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**A SURVEY OF THE USE OF MOBILE PHONES AMONG SENIOR  
SECONDARY SCHOOL STUDENTS IN LAGOS STATE, NIGERIA**

**Abstract:**

Globally, the use of mobile phones among adults and youths, especially teenagers, in secondary school has increased dramatically in recent years. The study was a survey of the use of mobile phones on senior secondary school students in Lagos state. The descriptive survey research design was used for the study. Simple random sampling technique was used to select 450(180 male and 270 female); (301 public and 149 private) Senior Secondary School Students from 70 secondary schools across the 57 Local Government Areas (comprising the 20 original Local Government Areas and 37 Local Council Development Areas) in Lagos State. The instrument used for data collection was a self-designed 15-item questionnaire designed on five-point Likert scale with a reliability coefficient ( $r$ ) of 0.85 obtained through a test-retest method. The data collected were analysed using frequency counts and simple percentages while t-test was used to test the only hypothesis stated in the study. The results showed that there were diverse operations that senior secondary school students perform on their mobile phones. These range from making voice calls, internet browsing, chatting to downloading music/movies and snapping pictures. The results also showed that majority of the students in senior secondary schools used their phones to browse social networking sites but

they rarely used their mobile phones to download school work or assignment. The findings also revealed that there was no significant difference between gender and the use of mobile phones among senior secondary school students. It was recommended that some major stakeholders (parents, guardians and teachers) in education should monitor the kind of activities that their children/wards/students perform with their mobile phones. Teachers can also encourage the use of mobile phones by giving students tasking projects and/or assignment that will enhance educational attainment.

**Keywords:**

Mobile phone, survey, senior secondary school student, podcast, Lagos State

**JEL Classification:** I29

## Introduction

The Information and Communication Technology (ICT) era has brought about a very important element of life which cannot be ignored in contemporary social and academic world. ICT, specifically mobile phone, is used for various purposes including social, economic and educational to mention just a few, by a large community of users just as majority of youths and teenagers use it mainly for calling, browsing and connecting friends, colleagues, associates, siblings and course mates on social networking sites (Boyd, 2006). The mobile phone has made it quite easy and convenient for people to connect with other people around the globe with just a click of a few icons or buttons. Individual mobile phone users can easily call, send information to friends, colleagues and loved ones or get information from them or retrieve/download information from the internet. In educational institutions, students are faced with many new challenges like meeting new people, making friends, living away from home and taking on academic responsibilities. This is an important part of the transition to adulthood for most young people, especially teenagers of secondary school age.

Owing to the introduction and availability of Information and Communication Technology (ICT), part of which is telecommunication, mobile phones have become an important part of our daily life. Mobile phone is not only used for communication but also research and social interaction. According to the Oxford Advanced Learner's Dictionary (2004), mobile phone is a telephone that does not have wires and works by radio waves that can be carried around and used everywhere. Mobile phone has fundamentally affected our societal, accessibility, safety, and security co-ordination of social, academic and business activities (Ling, 2016). As computers and the internet are essential educational tools, so also is mobile technology which is portable, affordable, effective and easy to use, and have become potential technology incorporated to support learning. These technologies provide many opportunities for wider participation and enable easy access to learning resources. Mobile devices such as phones are more reasonably priced than laptop and desktop computers, and therefore, present a less expensive method of accessing a myriad of tools all in a smaller device. Mobile technologies offer a fundamental change in the way learning can be achieved and opens the door to countless opportunities for educational excellence, and has become part of culture of every region in the world.

Global System of Mobile Communications (GSM) revolution in Nigeria which began in August 2001 changed the face of Information and Communications Technology in the country. Since the GSM was launched, mobile telephony has rapidly become the most popular method of voice communication in Nigeria. The growth has been so rapid that Nigeria has been described as "one of the fastest growing GSM markets in the world" (Olufemi, 2012). The adoption of mobile phone by school age children in Nigeria is seen as the most popular form of electronic communication. The term mobile phone means different things to different people. To the youth, mobile phone is considered to be a social tool rather than a technological tool (Srivastava, 2015). The adoption of

mobile phone in Nigeria has made people to abandon fixed land phone. The number of mobile phone users in Nigeria rose from about seven (7) million in 2004 to 15.5 million in 2016 ([www.statists.com/statistics](http://www.statists.com/statistics)). In 2017, out of 960 million mobile phone users in Africa, Nigeria accounted for 150 million subscribers; the highest in Africa and one of the highest in the world ([blog.jumia.com.ng](http://blog.jumia.com.ng)). According to Nigerian Communications Commission (NCC), 91.6 million people visited the internet through their mobile phones in 2017 ([www.vanguard.ngr.com](http://www.vanguard.ngr.com)).

