

Use of Mobile Phones for Academic Purposes by Law Students of Igbinedion University, Okada Nigeria

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Abstract Extensive literature review has shown that the 21st century youth is techno savvy, hence spend quality time surfing the internet using their internet enabled phones. This paper intends to investigate the extent to which students of the College of Law, Igbinedion University use their mobile phones for the purpose of helping them get academic information. The paper investigates how often the students use the internet on their mobile phones and what interest them most on the internet. It aims to determine how often they visit the internet for academic purpose. Five research questions were determined and tested with questionnaire serving as the main instrument for data collection. A total of 150 questionnaires were distributed and all 150 were duly filled and returned, out of which 148 was found usable, representing 98.7% of the representative total population. The analysis of the students' perception showed that majority of the students use their mobile phones to search for academic information. The paper also finds out that after academic information, the next highly used function of the mobile phone is for social networking, chatting and reading the news online. It concludes by recommending introduction of mobile learning in the university.

Keywords Mobile Phone, Internet, Academic Purpose, Nigeria

1. Introduction

The use of mobile phones for socialization via various social media like Facebook, Whatsapp, Tweeter, LinkedIn, etc cannot be over emphasized. Students use various kinds of internet enabled phones like iphone, blackberry, nokia, samsung and various kinds of android phones for the purpose of socializing on the internet and also to keep abreast of information around them. Adaja & Ayodele (2013) advocated that one of the breakthroughs in information and communication technology in the 21st century was the discovery and emergence of the new media which have facilitated the creation of the different platforms for social interaction. Ayub, Hamid and Nawawi (2014) who share similar views with Adaja & Ayodele (2013) opined that advances in computer technology have enabled the Internet to serve as a platform not merely to seek information, but also to exchange ideas and knowledge with other users, and obtain expert opinions via email, teleconferencing, chatting and other avenues. Nevertheless, the advent of social network sites such as Facebook, Twitter, LinkedIn and others that include chatting and online games have changed the perception on Internet use from one that is associated with learning to that of a socializing facility. Such website

applications have resulted in the Internet being used for both academic and non-academic activities".

The 21st century youth spend more time on the phone, the internet or in front of the television screen. The mobile phone usage pattern of youths has become worrisome because most of them use their phones excessively. Livingstone and Bober (2005) opined that youths found mobile phone valuable and useful than any other means of communication. They further noted that mobile phones are sometimes a tool for social identity than a means to facilitate education.

Sofowora (2011) shares similar opinion with Livingstone and Bober (2005) when he observed that the indiscriminate use of phones in public places such as the highway, hospitals, churches and even classrooms are other examples of poor mobile phone etiquette. It is not only in Nigeria that these kinds of problems occur, it is world over.

It is therefore justifiable to say that if such time spent on the internet is for academic purpose, then probably, the academic performance of youths may gradually be improved and reading culture may be enhanced.

The internet can be used for different purposes, depending on the needs of users at the time of visit. Since the use of mobile phone to access the internet is common among the youths, it will be difficult to monitor or censor what is being done on the internet by them.

According to Longe et al. (2007), the internet is both a source of promise for our children and a source of concern. The promise is that the internet offers such an enormous range of positive and educational experiences and materials.

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This paper would reveal the frequency of mobile phone usage for internet activities and what is being done on the internet by the selected sample, in a bid to investigating the frequency of use of the internet for academic purposes.

2. Objectives of the Study

The main objective of the study was to investigate the extent, to which mobile phones are used by students of the College of Law, Igbinedion University, Okada to do their class work and to consult academic documents relevant to their field of study.

The study aimed at identifying the following:

1. The mobile phone practices of the students.
2. The number of hours students spends on social networks, playing games, chatting, shopping online, gambling online, reading news and doing academic research.
3. The number of students that use their phone for academic purposes.
4. The academic applications that the students make use of.
5. How convenient it is to use the mobile phone for academic purposes.

The research will help to have a clear understanding of students' mobile practices which would encourage the university to implement more student-centered support and services.

3. Research Questions

To achieve the above stated objectives of the study, the following research questions were raised

1. What are the mobile phone practices of the students?
2. What are the numbers of hours the students spend on social networking, playing of games, chatting, shopping online, gambling online, reading news or doing academic research?
3. What percentage of the students' population uses their mobile phone for academic purpose?
4. Which academic applications do the students make use of?
5. What are the limitations of using mobile phone for academic purposes?

