Kuutti, 1996). Furthermore, rules, community and division of labour are included in activity theory. Mobile technologies are perceived as mediating tools that support mobile learning activities (Uden, 2007). An m-learning system for learners' knowledge management was developed by (Liaw, Hatala, & Huang, 2010). The developed system that was based on activity theory enables learners to search, retrieve, share, manage and create their own knowledge (Liaw, Hatala, & Huang, 2010).

RESEARCH METHODOLOGY

The study was limited to only campus-based undergraduate students of the University of Cape Coast (UCC) totaling 20,410 as at 2017. Stratified sampling was used to group students into faculty/school then simple random sampling was employed. The strata compose of the various faculties and schools in the University of Cape Coast. 700 paper-based questionnaires with 66 question items each were distributed. 600 filled-questionnaires were returned indicating response rate of 85.7%.

The Descriptive Research design was used in this study involving the collection of data to answer questions concerning the possibility of using m-learning in UCC in immediate future. The data was analyzed using the Statistical Package for Social Science (SPSS) Version 25 based on percentage and frequency distributions. The background data of the respondents are show in Table 1.

Table 1: Bio-Data

Items	Frequency	Percentage
Gender		
Male	372	62.0
Female	228	38.0
Programme Level		
100	118	19.7
200	88	14.7
300	194	32.3
400	200	33.3
Total	600	100.00

Source: Field Survey, 2017

The study was limited to only undergraduate students in UCC. As clearly indicated in Table 1, 62% and 38% represent males and females respectively with most (33.3%) of the respondents in their final year of study (i.e. level 400).

FINDINGS AND DISCUSSIONS

Table 2: Mobile Technology use and users' type

Items	Category	Frequency	Percentage
Type of Mobile Device	Smartphone	393	65.5
	Tablet PC	190	31.7
	iPad	17	2.8
Types of Mobile users	Pioneer	348	58.0
	Wannabe	92	15.3
	Traditionalist	160	26.7
Total		600	100.0

Source: Field Survey, 2017

According to Asuamah (2013) most students at the higher education use mobile device. Wilhem (2012) also emphasized that students are the highest consumer of smart devices. The studies of Asuamah and Welhem affirms what this study also revealed. Based on the total respondents used in the studies. All the respondents were using some type of smart devices. Yankov & Magee (2011) stated that students spent most of their time with smart devices because of its portability, flexibility and easy adaptability to new applications. Table 2 displayed the typed of mobile devices used by students. Students who used smartphones were more than those who were using other types of mobile devices, that is 65.5% of the total population were using Smartphone. Tablet PC users were 31.7% while iPad had the least 2.8%. Cavanagh (2015) studies proved otherwise where most students (high school, middle school and elementary school) were using laptops and Tablet PC to learn and few were using Smartphones. Again, most students 58.0% were Pioneer users of mobile devices and Wannabe users were 15.3% whilst Traditionalist users were 26.7% constituting the second mobile device users.

Table 3: Mobile Technology use and users' type

Items	Category	Frequency	Percentage
M-learning Awareness	Yes	423	70.5
	No	177	29.5
Use of mobile devices at lectures	Yes	54	9.0
	No	546	91.0
Adaptation of M-learning by UCC	Yes	400	66.7
	No	200	33.3
Total		600	100.0

Source: Field Survey, 2017

Table 3 further indicated that 70% of the students had some knowledge on m-learning. Yet 91.0% were not using mobile devices at lectures. Above all, students were adaptive to Mobile learning. According to Owusu-Acheaw and Larson (2015) majority of the respondents had mobile phones which also had Internet facility on them and had knowledge of the existence of many media sites but were not accepted to be used by most high schools in Ghana. Kolog, Tweneboah,, Devine and Adusei (2018) also attested that students were disallowed to use mobile devices while in school.