The introduction of mobile communication device has impacted on education positively and negatively. The school as one 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 of 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. Srivastava (2015) commenting on the foregoing problems stated that the introduction of mobile phone in schools have brought about concerns for discipline in classroom. Ling (2016) also opined that mobile phone usage in schools is a great problem and it is against the goal and mission of the school.

Mobile phone is helpful to students for study purposes. From observation, students use mobile phones to exchange useful information with their classmates about their studies. Students use this fascinating device in a better way. The students' academic performance has improved due to technology advancement (Viatonu, Adesanya and Olagunju, 2014). The mobile phone can also help to improve the level of the quality of education when used to share important and useful information with classmates and using dictionary, thesaurus and calculator available on the mobile phone.

The increased use of mobile phones has become a global phenomenon such that what started as a hobby for some computer literate people has become a social norm and way of life for people from all over the world. Teenagers and young adults have embraced its use as a way to connect with their peers, share information, reinvent their personalities, and showcase their social lives (Boyd & Ellison 2008). Students can download audio and video lectures and podcasts to their smart phones. They can play audio, video, flash movies, edit text documents, access e-mail and Web content, send text messages and use the phone for mass storage. Smart phones also enable global collaboration and scientific experimentation and research. Users also can access information globally, thus supporting interactive learning (Wagner, 2005).

According to Galuszka (2007), technologies such as mobile phone and computers were not in widespread use for academic purposes. He further expressed that compared to the major cities; technologies were less often utilized in rural schools. Although most of the schools in urban cities have access to the internet, students tended to use it for non-academic purposes, such as surfing the internet and social networking. Teenagers now use their mobile phones to search the internet for their

daily activities and information gathering as opposed to older generations who rely on television, newspapers and other printed materials (Lewis, 2008).

According to Jamogha and Jato (2012) mobile phones have become ubiquitous, giving young people a new lease of life to interact with each other and communicate with the world. This form of communication depends on user-created content, not mass produced messages coming from larger companies. A significant use of the mobile phone is the crucial aspect of accessing social networking sites like twitter, Facebook, Instagram and WhatsApp with the immediacy of being able to access those sites. The idea of these sites is that it helps people feel socially connected to colleagues and even a total stranger from any part of the world.

Quality education produces productive students who will impact positively on their respective educational system and subsequently are proved as strong contributors to national development. The use of technology such as mobile phones is one of the most important factors that can influence not only national development but also educational development and students' life chances. Shah, Kwak and Holbert (2001) argued that the use of mobile phones has significant effect on student academic performance and this impact is determined by the type and frequency of mobile phone usage. They are positively affected by the informative use of the mobile phones while negative effect is used for criminal or non-academic activities like fraud, pornography and the likes.

The use of mobile phone for social networking has been repeatedly found to be the highest among those between the ages of 18-29 years (Rainie, 2011). On the contrary, Hampton, Sessions-Goulet, Rainie and Purcel (2011) asserted that the fastest growing segment utilizing mobile phone technology to connect social networking sites since 2008 has been among those aged 35 years and older. Approximately 61% of teens aged 12-17 utilize mobile phones to browse social networking sites to send messages to their friends on a regular basis (Lenhart, 2009). Overall, it has been found that more women use mobile phone to connect social networking sites than men to communicate and exchange information (Hampton, Sessions-Goulet, Rainie, and Purcell, 2011).