4. Review of Relevant Literature on M-Learning and the Use of Mobile Phones in Education

4.1. Mobile Learning

Mobile learning has become a major focus in education, mobile technology has really changed the way people learn and want to learn, the learning environment is gradually

shifting from the physical to the virtual, the onus now rests on educators to harness from the benefits of mobile learning and also tackle the various problems posed by this new way of learning. This is evident in Irina (2011), learning and communication are becoming increasingly mobile, and the advent of Web 2.0 technologies is actively dissolving the boundaries between "educational" and "real world technologies." The relationship between users of modern technologies and educational institutions is going through fundamental changes, and it becomes harder on the institutional level to ignore the impetus from the outside world. In the same vein, Tomei (2005) noted that the rapid growth in Information Communication and Technologies (ICT) nowadays has brought amazing changes to various fields, including education. Presently, there is a substantial increase of technological utilization for educational purposes. With the potentials ICT offers, educational institutions are now seeking for new paradigms to restructure their educational curricula and classroom facilities to bridge the existing technology gap education. This process however requires effective adoption of technologies into existing environment in order to provide learners with the required knowledge as well as to promote meaningful learning".

4.2. Mobile Phone in Education

The use of mobile phones for education has both its positive and negative sides. Rismark et al (2007) found out that sometimes, students used the mobile phone to view the videos ahead of lectures without further preparation. The mobile phone thus worked as a preparation tool for the purpose to familiarize themselves with the topic without using other study material. Sofowora (2011) further elucidated that mobile communication device no doubt had impacted education positively and negatively. The school as part of the agencies of socialization is not left out. Nigeria as a developing country welcomes mobile technology with enthusiasm. However the enthusiasm soon began to fade out as a result of myriad problems associated with the use of mobile phone by students in schools. Some of the problems are: concern for discipline, examination malpractices and mobile bullying. Research has also shown that some people have become addicted to their phones, they cannot do without it, and they sleep and wake up with it beside them.

The emergence of several chat engines like whatsapp, google chat, ebuddy, etc. has made it almost impossible for some people to part with their phones. This is opined in Ezemenaka (2013), some people can experience withdrawal symptoms typically associated with substance abuse, such as anxiety, insomnia, and depression, when they are without their smartphones and all these are embedded to the cause of academic relapse of students who fall into this category. Surprisingly, these addictions take strong toll on the student without them noticing it and some of them find it hard to believe that they are addicted to their phones. Thus, giving more credence to the amount of time meted out to these phones than academics. If such time spent on the internet is

used to harness the academic opportunities or content available on the internet, students' academic performance will be improved.

It is worrisome to note that some youths spend a considerable time of their student life on the internet, doing other things than performing academic activities. This is made known in the research conducted by Noor (2003) on the students in University Malaya in Malaysia, she found that students used the Internet for communication, online purchasing, assignments, personal activities and searching academic resources. Students also used the Internet more for social and entertainment purposes than for academic activities. Also, Evans (2008) observed that majority of university students around the world carry these miniature computing and communication devices during the university day, using them almost exclusively for personal purposes. In another research conducted by Omotayo (2006) it was found that among 664 undergraduate students at the Obafemi Awolowo University, Nigeria, 97.1% used the Internet for e-mail and 53.9% for academic information.

The average 21st century student is versatile in mining information from the internet; they tend to pick interest in online activities and would tend to do same if they get to know about academic contents on the internet. This point is buttressed by Attewell (2005) previous studies have found out that mobile technologies make a useful contribution to attracting young people to learning, maintaining their interest and supporting their learning and development.

In another research carried out on the use of mobile phones in Japan to teach English as a Second Language (ESL) by Thornton and Houser (2004) it was reported that mobile phones in Japan outnumber PCs five to one, and that while 43 per cent of Japanese students use a computer to send email, 99 per cent of their subjects transmitted email on their mobiles. Thornton and Houser however concluded that, in situations where class time for the courses is limited, there is a real need to provide extra-curricular learning opportunities.

5. Methodology

This study adopted a descriptive survey design. Structured questionnaire tagged "Use of mobile phones for academics purposes by College of Law students of Igbinedion University, Okada" were used to collect information from the students' respondents.

