Usage of Mobile Phone as correlates of students' interest and attitude towards Business Administration course in Federal Polytechnic, Ado-Ekiti, Ekiti State, Nigeria

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Abstract

This study investigates the Usage of Mobile Phone as correlates of students' interest and attitude towards Business Administration course in Federal Polytechnic, Ado-Ekiti, Ekiti State, Nigeria. T*he research design was descriptive survey. The sample of the study consist of one hundred and twenty (120) OND Business Administration students of Federal Polytechnic, Ado-Ekiti selected using simple random sampling techniques. Two research hypotheses was formulated for the study and tested at p< 0.05. The instruments used to collect relevant data from the subjects were Business Administration Attitudinal Scale (BAAS and Business Administration Interest Scale (BAIS). The instruments were subjected to validity and reliability mechanism. Pearson Product Moment correlation(r) statistical analysis was used to analysed the two null hypotheses formulated for the study. The findings showed that there is significant relationship in the students' usage of Mobile Phone and Students' interest and attitude towards Business Administration in Federal Polytechnic, Ado-Ekiti, Ekiti State, Nigeria. Conclusions and appropriate recommendations were also made in this paper.*

Key words: usage, Mobile Phone, student's attitude, student's interest, Federal Polytechnic.

Introduction

Cell phones are integral parts of university life and culture. Even a casual observation of today's university students will reveal cell phone being used, both covertly and overtly in every possible campus setting, including the classroom. Research suggests that university student frequently use the cell phone during class time despite rules against doing so (Tindell & Bohlander, 2012). As cell phone technology continues its rapid development the device appear capable of contributing to student learning and improve academic performance. For example, Modem, Smart phone, provide students with immediate access to many of the same education-enhancing capabilities as an internet-connected computed such as online information retrieval, file sharing and interacting with professors and fellow student (Bue & Mc Cormick, 2012, Tao & Yeh, 2013). Conversely resent research suggests that many college students perceive the cell phone primarily as a leisure device and most commonly use cell phones for social networking, surfing the internet, watching videos, and playing games (Lepp, Li & Barkely, 2015; Lepp, Barkely, Sanders, Rebold & Gates, 2013). If typically utilized for leisure rather than education, then cell phones may disrupt learning within academic setting (Levine, Waiter and Bowman 2007).

Inspite of the burst of mobile phones in most of our daily lives aspects, the utilization of these devices in education is still new in its infancy. This is true for the use of mobile phones in education in general and especially for its use in teaching mathematics. On the other hand, we are aware recently of the increasing commonness of mobile and wireless devices, especially mobile phones, amongst the young generations. This provide new possibilities, opportunities and challenges for the educational environment. Furthermore, some recent studies examined the use of mobile phones in learning mathematics amongst college pre-service teacher. This implies new era for mobile phone integration in the mathematics class in which the diversified mobile features are utilized to build mathematical knowledge. This also studied learning environment. Doing so they aimed to examine how socio-cultural and situated learning aspects were reflected in these processes and experiences. The found that the contribution of the mobile phone environment lies not only in making dynamic mathematical application more available, but also in support the execution of tasks that are closer to the students experience and more relevant to them which has the potential to enhance experiential learning (this was explained according to Genossar, Botzer & Yerusgamly, 2008).

Roschelle and Colleagues conducted several experiments using mobile devices in the mathematics classroom. For example, Tatar, Roschelle, Vahey and Penvel (2003) examined the use of mobile device in mathematics and science learning by implementing several activities that became possible owning to the availability of mobile devices, including:

(1) Sending the same document to all students

(2) Differentiation: sending different parametric definitions to ach students in a systematic way

(3) Contribution: forwarding a function or mathematical data constructed by one student to a friend or teacher

(4) Harvesting: following the collaborative work of several students, constructing a set of functions or data that are related to each other but different.

(5) Aggregation: Combining functions or data that are in some way related and presenting it usually in public.

The study found that mobile learning promises access to applications that support learning anywhere, anytime and that this type of learning supports both adults at the workplace and students in classroom learning. Roschalle, Patton and Tatar (2007) found that the use of mobile devices in the Mathematics classroom made the class more (a)Student centred (b) Assessment centred (c) Knowledge centred and (d) Community centred

In the last decades, several researches have been following the integration applets (which are common on the internet) in the mathematics using a constructive approach. (e.g Pesonen 2003), as an extension to the use of these tools within a web environment, recently new mathematical applications have become available for mobile devices, and most recently for mobile hones. These application are called "midlets". According to wikipedia (2008) defined midlets as Java programs for embedded devices, generally games and application that run on a mobile phone.