Table 4: Skills in the use of Mobile technology among students (Easiness of Use)

Statement	Skilled	Cannot Measure	Never Used	Means	StDev.
Sending text / SMS	584(97.3%)	16(2.7%)	0	3.0	0.16
Participating in social media	526(97.3%)	10(1.7%)	6(1.0%)	3.0	0.24
Downloading games, music or applications	536(89.3%)	10(1.7%)	54(9.0%)	2.8	0.58
Playing games	558(93.0%)	16(2.7%)	26(4.3%)	2.9	0.43
Sending pictures or movies to other people	490(81.7%)	20(3.3%)	90(15.0%)	2.7	0.72
Using Bluetooth/Infra-Red to transfer files	556(92.6%)	10(1.7%)	34(5.7%)	2.9	0.48
Playing music on the Internet	442(73.8%)	12(2.0%)	146(24.3%)	2.5	0.86
Listening to the radio	566(94.3%)	12(2.0%)	22(3.7%)	2.9	0.40
Searching for information on the web	566(94.3%)	6(1.0%)	28(4.7%)	2.9	0.43
Taking digital photos/videos	548(91.3%)	16(2.7%)	36(6.0%)	2.9	0.5
Sending or receiving email	496(82.6%)	16(2.7%)	88(14.7%)	2.7	0.71
Composite Mean				2.8	

Source: Field Survey, 2017 (Never Used = 1, Cannot Measure = 2, Skilled = 3)

In the study of Ishak, Ismail & Yazam (2013) revealed that most students use social media for the purposes such as searching for information, communicating with friends/families, keeping in touch with friends/families, entertainment, and completing the assignment task. The current study revealed that 526 (97.3%) (m=3.0: SD= 0.24) have skills in social media, in order words spent more time on social media and show their technological usage of mobile devices. Student were also seen to use the mobile devices to send files, pictures, movies through Bluetooth and WiFi, constituting 556(92.6%) ((m=2.9: SD= 0.48) of the entire population. Ezeah, Asogwa, & Obiorah (2013) & Ishak et al. (2013) in both studies showed that students use their mobile devices in searching for information on the web. Notably, the study also attests that most students 566(94.3%) (m=2.9: SD= 0.43) use mobile devices to search for information on the web. However, Ezeah et al. (2013) findings confute that

students were using social media most often for the purpose of getting entertainment and engaging in cyber-crimes and expose themselves to pornography and apparently reduces the time they devote to their studies.

Lastly, most students used their mobile devices to send and receive emails, making up 496(82.6%) ($m=2.7$; $SD=0.71$) of the respondents. Owusu-Acheaw and Larson (2015) confirmed that most of the students visit their social media sites using their phones and spend between thirty minutes to three hours per day. In sum, regarding respondents' skills in the use of Mobile technology produced an overall mean of 2.8. This implies that almost all the respondents had the requisite skills in the use of mobile technology. This finding made by the researchers corroborates the findings of (Suki & Suki, 2010) whereby the interactivity nature of mobile technology influences adoption of m-learning.

Table 5: Students' Perception on the Potentials of Mobile Learning (M-learning)

Statements	Agree	Uncertain	Disagree	Mean	StDev.
I enjoy learning with the mobile device	556(92.7%)	32(5.3%)	12(2.0%)	2.9	0.35
I could do self-tutorial with mobile device	446(74.3%)	80(13.3%)	74(12.3%)	2.6	0.69
I feel insecure about inability to use ICT	240(40.0%)	76(12.7%)	284(47.3%)	2.1	0.93
I can quickly adopt to new technology	514(85.6%)	54(9.0%)	32(5.3%)	2.8	0.51
I can use mobile device to perform any task	474(79.0%)	90(15.0%)	36(6.0%)	2.7	0.56
I can solve problem using mobile device	372(62.0%)	104(17.3%)	124(20.7%)	2.4	0.81
I am in complete control when using mobile device	400(66.7%)	98(16.3%)	102(17.0%)	2.5	0.77
I find mobile device difficult to use for learning	112(18.6%)	54(9.0%)	434(72.4%)	2.5	0.79
I do not enjoy learning with mobile device	82(13.7%)	36(6.0%)	482(80.3%)	2.7	0.70
ICT frustrates me	66(11.0%)	62(10.3%)	472(78.7%)	2.7	0.66
Composite mean				2.6	