6. Population and Sample

The population of this study was the law students of Igbinedion University, Okada in Edo State of Nigeria. 150 questionnaires were randomly distributed and the response rate shows 150 (100%). This was achieved because respondents filled the questionnaires and returned them immediately. Out of 150 returned, 148 (98.7%) was found useful and analyzed.

7. Administrative Procedure

All the students' respondents were administered the questionnaires in the lecture halls. The questionnaires were distributed with the help of the lecturers of the participants. The students were assured that there were no positive or negative answers. They were also told that their responses were to be treated as confidential and used for academic purposes only.

8. Data Analysis and Discussion

Data collected for this study were analyzed using tables, frequency distribution and simple percentage. Respondents were asked questions to investigate their demographic variables and the above stated research questions. The results are discussed below.

Respondents' profile

Tables 1 and Table 2 show the demographic variables of the respondents. Respondents' profile with respect to academic level and sex were investigated and the findings are presented in Table 1 and Table 2 respectively.

Table 1. Distribution of Respondents by levels of study

Levels	Frequency	Percentage
100	22	14.9
200	44	29.7
300	27	18.2
400	30	20.3
500	25	16.9

Table 1 shows that the five levels of study are well represented in this study with 200 level students having the highest percentage (29.7%), followed by 400 level (20.3%), then 300 level (18.2%), 500 level (16.9%), and 100 level students (14.9%).

Table 2. Distribution of Respondents by Sex

Sex	Frequency	Percentage
Male	64	43.2
Female	84	56.8

Table 2 shows that the higher percentage of the respondents, 84 (56.8%), are female while 64 (43.2%) are male gender. This may be as a result of the research methodology used which shows that female respondents were more fortunate to be sampled.

Research Question 1: What are the mobile phone practices of the students?

The mobile phone practices of the students were investigated and the results discussed in as follows:

Table 3. Respondents' ownership of mobile phones

Response	Frequency	Percentage
Yes	148	100.0
No	0	0

Table 3 revealed that all respondents own mobile phones. A total of 148 (100%) respondents indicated yes when asked if they own mobile phones. This is consistent with earlier studies which show that majority of university students own at least one mobile phone, while in many cases they own more than one (Jacobsen & Forste, 2011, Vasudev, Kaur, Kumar, & Chaturvedi, 2012).

Table 4. Respondents' general knowledge of ICT

Response	Frequency	Percentage
Very High	8	5.4
High	39	26.3
Average	89	60.1
Low	10	6.8
Very Low	2	1.4

From the table, the majority of the respondents (60.1%) indicated that they have an average knowledge of ICT, 26.3% indicated that they have a high knowledge of ICT. A smaller percentage considered their knowledge of ICT to be very high (5.4%) while only 6.8% and 1.4% considered their knowledge to be low and very low respectively. It is evident from the above that the majority of respondents (91.8%), have the requisite ICT knowledge to use their mobile phones to browse for academic purposes. This is also consistent with earlier studies (Nwezeh, 2010; Danner & Pessu 2013) that majority of students investigated had the requisite ICT competencies for use in accessing academic information. However these findings disagree with studies (Ukonu, Wogu & Obayi, 2012; Olibie, Ezoem & Ekene 2014) which find that Nigerian university students' awareness of the meaning and usage of the internet or virtual learning is low.

Table 5. Whether respondents' brand of phone can surf the internet

Response	Frequency	Percentage
Yes	136	91.9
No	12	8.1

A total of 136 respondents (91.9%) indicated that their phones can surf the internet while 12 (8.1%) had phones that cannot surf the internet.

Table 6. How often respondents' phone is used to surf the internet

Response	Frequency	Percentage
Daily	124	83.8
Once a week	7	4.7
Once a month	5	3.4
Not at all	12	8.1

Respondents were asked questions about the rate of internet usage on their mobile phones. 83.8% said they used their mobile phones to browse the net on a daily basis, 4.7% once a week, and 3.4% once a month. 8.1% of the respondents do not use their phones to browse at all. The above shows that all respondents who had phones that could surf the net use their phones to browse at least once a month while the higher percentage browse the net daily on their mobile phones. This shows that a major means through which the respondents browse the internet is through their mobile phones.