It is believed that current senior secondary school students are growing in the technology era and see the use of mobile phones as part of their daily routine. Research has shown that 63% of heavy users received high grades, compared to 65% of light users (University of Leicester, 2010). Kirschner and Velayutham (2010) revealed that students who multi-task between their mobile phones, social networking sites and homework are likely to have 20% lower grades than those who do not have a social networking site in visual range. They (Kirschner and Velayutham, 2010) believe that even running a social networking site on the background of a student's personal mobile device such as mobile phones while studying or doing homework could lower a student's grade and make site users study less. However, studies have also found a positive association between use of mobile phones and academic performance of student users as students using mobile phones frequently for

academic purposes scored higher on reading skills test and had higher grades (Jamogha and Jato, 2012; Karen, 2012).

Some of the benefits of using mobile phones have been highlighted by Jamogha and Jato (2012) to include: enhancing effective communication among students, professionals, family and friends; promoting experimentation with technology, teaching transferable skills; easy networking; drawing academics to social media for research purposes; and crisis planning/management, among others. Nevertheless, Karen (2012) stated that the biggest problem of the use of mobile phones, especially on social networking sites, is the distraction it causes to students both in and out of classroom. Bonner, Grandt and Schwartz (2012) have highlighted some negative effects of using mobile phones to include; sexual predators use social networking sites to connect with and stalk victims; online harassment and bullying; social media do not confirm people's claims.

Shaikh (2009) says mobile phone offers greatest potential if rightly used and harnessed for education. Also Miyazawa (2000) cited in Mfula (2008) stated that mobile phone is being used for literacy program. This is done by sending many interesting short message service (SMS) in national language to learners (adolescent girls) every day and night. According to his report, learners find mobile phones as very interesting and useful tool for learning. Neil (2009), expressing his opinion on the usefulness of mobile phone in education, describes mobile devices as technology which allows one to create, deploy content such as voice, text, music, picture videos at different location. The classroom is shifting in time and space with e-learning. The frequent use of mobile phones for learning purposes by students has made the present study imperative.

## **Statement of the Problem**

The introduction of information and communication technology (ICT) in education has no doubt, enhanced teaching and learning. Specifically, the advent of mobile telephone in Nigeria in August 2001 has changed the face of education at all levels in the country. Also, the introduction of electronic learning (e-learning), part of which is the use of mobile telephone in education, has taken teaching and learning beyond the four walls of the classroom setting. Apart from the attendant benefits of using mobile phones in education which include to make voice calls, browse the internet and other social networking sites, share and receive information from friends and colleagues, the use of mobile phones in education, especially among teenagers and secondary school students, is not without its negative sides such as making threat calls, browsing pornographic, immoral and criminal sites, examination malpractices among other problems. In the light of the foregoing, the study therefore examined the use of mobile phones among senior secondary school students in Lagos State, southwest Nigeria.

## Research Questions

The following research questions were stated to guide the study:

1. What are the operations that senior secondary school students mostly perform on their mobile phones in Lagos State?
2. What quality of time do secondary school students in Lagos State spend browsing on mobile phones?
3. What major skill do students acquire using mobile phones in senior secondary schools in Lagos State?

## Research Hypothesis

The following hypothesis was stated in the study:

There is no significant difference between male and female students in the use of mobile phones in senior secondary schools in Lagos State.

## Methodology

### Research Design

The study made use of the descriptive survey research design. This design was adopted for the study because the data collected for the study covered a wide range of the sampled area to determine the use of mobile phones among senior secondary school students in Lagos State.

### Instrument

A self-designed questionnaire was used to collect data from the respondents. The questionnaire had two sections: A and B. Section A elicited demographic information from the respondents such as age, name of school, type of secondary school (junior or senior), ownership of school (public or private), Local Government Area where school is located among other information. Section B covered items on five-point Likert scale ranging from availability/possession of mobile phones, use of mobile phones, frequency of use of mobile phones, name/brand of mobile phone, availability of camera on mobile phone among other items. The items were designed as to establish the use of mobile phones among senior secondary students in Lagos State. The instrument was validated by test and measurement experts from two higher institutions (one each from a college of education and a university) who scrutinized it for content and construct validity. The reliability of the instrument was carried out using the test-retest method with Pearson Product Moment Correlation Coefficient (PPMCC) which yielded 0.85; an attestation to the suitability and reliability of the instrument for the study.