As applets replaced courseware and dedicated tools in computers, midlets replaced applets in mobile phones, so these gives students need to have a good perception towards the use of mobile phones in teaching learning of mathematics.

Research Hypotheses

The following null hypotheses were formulated and tested at $p < 0.05$:

1. There is no significant relationship in the students' usage of Mobile Phone and student's interest in Business Administration Course in Federal Polytechnic, Ado-Ekiti.
2. There is no significant relationship in the students' usage of Mobile Phone and student's attitude towards Business Administration Course in Federal Polytechnic, Ado-Ekiti.

Literature Review

While studying students' intention to use web – based learning, Chui and Wang (2008) suggested an extended UTAUT model where self – efficiency was modeled as having a direct effect on effort expectancy and also suggested that self – efficacy affects intention to use the technology. While studying students acceptance of tablet PC computers, El-Gayor and moran (2006)suggested an extended UTAUT to include self-efficacy as affecting intent use or behaviour intent. Self – efficacy represents a persons perceptions of their capabilities to use the table to complete necessary mobile learning tasks.

As previously mentioned, Hassanien, Head & Wang (2010) included enjoyment as a construct to evaluate user satisfaction of mobile learning. Huang, Lin & Chuang (2007) also included perceived enjoyment and suggested that it affects attitude towards mobile learning and described it as a causal relationship (Huang, Lin and Chuang 2007). If users perceive using tablets for learning as enjoyable, it positively affects their attitude towards learning with tablets.

Social Learning with Social Media and Networking Applications

Today's youth have much experience with video and photo-sharing media such as YouTube (Mullen and Wedwick, 2008). This video-sharing media can be incorporated into a constructivist classroom as learning tools as the youth; the students are actively creating their own learning experiences through viewing and creating videos and educators can use this as a tool for engaging the youth in meaningful learning experiences (Mullen & Wedwick, 2008).YouTube is increasingly being used by educators as a pedagogic resource for many interesting newsworthy events to teach students especially within an 'English as a Second Language' course,(Duffy, 2008). The students watched the videos as a resource towards learning the essentials of the English Language and the students get enjoyment from watching the videos. There was positive students' feedback about the learning of English as a Second language through the YouTube videos (Duffy, 2008). To Duffy (2008), videos can be a powerful educational and motivational tool but the effectiveness of You Tube is not in itself but in how it is used towards achieving learning goals and objectives before it can be seen as an effective learning tool. Effective instructional video is student centred and can be used for

student pedagogy with the video as a vehicle for students' discovery of knowledge and for instructional videos on an online space to share student authored content (Duffy,2008). With the discourse on the use of YouTube videos for learning now and in the future, educators may want to consider how to engage students with YouTube to teach students to think critically about their potential uses of YouTube videos for collaborative and meaningful social learning experiences with one another.

Besides the use of YouTube videos for collaborative students' learning experiences, Facebook also shares many of the qualities of a good education technology in its reflective element, allowing for peer feedback and a fit for the social context of learning. The conversational and collaborative characteristics of Face book are also "collaborative and encourage active participatory role for users"(Maloney, 2007). According to Stutzman (2005), students use Facebook to 'hang out' with friends, learn about each other or simply as a directory to other websites and knowledge. Students often use Facebook for social purposes to develop social networking skills with their peers at school and from previous institutions they have attended. Students' use of Facebook is profoundly informal and often at a tangent with the official learning aims of educators (Stutzman, 2005).It seems that the formal use of Facebook as a tool for rigorous academic study is fairly rare, but the use of Facebook as a tool for teaching and learning has been on the rise recently. According to Selwyn (2009), Facebook is very useful as a tool for negotiating a social and community identity, such as student identity as a university student. Selwyn (2009) conducted an extensive survey of the contents of Facebook postings by 909 undergraduate students in the U.K and found that the students would use Facebook particularly to negotiate their identity as a university student by sharing feelings and perceptions about the institution and teaching staff. Hence, the study has not been able to extensively show that Facebook is fully welcomed as a good teaching and learning pedagogy.