Source: Field Survey, 2017 (Agree = 3, Uncertain = 2, Disagree = 1)

Table 5 shows the perceptions students have towards the use of Mobile learning. It was revealed that most students 556(92.7%) ($m=2.9$; $SD=0.35$) enjoyed learning with their mobile devices. Guma, Businge, Nkamwesiga and Andogah (2017) findings showed that students use mobile devices to access course materials, doing class work, send and receive e-mails and taking and sharing of notes but virtual classroom, discussion forums and using pre-recorded lecturers with PowerPoint. 446(74.3%) ($m=2.6$; $SD=0.69$) of the respondent could use mobile device for self-tutorials. A study of students in Guangzhou by Wong (2014) showed that searching and learning were the most activities used by students when they are with their mobile devices. 474(79.0%) ($m=2.7$; $SD=0.59$) of the respondents stated that they can use their mobile device to perform any task while 372(62.0%) ($m=2.4$; $SD=0.81$) can solve problems with it. Above all, most student 434(72.4%) ($m=2.5$; $SD=0.79$) did not find it difficult learning with mobile devices and 482(80.3%) ($m=2.7$; $SD=0.70$) enjoyed learning with it. No wonder Ali (2017) results showed that some students are already using mobile devices to support their learning process. Ali (2017) one of the keen reasons why student enjoyed using mobile devices is that, the can-do variety of activities with it and are not limited, motivating them all type of learning style behaviour.

Table 6: Students Learning Characteristics (Adaptation to M-Learning)

Student's Learning Characteristics	Agree	Undecided	Disagree	Mean	StDev.
I enjoy trying hands on difficult problems	376(62.7%)	68(11.3%)	156(26.0%)	2.4	0.87
I prefer to discover things	554(92.3%)	42(7.0%)	46(0.7%)	2.9	0.30
I enjoy tackling problems that are completely new	436(72.9%)	82(13.7%)	80(13.3%)	2.6	0.72
I am eager to learn new information	548(91.3%)	22(3.7%)	30(5.0%)	2.9	0.47
I am disciplined	550(92.0%)	34(5.7%)	14(2.7%)	2.9	0.39
I enjoy learning new information	554(92.3%)	24(4.0%)	22(3.7%)	2.9	0.42
I have a need to learn	538(90.0%)	36(6.0%)	24(4.3%)	2.9	0.46
I enjoy studying	560(93.6%)	30(5.0%)	8(1.7%)	2.9	0.33
Composite mean				2.8	

Source: Field Survey, 2017 (Agree = 3, Undecided = 2, Disagree = 1)

The researcher intended to know the students learning characteristics. In table 6 majority 548(91.3%) (m=2.9: SD=0.47) of the students were eager to learn new information, 550(92.0%) (m=2.9: SD=0.39) were disciplined, have the need to learn and 554(92.3%) (m=2.9: SD=0.42) enjoyed learning and studying with mobile device. The statistics in table for affirms Mockus, Dawson, Edel-Malizia, Shaffer, Sung An & Swaggerty (2011) finding where mobile device made learning more flexible and convenient for the student.

Table 7: Perception of Mobile Learning (ML)