## Population and Sample

The population for the study consisted of all the senior secondary school students in the 57 Local Government Areas in Lagos State. The sample comprised 450 (180 male and 270 female); (301 from public schools and 149 from private schools) students from 70 selected senior secondary schools. Random sampling technique was used to select the respondents for the study. The respondents cut across the three levels of Senior Secondary (SS 1-3). This sampling method was employed for equal representation of respondents.

## Administration of instrument

A total of six hundred (600) questionnaires were distributed by the researchers with the help of two research assistants. The questionnaires were prepared and administered to senior secondary school students (SS 1-3) in the selected schools. However, only 450 (75%) questionnaires were validly completed and returned for analysis.

## Data Analysis

The data collected were analysed using frequency counts and percentages while t-test was used to test the only hypothesis at 0.05 level of significance.

## Results

**Table 1: Respondents' Profile**

**Table 1a: Gender distribution of respondents**

Status	Frequency	Percentage %
Male	180	40.0
Female	270	60.0
<b>Total</b>	<b>450</b>	<b>100.0</b>

**Table 1b: Class Distribution of Respondents**

Class	Frequency	Percentage %
SS1	135	30.0
SS2	165	36.7
SS3	150	33.3
<b>Total</b>	<b>450</b>	<b>100.0</b>

Table 1 (a and b) shows students' personal profile. Table 1a shows out of the 450 respondents used for the study, 180(40%) were male while 270(60%) were female. Table 1b shows that 135(30%) of the respondents were Senior Secondary (SS1) students, 165(36.7%) were in SS2 and 150(33.3%) were in SS3.



**Table 2: Operations often performed on phone**

Operations	Very often (%)	Often (%)	Most often (%)	Rarely (%)	Never (%)
<b>Calls</b>	180 (40)	150 (33.3)	120 (26.7)	0 (0)	0 (0)
<b>Internet Browsing</b>	120 (26.7)	105 (23.3)	135(30)	60 (13.3)	30 (6.7)
<b>Chatting</b>	135 (30)	45 (10)	90(20)	105 (23.3)	75 (16.7)
<b>Download Music/Movies</b>	135 (30)	90 (20)	105(23.3)	30 (6.7)	90 (20)
<b>Download for school Assignment</b>	10 (2.2)	15 (3.3)	175 (39)	20 (4.4)	230 (51.1)
<b>Snap Pictures</b>	300 (66.7)	133 (29.6)	3 (0.7)	6 (1.2)	8 (1.8)

**NB:** Percentages are in parenthesis

Table 2 shows the operations students performed on their mobile phones. The results show that 180 (40%) of the respondents very often used their phones for calling; 150 (33.3%) often used their mobile phones for calling; 120 (26.7%) most often used their mobile phones for calling. On the other hand, 135 (30%) of the students said that they most often used their mobile phones for browsing the internet; 120 (26.7%) very often used their mobile phones for internet browsing; 105 (23.3%) often used it to browse the internet; 60(13.3%) rarely used their phones for internet browsing while 30(6.7%) never used their phones to browse the internet. Also, 135(30%) of the students very often used their phones to chat with friends and loved ones, 105(23.3%) rarely used their phones for chatting; 90 (20%) of the respondents most often used their phones for chatting; 45 (10%) often used their phones for chatting. However, 75 (16.7%) of the students never used their phones for chatting. Furthermore, 135 (30%) of the students very often used their mobile phones to download music and or movies; 105 (23.3%) most often download music/movies on their phones; 90 (20%) often used their mobile phones to download music or movies; 30 (6.7%) rarely used their phones to download music or video while 90 (20%) never used their phones to download music or movies. On download for school assignments, 10 (2.2%) of the students very often used their phones to download school assignments; 15 (3.3%) often used their phones to download school assignments; 175 (39%) most often download school assignments on their phones; 20 (11.1%) rarely download school assignments on their phones while 230 (51.1%) never download school assignments on their phones. Table 2 further reveals that 300 (66.7%) of the students snapped pictures on their phones; 133 (29.6%) often snapped pictures with their phones; 3 (0.7%) most often snapped pictures on their phones; 6 (1.2%) rarely used their phones to snap pictures while 8 (1.8%) never snap pictures on their phones