Table 7. Number of hours that respondents spend on the internet daily

Response	Frequency	Percentage
30 minutes -1 hour	20	13.5
2 hours	37	25
3 hours and above	72	48.7
Undecided	19	12.8

The study shows that 13.5% spend between 30 minutes to 1 hour daily using their mobile phones to browse the internet, while 25% spend 2 hours and 48.7% spend 3 hours and above, daily. 12.8% of the respondents did not give any answer. From the above, the higher percentage of the students uses their phone to browse the internet for three hours or more daily.

Table 8. The primary purpose of respondents' using the internet on their mobile phones

Response	Frequency	Percentage
To browse www	35	23.7
To read news	27	18.2
To read/send emails	13	8.8
To use online applications	08	5.4
To search for academic materials	52	35.1
Undecided	13	8.8

The respondents were asked questions with respect to their primary purpose of using the internet on their mobile phones. 35.1% responded that they use their phones to search for academic materials, 23.7% to browse www, 18.2% to read news, 8.8% use their phones to read and send emails, 5.4% to use online applications, and 8.8% of the respondents did not give any response. From this response, it is evident that the majority of the students (35.1%) use their phones to search for academic materials online. Again, this is consistent with studies (Udende & Azeez, 2010; Ola, A.O., 2013) which find that university students use the internet mainly to search for academic information. However, the findings disagree with other studies (Bankole & Babalola, 2012) which finds that 90.6% of university students use the internet for communication and only 43.5% use it to do class assignments.

Table 9. The number of hours that respondents spend on each site they visit per week

Response	Less than 2 hours a week	2-4 hours a week	5-6 hours a week	7-9 h a week	10-20 hours a week	Above 20 hours a week
On chatting	11 (7.4%)	37 (25%)	62 (41.9%)	17 (11.5%)	21 (14.2%)	
On playing games	102 (68.9%)	28 (18.9%)	04 (2.7%)	10 (6.8%)	03 (2%)	01 (0.7%)
On academic information	11 (7.4%)	13 (8.8%)	19 (12.8%)	16(10.8%)	87(58.8%)	02 (1.4%)
On social network	08 (5.4%)	10 (6.8%)	93 (62.8%)	12 (8.1%)	16(10.8%)	09 (6.1%)
On online shopping	104(70.2%)	13 (8.8%)	25 (16.9%)	6 (4.1%)		
On online gambling	123 (83.1%)	06 (4%)	10 (6.8%)	05 (3.4%)	02 (1.4%)	02(1.4%)
On news	22 (14.9%)	35 (23.6%)	08 (5.4%)	62 (41.9%)	14 (9.5%)	07 (4.7%)

Research Question 2: What are the numbers of hours the students spend weekly on social networking, playing of games, chatting, shopping online, gambling online, reading news or doing academic research?

The aim of the above research question is to investigate those sites that a majority of the students spend the highest number of hours on, and those that they spend the least number of hours on. Respondents were asked questions to investigate the number of hours they spend on each of the sites they visit. From their response as illustrated in the table above, it is evident that a majority of the respondents spends the highest number of hours on chatting (41.9% spends 5-6 hours), academic information (58.8% spends 10-20 hours), social network (62.8% spends 5-6 hours), and news (41.9% spends 7-9 hours), and the least number of hours on playing games online (68.9% spends less than 2 hours), shopping online(70.2% spends less than 2 hours), and gambling online(83.1% spends less than 2 hours).

Research Question 3: What percentage of the students' population uses their mobile phone for academic purpose?

The percentage of students' population that uses their mobile phones for academic purposes were investigated and the results are discussed in **Table 10** and **Table 11**.

Table 10. What respondents often do when they are online

Response	Frequency	Percentage
Chat with friends	18	12.2
Play games	5	3.3
Search for academic information	45	30.4
Use social networks like Facebook, Twitter, Whatsapp, etc	23	15.5
Do my shopping online	10	6.8
Gamble online	10	6.8
Read news	22	14.9
Undecided	15	10.1

When respondents were asked questions concerning what they often do while online, 30.4% said they use their phones to search for academic information, 15.5% to use social networks, 14.9% to read news, 12.2% to chat with friends, 6.8% to shop online, 6.8% to gamble online, 3.3% to play games, while 10.1% did not give any response. From the above, the higher percentage of the students (30.4%) often uses their phones to search for academic information online. This is also consistent with their earlier response in Table 8 where the higher percentage indicated that their primary purpose of browsing with their phones is to search for academic information.