Statements	Agree	Undecided	Disagree	Mean	StDev.
MT enables access to learning content more quickly	542(90.3%)	0	58(9.7%)	2.8	0.59
MT enables access to learning content more often	544(90.7%)	0	56(9.3%)	2.8	0.58
Using mobile device prolong tasks	248(41.4%)	72(12.0%)	280(46.6%)	1.9	0.94
Using mobile device will support learning	480(80.0%)	56(9.3%)	64(10.7%)	2.7	0.65
Using MT for learning is a good idea	534(89.0%)	46(7.7%)	20(3.3%)	2.9	0.44
It is okay if MT was a required component of studies	422(70.4%)	84(14.0%)	94(15.6%)	2.5	0.75
Adopting mobile learning in future will be perfect	538(89.7%)	36(6.0%)	26(4.3%)	2.9	0.46
Students need knowledge to use mobile device for learning	470(78.4%)	72(12.0%)	58(9.6%)	2.7	0.64
M-learning would not be compatible with students' learning	218(36.4%)	122(20.3%)	260(43.3%)	1.9	0.89
Students would be willing to use MT if supported	502(83.6%)	52(8.7%)	46(7.7%)	2.8	0.58
Composite mean				2.6	

Source: Field Survey, 2017 (Agree = 3, Undecided = 2, Disagree = 1)

Table 7 shows respondent's perception of mobile learning. The study revealed that most student 542(90.3%) (m=2.8: SD=0.59) perceived to have quick access to learning content once using mobile technology, 480(80.0%) (m=2.7: SD=0.65) also said that the use of mobile technology would support their learning. Most student 534(89.0%) (m=2.9: SD=0.44) find it a good idea to use mobile technology in learning. Despite the above warning need for mobile technology, 470(78.4%) (m=2.7: SD=0.64) of the students required knowledge in using mobile device when learning. With this, 218(36.4%) (m=1.9: SD=0.89) perceived that mobile learning would not be compatible with students' learning, yet 502(83.6%) (m=2.8: SD=0.58) are willing to use M learning if mobile learning will be compatible. This reason of incompatibility and difficulty learning with was raised by Chang, Lee, Lin, Cheng (2013) that mobile device users frequently would be distracted by social

media updates and messages, which pops up on your screen instantly. In totality, the composite mean of 2.6 showed that students agreed with most of the assertions stated in Table 7.

Table 8: Perceived Usefulness in using Mobile Technology (MT) in learning

Statements	Agree	Undecided	Disagree	Mean	StDev.
Mobile technology (MT) is useful in learning	550(91.6%)	0	50(8.4%)	2.8	0.55
Taking a mobile-supported course ensures time consciousness	486(81.0%)	72(12.0%)	42(7.0%)	2.7	0.58
It is convenient to access learning content via a mobile device than over using a computer	400(66.7%)	88(14.7%)	112(18.6%)	2.5	0.79
It will take a while to get comfortable with using a mobile device for learning	304(50.7%)	72(12.0%)	224(37.3%)	2.1	0.93
MT will make learning more interesting	548(91.3%)	0	52(8.7%)	2.8	0.56
Learning with the mobile technology will be fun	508(84.7%)	68(11.3%)	24(4.0%)	2.8	0.49
Currently MT and the associated services are too expensive	446(74.7%)	58(9.3%)	96(16.0%)	2.6	0.75
Overall benefits of mobile learning are good.	542(90.4%)	38(6.3%)	20(3.3%)	2.9	0.42
M-learning means learning anywhere at anytime	464(77.4%)	48(8.0%)	88(14.6%)	2.6	0.73
Composite mean	2.6				

Source: Field Survey, 2017 (Agree = 3, Undecided = 2, Disagree = 1)

It is obvious from table 8 looking at the composite mean of 2.6, students agreed to the statement above. This also shows that using mobile Technology is perceived to be useful for learning. Evaluating the composite mean 550(91.6%) (m=2.8: SD=0.55) of the students perceive Mobile Technology as useful in learning, 400(66.7%) (m=2.5: SD=0.79) would had convenience when accessing learning content via a mobile device than over using a computer, 224(37.3%) (m=2.1: SD=0.93) disagreed with the assertion that “It will take a while to get comfortable with using a mobile device for learning” leaving 304(50.7%) students who perceived that it would take a while before becoming comfortable using mobile device in learning. Despite the discomfort, 548(91.3%) (m=2.8: SD=0.56) and 508(84.7%) (m=2.8: SD=0.49) student see it interesting and fun learning with Mobile Technology respectively. Currently, majority of the student 446(74.7%) (m=2.6: SD=0.75) perceive MT and the associated services too expensive. However, greater number of students 464(77.4%) (m=2.6: SD=0.73) can learn anywhere due to the avenue of Mobile Technology. This avenue to Mwapwele and Roodt, (2016) assist students to a better extent in understanding concepts, in communicating to one another, in searching for information on the internet, and equipping them with skills they can employ for lifelong learning.