However, with the advent of social media and networking applications, the youth are actively using these applications and are connected with one another via these applications. A survey by Singapore Polytechnic's School of Communication, Arts and Social Sciences (2009) found that 71% of 201respondents between 15 and 19 years old and 74% of 175 respondents between 20 and 24 years old visited Facebook daily. The majority of the 800 respondents (15–34 years old) shared their personal information such as real name, age, gender and date of birth on their Facebook page (Singapore Polytechnic, 2009). But, are students able to learn from the sharing and discussion of information via Facebook with one another? What could possibly be the problems and difficulties with using of YouTube videos and Facebook application for learning purposes? There seems to be a gap in the literature about the use of YouTube and Facebook for learning among the youth (Singapore Polytechnic, 2009; Selwyn, 2009). Hence, this paper aims to seek an in-depth understanding, in exploration through a qualitative method of interviews, of the tertiary students' learning experiences and opinions with the social media of YouTube videos and the social networking applications of Facebook for learning. Secondly, the paper also aims to seek an in-depth understanding of lecturers' experiences and opinions of using YouTube videos and Facebook for teaching. Thus, the exploratory study and investigation of a case study of students and lecturers' experiences, opinions and preferences with teaching and learning via the YouTube videos and the connectivity and communication via Facebook for teaching and learning for this paper. In the meanwhile, the paper also seeks to find out the possible problems and difficulties that the students and lecturers would have experienced with the leveraging of these social media and social networking applications for teaching and learning.

Mobile Learning

Using most recent technical communication devices to facilitate the process of learning and teaching, schools tried to put them in the heart of the educational process. Therefore, PDA, Laptop, internet and smart phone are used in what is called mobile learning. To study the impact of these devices, researchers have surveyed students and sometime teachers reaction against these new intruders Sipila (2008). Among those researchers Al-fahed (2009), chase and Meghan(2007) conducted studied to figure out studied to figure out students favour using mobile device in the process of learning. Their founding encourage researchers interested to extensively study methods ad techniques of providing knowledge via modern technological tools.

Al-Fahad (2009) conducted a study to better understand and measure students perceptions and effectives of mobile learning the result of this study revealed that the wireless networks increase the flexibility of access to resources of learning independently any place. Therefore, students can save their time effort and even money.

Investigating students perception towards new technology involvement in the process of university learning chase and Moghan (2007) surveyed students at slippery rock university to determine their engagement with their attitude towards technology on campus. Their study indicates that the subjects of their study revealed more and more satisfaction with the use of technological devices in the educational process.

To demonstrate the power of the mathematics and technology attitudes scale, Barkatsas (2007) surveyed 350 students from schools. The study showed that the students had a wide range of attitude towards learning mathematic with technology. The researcher found out that male students showed more confidence in new technology, however, female students showed negative correlation with mathematics confidence.

To study attitudes towards mobile phone in particular, Thornton & Houser (2005), thatcher & mooney (2008), Fotdar & Latila (2007) and Bayia & Daher (2009) conducted their research on their research on the attitudes towards the use of mobile phone from different perspectives. The researchers agree on the reaction that students are in favour of using mobile phones in the process of learning.

Thornton and Houser (2005) polled 333 japanese University students regarding their use of mobile devices. Trying to use the mobile as a means of study they found out that 93% of the sample of the study believe that this is a valuable teaching methods, exchanging some 200 e-mail messages each week, sixty percent e-mail peers about classes; 44% e-mail for studying Thatcher & Mooney (2008) analyzed a questionnaire distributed at the end of a university course with students to use mobile phone text messaging to send questions to their lecturer during classes or between classes, the results indicated that students had strongly favourable perceptions of this initiative and suggested more future use of mobile in the process of education to enhance the learning experience.

At the end of a university course, where students were encourage to use mobile phone text messaging to send questions to the lecturer during classes. Fotdar & Lalita (2007) conducted a survey to better understanding and measure students' attitudes and perceptions towards the effectiveness of mobile learning results of this survey reveal that introducing mobile phone could be helpful in improving retention at Bachelor of science students, by augmenting their teaching /learning and supporting the existing learning system. Fordar and Lalita found out that more than half of the respondents surveyed highly support the introduction of mobile phone to enhance the learning experience.

Baya'a & Dahor conducted a research to examine the perception of the students regarding their mathematics learning using mobile phones. The study reveled that the subjects of the study positively appreciated the great capabilities of cell phones in the process of learning /teaching mathematics.

To find out attitudes toward mobile conversations in public places, Love & Kewly (2005) carried out a study that revealed variety in personality influence people attitudes towards making calls in public besides the researchers discovered that the reactive of personality has an impact on people's attitude towards being close to people making mobile phone calls in public places.

Kumiko Downs (2003) Surveyed college students cell phone usage from a behavioural and psychological perspective. Analyzing their survey they concluded that people have various feelings and attitudes towards mobile phone usage.