Other reasons given are that they read and send emails (23%), and that they use online applications (20%).

Table 11. Whether respondents use their mobile phones to consult scholarly articles for assignments

Response	Frequency	Percentage
Yes	136	91.9
No	12	8.1

From the above table, 91.9% of the respondents indicated that they use mobile phones to consult scholarly articles for assignments, while 8.1% indicated otherwise. This shows that the higher percentage of the students use their mobile phones to scholarly articles for assignments.

Table 12. Main benefits of using the internet on respondents' mobile phone

Response	Frequency	Percentage
It is accessible everywhere	50	33.8
It allows me to use online utilities when I am out	06	4.0
It is a way to pass my time	14	9.5
I can search for academic information that I need urgently	64	43.2
Undecided	14	9.5

Research Question 4: What do respondents consider the limitations of using mobile phones for academic purposes?

Respondents were asked questions concerning the main benefits of using the internet on their mobile phones, the higher percentage (43.2%) indicated that they can search for academic information urgently, followed by accessibility everywhere (33.8%). 9.5% indicated that it was a way to pass their time, while a small percentage (4.0%) indicated that it allows them to use online utilities when they are out. Another 9.5% gave no answer.

Table 13. Factors inhibiting the use of mobile phones for the above purpose

Response	Frequency	Percentage
Small screen for text	15	10.1
Limited area of coverage	30	20.3
Frequent network problems	62	41.9
High cost of internet data bundles	28	18.9
Undecided	13	8.8

When asked questions concerning factors that the respondents considered to inhibit their use of mobile phones, frequent network problems was the major factor indicated by the respondents (41.9%), followed by limited area of coverage (20.3%), and high cost of internet data bundles (18.9%). A smaller percentage (10.1%) indicated the small screens of the phones as a factor while 8.8% were undecided.

Research Question 5: What academic applications do the students make use of?

Table 14. What academic applications do respondents use while online?

Application	Frequency of use	Percentage	Frequency of non-use	Percentage
Google	135	91.2	13	8.8
Safari	21	14.2	127	85.8
Wikipedia	103	69.6	45	30.4
Jstor	10	6.8	138	93.2
OARE Science	0	0	148	100.0
Hinari	0	0	148	100.0

Jstor, Hinari and Oaresciences are the academic journals subscribed to by Igbinedion University. Multiple answers were allowed for this question. 91.2% of the respondents indicated that they used Google while 8.8% did not use, 14.2% used Safari while 85.8% did not use the application, 69.6% used Wikipedia while 30.4% did not use, 6.8% used Jstor while 93.2% did not use. None of the respondents (100%) indicated that they used either Oarescience or Hinari. From the above, the main applications used by the respondents are Google and Wikipedia. Safari and Jstor are only slightly used, while Oarescience and Hinari are not used at all. This may be due to the fact that Oaresciences and

Hinari are mainly used to access information in the sciences and the respondents are law students.