Table 9: Interest of Students on Mobile Device Usage to Perform some Activities

Activities	Interested	Fairly Interested	Not Interested	Mean	StDev.
SMS notifications for results, change of venue/time for class	526(87.7%)	52(8.7%)	22(3.7%)	2.8	0.46
To write mobile quizzes	334(55.6%)	120(20.0%)	146(24.3%)	2.3	0.84
Mobile blogging	384(64.0%)	138(23.0%)	78(13.0%)	2.5	0.71
To view lecture slides or readings	402(67.0%)	142(23.7%)	56(9.3%)	2.6	0.66
To download and view lecture recordings as audio or video (podcasting)	458(76.3%)	132(22.0%)	10(1.7%)	2.7	0.47
Checking results	522(87.0%)	52(8.7%)	26(4.3%)	2.8	0.48
To download and play mobile educational game	484(80.7%)	110(18.3%)	6(1.0%)	2.8	0.43
To take lecture notes during lectures	418(69.7%)	102(17.0%)	80(13.3%)	2.6	0.72
SMS notifications for assignment submission deadlines	532(88.7%)	38(6.3%)	30(5.0%)	2.8	0.49
Composite mean	2.7				

Source: Field Survey, 2017 (Interested = 3, Fairly Interested = 2, Not Interested = 1)

Table 9 shows what students would be interested to them in their usage of mobile device. It was seen that 334(55.6%) were interested in using mobile device to write quizzes, 120(20.0%) would be fairly interested whiles 146(24.3%) were not interested in using mobile device to write quizzes, emerging with total mean 2.3 and SD of 0.84. Again, 384(64.0%) ($m=2.5$: $SD=0.71$) were interested in mobile blogging, 402(67.0%) ($m=2.6$: $SD=0.66$) were interested in viewing lecture slides or readings with mobile device, 458(76.3%) ($m=2.7$: $SD=0.47$) were also interested in downloading and viewing lecture recordings as audio or video (podcasting) with mobile device. Most students 522(87.0%) ($m=2.8$: $SD=0.48$) would be interested in checking their results with mobile device. To download and play mobile educational game, 484(80.7%) ($m=2.8$: $SD=0.43$) students would be interested in using mobile device for it. Taking lecture notes a priority to all students. It was seen that 418(69.7%) ($m=2.6$: $SD=0.72$) students would use mobile device to take lecture notes during lectures and lastly majority of the population 532(88.7%) ($m=2.8$: $SD=0.49$) were interested in using mobile device to send SMS notifications for assignment submission deadlines. According to Ker, Lim, Low, Patanmacia, and Ting (2011) mobile devices have internet access, which allow the user to have access to many things including emails, instant messages and social media. In all the composite mean of 2.7 showed that students would be interested in the above listed purpose when using mobile device in school.

CONCLUSION

The results show that majority of students have good knowledge of the use of mobile devices as significant number of them use advanced features of their mobile devices frequently and are keen and optimistic about the use of m-learning. Majority of the students from the study are strongly and willing to adopt m-learning because they believe it would enhance their learning. Findings from the study have practical implications in developing and deploying an m-learning system for students. The university could deploy SMS notifications for activities among which are reminding students when the due date of assignments or borrowed books are at hand or to announce important live events such as writing of quizzes or exams. In developing an m-learning system, key activities such as SMS notifications for results, change of venue/time for class and downloading and viewing lecture recordings as audio or video (podcasting) should be considered by the developers.

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