Waldman et al. carried out three surveys in (2002) and (2003), and then ran comparisons using the data collected from the surveys conducted. Two surveys in the same year (2002) were about mobile phone ownership, payment of mobile phone bills and reasons for the usage of cell phones. Another survey (2002) of Americans determined locations where they felt it was acceptable to communicate using a mobile phone. The results of this study (2004) show that organizational systems research association (OSRA) attend will gain awareness of the impact of mobile phone usage on university students and their attitudes towards the use of mobile phones.

Pachler & Bradley (2008) conducted a study on the use of high end mobile learning. The aim of their study was to investigate how mobile devices are being integrated by learners I formal and formal contexts. In their study two dominant themes emerged from the cases affective issues and phone usage in learners formal and informal practice. Moreover, the data suggest that the learner might benefit from the use of facilities of the cell phones, for example sending messages in certain contexts, which could provide the way of bridging the gap between formal learning.

However, the researchers have found that cell phones use in the area of the university environment has not been well researched. Therefore they decided to investigate university students attitudes towards cell phone learning environment to help those in charge of the educational techniques to come to a decision of whether it is worthy to use mobile phones as means of study or not.

Bower, Hedberg & Kuswara (2010) further propose a framework for technology learning design, suggesting four types of online pedagogies – transmissive, dialogic, constructionist and co-constructive. These pedagogies are categorized according to their degree of production and collaboration. The transmissive pedagogical approach, where the basic paradigm is learning from ICT, is based on information delivery approaches with information broadcast and made available to learners. For dialogic, constructionist and co-constructive pedagogies, they provide opportunities for interaction and construction that allow students to learn with ICT.

There are merits to each of the learning pedagogies, depending on the different stages of the learning cycle. Direct instructional or the transmissive approaches would be more appropriate for beginners who have yet to form understanding about a particular topic. The dialogic pedagogical approaches allow learners to extend their learning and understanding beyond what they could achieve in isolation. Extended learning takes place through discussions and dialogues with peers and instructors. The constructionist pedagogy assumes that students learn by reconstructing their knowledge. This approach often encourages students to use open tools to create and produce what they have learned. The co-constructive approaches place emphasis on the power of groups and teamwork, where students work with their peers to construct knowledge. Table 1 provides a matrix of pedagogies according to the degree of production and collaboration.

Although Law (2009) reported a change in pedagogical approach by teachers when ICT was being used, the more conventional and traditional pedagogical approaches still prevailed, especially in some countries (e.g., Hong Kong, Singapore and Taiwan). Teachers

in the above-mentioned countries were reported to value a more traditionally oriented curriculum, as compared to curriculum goals that focused on lifelong learning and connectedness.

McAlister, Dunn & Quinn (2005) examined teachers' attitudes towards the use of computers in teaching mathematics in the primary school classroom. Positive attitudes of teachers towards the use of ICT in teaching and the availability of the necessary resources would facilitate the use of computers in teaching mathematics in the primary classroom. The computers could be used as a tool in supporting and enhancing students' learning as well as a tool for teaching.

Research Methodology

This study investigates the Usage of Mobile Phone as correlates of students' interest and attitude towards Business Administration course in Federal Polytechnic, Ado-Ekiti, Ekiti State, Nigeria. The research design was descriptive survey.

The population of the study comprises of all students of Federal Polytechnic, Ado-Ekiti, Ekiti State, Nigeria. The sample of the study consists of one hundred and twenty (120) OND Business Administration students of Federal Polytechnic, Ado-Ekiti, Ekiti State which were selected using simple random sampling techniques. Two null research hypotheses was formulated for the study and tested at $p < 0.05$.

The instruments used to collect relevant data from the subjects were Business Administration Attitudinal Scale (BAAS and Business Administration Interest Scale (BAIS). The instruments were subjected to validity and reliability mechanism.

Pearson Product Moment correlation(r) statistical analysis was used to analysed the two null hypotheses formulated for the study. The instruments were subjected to validity and reliability mechanism and they were found appropriate for the study. The researcher administered BAAS and BAIS on the respondents. Pearson Product Moment correlation(r) statistical analysis was used to analysed the two null hypotheses formulated for the study.

Results and Discussion
Hypothesis 1

There is no significant relationship in the students' usage of Mobile Phone and student's interest in Business Administration Course in Federal Polytechnic, Ado-Ekiti.

Table 1: Pearson Product Moment Correlation of Students' usage of Mobile Phone and Students' interest in Business administration course in Federal Polytechnic, Ado-Ekiti.