Major Findings

- 100% of the respondents use mobile phones, while 91.9% own mobile phones that can surf the internet.
- Majority of the respondents (91.8%) have enough knowledge of ICT to access academic information on their mobile phones.
- 91.9% of the respondents use their phones to browse at least once a month, 83.8% of these on daily basis, while 8.1% of the respondents do not use their phones to browse at all.
- 13.5% spend between 30 minutes to 1 hour daily using their mobile phones to browse the internet, while 31.8% spend 2 hours and 41.9% spend 3 hours and above, daily. 12.8% were undecided.
- 35.1% indicated that the primary use of their mobile phones is to search for academic materials, 23.7% to browse www, 18.2% to read news, 8.8% to read and send emails, 5.4% to use online applications, 8.8% of the respondents did not give any response.
- 30.4% indicated that what they often do while online is to use their phones to search for academic information, 15.5% to use social networks, 14.9% to read news, 12.2% to chat with friends, 6.8% to shop online, 6.8% to gamble online, 3.3% to play games, while 10.1% did not give any response.
- a majority of the respondents spends the highest number of hours on chatting (41.9% spends 5-6 hours), academic information (58.8% spends 10-20 hours), social network (62.8% spends 5-6 hours), and news (41.9% spends 7-9 hours), and the least number of hours on playing games online (68.9% spends less than 2 hours), shopping online (70.2% spends less than 2 hours), and gambling online (83.1% spends less than 2 hours).
- 91.9% of the respondents use mobile phones to consult scholarly articles for assignments, while 8.1% do not.
- 41.9% indicated frequent network problems as the major problem of using their mobile phones to browse the internet, 20.3% indicated limited area of coverage, 18.9% high cost of internet data bundles and 10.1% small screens of the phones.
- 43.2% indicated ability to search for academic information urgently as the main benefit of using the internet on their mobile phones, 33.8% indicated accessibility everywhere. 9.5% indicated that it was a way to pass their time, while a small percentage (4.0%) indicated that it allows them to use online utilities when they are outside. Another 9.5% gave no response.
- 91.2% of the respondents used Google, 14.2% used Safari while 69.6% used Wikipedia, and 6.8% used Jstor. None of the respondents (100%) indicated that they used either Oarescience or Hinari. Thus, the main applications used by the respondents are Google and Wikipedia. Safari and Jstor are only slightly used, while

Oaresciences and Hinari are not used at all.

9. Recommendations

It is evident from the above that mobile phones are a major means through which the law students of Igbinedion University, Okada, access academic information. In the light of this the following recommendations are made;

1. Efforts should be made by the university to inculcate mobile teaching and learning curriculum in to the school syllabuses at the various levels.
2. Mobile services should be integrated into library operations/services.
3. Library resources and services should be made available in forms that are compatible with mobile devices.
4. Library staff, lecturers and university staff generally should be sensitized and trained in the use of mobile devices for teaching and learning purposes.
5. A standardized training programme in the use of mobile devices for learning purposes should also be established for the students. This training programme should be updated yearly to accommodate any new technological developments and innovations in mobile usage for academic purposes.
6. Wireless internet infrastructure in the university should be upgraded to ensure quality, speed and availability to students. Multiple access points should also be made available to students, both within the university and in their hostels. This will go a long way in augmenting the cost of data payment on students' mobile phones.
7. Studies on the other colleges in the university should be conducted for purposes of evaluation and effective implementation of the above recommendations.