VARIABLE	N	X	SD	df	r_{-cal}	r_{-tab}	Remark
Usage of Mobile Phone	120	11.55	0.512	118	0.478	0.195	*
Students' Interest in Business Administration	120	8.21	0.345				

P < 0.05 (* = Result is Significant at 0.05 level)

The result in table 1 showed that 'r' value, r_{-cal} (0.478) with a P value < 0.05 alpha level is greater than the critical r.tab (0.195). The null hypothesis is therefore rejected, which means that there is significant relationship in the students' usage of mobile Phone and interest in Business Administration course in Federal Polytechnic, Ado-Ekiti. The study also revealed

that students' usage of mobile phone (X = 11.55) have higher disposition towards Business Administration course.

Hypothesis 2

There is no significant relationship in the students' usage of Mobile Phone and student's attitude towards Business Administration Course in Federal Polytechnic, Ado-Ekiti.

Table 2: Pearson Product Moment Correlation of Students' usage of Mobile Phone and students' Attitude towards Business Administration course in Federal Polytechnic, Ado-Ekiti.

VARIABLE	N	X	SD	df	r-cal	r-tab	Remark
Students' usage of Mobile Phone	120	12.82	0.315	118	0.459	0.195	*
Students' Attitude to Physics	120	8.00	0.522				

P < 0.05 (* = Result is Significant at 0.05 level)

The result in table 2 showed that 'r' value, r_{-cal} (0.459) with a P value < 0.05 alpha level is greater than the critical r.tab (0.195). The null hypothesis is therefore rejected, which means that there is significant relationship in the students' usage of Mobile Phone and student's attitude towards Business Administration Course in Federal Polytechnic, Ado-Ekiti. The study also revealed that students' usage of Mobile Phone (X = 12.82) have higher disposition towards students' attitude towards Business Administration in Federal Polytechnic, Ado-Ekiti.

Discussion of Results

Based on the hypotheses tested for this study, hypothesis one which stated that there is no significant relationship between the characteristics of the mobile phone environment that college students perceive as importance for their possible decision to join an experiment involving mathematics learning was rejected, the researchers upheld that there will be significant relationship between the characteristics of the mobile phone environment that college students perceive as importance for their possible decision to join an experiment involving mathematics learning.

In support of the above statement it was reported by Lockyer (2007) that within teacher education programs, computer technology must be integrates with curriculum pedagogy and field experience to model what the pre service teacher might use in their own practice. As it had been hypothesized, participating in the blogging activity did hence a positive impact on students technology self – efficacy, multimedia processing and blogging self – efficiency (Papastergions et al, 2011). Mobile device has the potential to offer an existing and challenging environment through which to offer enhance learning (Hall, 2001).

According to Aribamikan (2007) there are many way by which knowledge and skills could be imparted on the students such as lecture, reporting, experimental, whole-part-whole, directing, progression and demonstration. For the purpose of this study, attention would be focused on methods of teaching that are practical – oriented. This whole – part – whole, field trip, demonstration, visual aids, individuals or group method, progression, experimental and directing method. The results of this study are consistent with Al-Fahad (2009), Dr. Mark E. Chase & Meghan (2007) and Barkatsas (2007) attitudes towards mobile devices in learning. Specifically, this came up with the same results of Thorton & Houser (2005), Fozdar & Lalita (2007) and Baya'a & Daher (2009). However, none of them tackled the influence of gender

on the attitudes towards cell phone, though this study is inconsistent with Barkatsas (2007) findings that girls' relationship was negative to technology. It should be noted that this is not meant to be a definitive study. There are some important limitations of this study; for example, students who live far from the campus are more likely to favor distance devices for teaching.

Conclusions

Based on the results of this study, the findings revealed that there was statistical significant relationship in the students' usage of Mobile Phone and interest in Business Administration course in Federal Polytechnic, Ado-Ekiti.

Findings also revealed that there is significant relationship in the students' usage of Mobile Phone and student's attitude towards Business Administration Course in Federal Polytechnic, Ado-Ekiti.

Recommendations

Based on the findings of this study, experiencing cell phone in the academic learning environment, the researcher strongly believes that a lot of opportunities and potentials are to be realized. In spite of the inconvenient met in using these devices in class, we believe that forbidding them is not the right choice to be followed. Therefore, the researchers of this study recommend more studies on cell phones use and other techniques integration to utilize in academic learning environment.

Therefore, it is a great mistake to overlook this device as a means of study. The researcher recommend that introducing courses utilize mobile phone would be worthy, especially when the materials and knowledge required for an instructor to begin taking part in using the cell phone a device of learning are available.

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