REFERENCES

- [1] Adaja, T.A., & Ayodele, F.A. (2013). Nigerian youths and social media: Harnessing the potentials for academic excellence. *Kuwait Chapter of Arabian Journal of Business and Management Review* 2(5). Retrieved June, 2014 from http://singaporeanjbem.com/pdfs/SG_VOL_1_%286%29/7.pdf.
- [2] Ayub, A.F.M., Hamid, W.H.W & Nawawi, M.H. (2014). Use of internet for academic purposes among students in Malaysian institutions of higher education. *TOJET: The Turkish Online Journal of Educational Technology*, 13(1). Retrieved June, 2014 from <http://www.tojet.net/articles/v13i1/13122.pdf>.
- [3] Attewell, J. (2005). From research and development to mobile learning: Tools for education and training providers and their learner. Retrieved June, 2014 from <http://www.mlearn.org.za/CD/papers/Attewell.pdf>.
- [4] Bankole, O. M. and Oludayo, B. S. (2012). Internet use among undergraduate students of Olabisi Onabanjo University Ago-Iwoye, Nigeria. *Library Philosophy and Practice*. Retrieved March 2014 from <http://digitalcommons.unl.edu/libphilprac/812>
- [5] Danner, R. B., & Pessu, C. O. A. (2013). A survey of ICT competencies among students in Teacher Preparation Programmes at the University of Benin, Benin City, Nigeria. *Journal of Information Technology Education: Research*, 12, 33-49.
- [6] Evans, C. (2008). The effectiveness of M-learning in the form of podcast revision lectures in higher education. *Journal of Computers and Education*, 50(2). Retrieved June, 2014 from <http://www.sciencedirect.com/science/article/pii/S0360131507001182>.
- [7] Ezenenaka, E., (2013). The usage and impact of Internet enabled phones on academic concentration among students of tertiary institutions: A study at the University of Ibadan, Nigeria. *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*, 9(3). Retrieved June, 2014 from: <http://ijedict.dee.uwi.edu/viewarticle.php?id=1612>
- [8] Irina, A. (2011). A cell phone in the classroom: A friend or a foe. Retrieved June, 2014 from [httpfiles.eric.ed.gov/fulltext/ED544437.pdf](http://files.eric.ed.gov/fulltext/ED544437.pdf). j.sss.1923018420120303.1997
- [9] Jacobsen, W.C., Forste, R. (2011). The wired generation: Academic and social outcomes of electronic media use among university students. *Cyberpsychology, Behaviour and Social Networking*, 14(5), 227. Retrieved March 2014 from online.liebertpub.com/doi/abs/10.1089/cyberpsychology
- [10] Livingston, E. S., & Bober, M. (2005). United Kingdom Children 90 online: Final report of key project findings Ladson LSE Report. Retrieved June, 2014 from <http://eprints.lse.ac.uk/395/1/UKCGOsurveyreport.pdf>
- [11] Longe, O.B., et al (2007). Exposure of children and teenagers to internet pornography in South Western Nigeria: Concerns, trends and implications. *Journal of Information Technology Impact* 7(3), 195-212.
- [12] Noor, I. J. (2003). Computer usage and perception among accounting students: A survey in a public university. *Jurnal Pendidikan*, 23. Retrieved June, 2014 from <http://eprints.um.edu.my/2009/1/2.pdf>
- [13] Nwezeh, C.M.T. (2010). The use of ICT in Nigerian universities: A case study of Obafemi Awolowo University. *Library Philosophy and Practice*, 5-6. Retrieved March 2014 from <http://digitalcommons.unl.edu/libphilprac/494>
- [14] Ola, A.O. (2013). Internet access and use among undergraduate students of Bowen University, Iwo Osun State Nigeria. *Library Philosophy and Practice*. Retrieved March 2014 from <http://digitalcommons.unl.edu/libphilprac/964>
- [15] Olibie, E.I., Ezoem M.N., & Ekene U.S. (2014). Awareness of virtual learning among students of two Nigerian universities: Curriculum implications. *International Journal of Development and Economic Stability*, 2 (1), 39-53. Retrieved March 2014 from www.ea-journals.org
- [16] Omotayo, B. O. (2006). A survey of internet access and usage among undergraduates in an African university. *The*

- International Information & Library Review*. 38, 215-224.
- [17] Rismark, M., et al (2007). Using mobile phones to prepare for University lectures: student experiences. *TOJET: The Turkish Online Journal of Educational Technology*, 6 (4). Retrieved June, 2014 from files.eric.ed.gov/fulltext/ED499661.pdf.
- [18] Sofowora, O.A. (2011). Mobile phone adoption: Its influence on social behavior, schooling and academic work of adolescent students in Osun State, Nigeria. *Malaysian Journal of Educational Technology*, 11(1). Retrieved June, 2014 from <http://www.mjet-meta.com/resources/V11N1%20-%20Sofowora%20-%20Mobile%20Phone%20-%20ONLINE.pdf>.
- [19] Thornton, P. & Houser, C. (2004). Using mobile phones in education. 2nd IEE International Workshop on Wireless and Mobile Technologies in Education. Retrieved June, 2014 from http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=1281326.
- [20] Tomei, L. A. (2005). Taxonomy for the technology domain. USA. *Information Science Publishing*. Retrieved June, 2014 from <http://www.irma-international.org/viewtitle/30046/>
- [21] Udende, P. and Azeez, A. L. (2010). Internet access and use among students of University of Ilorin, Nigeria. *Journal of Communication and Media Research*, 2(1) 33-42. Retrieved April 2014 from <http://unilorin.edu.ng/publications/udendep/Internet%20access%20>
- [22] Ukonu, U., Wogu J., & Obayi, P. (2012). Problems and challenges facing the University of Nigeria's undergraduate students in the use of the UNN digital library. *IOSR Journal of Humanities and Social Science (JHSS)*, 3(2), 4-12. Retrieved March 2014 from www.iosrjournals.org.
- [23] Vasudev, A., Kaur, M., Kumar, H., and Chaturvedi, R. (2012). Mobile phone usage and awareness of health related issues among the male science students. *Studies in Sociology of Science*. Retrieved March 2014 from <http://www.cscanada.net/index.php/sss/article/view/>