**Table 3: Length of time respondents browse with mobile phones**

Online Operations	20mins-less (%)	21-40mins (%)	41-59mins (%)	1hour-more (%)
Chatting (SNS)	15 (3.3)	7 (1.5)	104 (23.1)	324 (72)
Download Music/Movies	310 (68.9)	104 (23.1)	26 (5.7)	10 (2.2)
Download for School Assignment	300 (66.7)	81 (18)	55 (12.2)	14 (3.1)
Upload photo	410 (91.1)	4 (0.9)	14 (3.1)	22 (4.9)

Table 3 reveals the length of time students spent to browse on their mobile phones daily. On chatting with friends on social networking sites (SNS), majority 324 (72%) of the students chatted for one hour or more daily, 104 (23.1%) spent 41-59 minutes chatting with their phones, 15 (3.3%) of them spent 20 minutes or less while 7(1.5%) spent 21-40 minutes. In downloading music/movies 310(68.9%) of the students downloaded for 20 minutes or less, 104(23.1%) downloaded for 21-40 minutes, 26(5.7%) indicated 41-59 minutes while 10 (2.2%) indicated between one hour and more. 300(66.7%) students spent up to 20 minutes or less in downloading school assignments; 81(18%) spent 21-40 minutes, 55(12.2%) spent 41-59 minutes while 14(3.1%) spent an hour or more downloading school assignments. Majority 410(91.1%) of the students spent 20 minutes or less uploading pictures on the internet with their phones; 22(4.9%) indicated that they uploaded photo with their phones for one hour or more; 14 (3.1) indicated 41-59 minutes while 4 (0.9%) of the students indicated that they uploaded photo with their mobile phones.

**Table 4: Websites Students Mostly browse on mobile phones**

Website	Frequency	Percentage
Social Network	298	66.2
Games sites	90	20.0
Bulk message sites	17	3.8
E-mail	15	3.3
Graphic sites	15	3.3
Video sites	3	0.7
Educational sites	5	1.1
Search engines	7	1.6
<b>Total</b>	450	100.0

Table 4 reveals the websites mostly browsed by senior secondary school students using their mobile phones. Majority 298(66.2%) of the students indicated that they browsed social networking sites, 90(20%) browsed Games sites, 17(3.8%) bulk message sites, 15(3.3%) indicated e-mail; 15 (3.3%) browsed graphic sites; 7(1.5%) of the students browsed search engines, 5(1.1%) of them browsed educational sites while 3(0.7%) browsed video sites.

**Table 5: Skills Acquired by using mobile phones**

Website	Frequency	Percentage %
Literacy skill	14	3.1
Academic skill	74	16.4
Technological Skill	362	80.5
<b>Total</b>	450	100.0

Table 5 reveals the basic skills that senior secondary school students acquired by using mobile phones. 362(80.5%) indicated that they acquired technological skill, 74(16.4%) indicated that they acquired academic skill while 14(3.1%) indicated that they acquired literacy skill.

## Test of Hypothesis

Ho1. There is no significant difference between male and female senior secondary school students' use of mobile phones.

**Table 6: T-test analysis on difference between male and female senior secondary school students' use of mobile phones**

Gender	N	Mean	SD	Df	t-cal	t-table	Remark
Male	180	2.5	22.35	448	1.48	1.96	*NS
Female	270	1.7	27.28				

**t-cal 1.48, t-table value 1.96 df 448 at 0.05 \* NS= Not Significant**

Table 6 shows that there is no significant difference between male (N=180, X= 2.5, SD= 22.35) and female (N=270, X= 1.7, SD= 27.28) senior secondary school students' use of mobile phones. The obtained t- cal value (1.48) is less than the t-table value (1.96) at 0.05 level of significance. Therefore the Ho1 is accepted.

## Discussions

The study has revealed the various operations that senior secondary school students often perform with their mobile phones as most of the respondents often use their mobile phones to make calls (to family, friends or loved ones); browsing the internet and snapping pictures (see table 2). It is interesting to note that though the study revealed that many of the respondents used their mobile phones for chatting however, a good number (75; 16.7%) of them never used their mobile phones for chatting. It is disheartening to report that majority (230; 51.1%) of the respondents never used their mobile phones to download school assignments or academic work. This shows that many of the senior secondary school students have relegated their academic work or school assignment to the background while embracing other social activities on their mobile phones. This finding corroborates the results of earlier studies which found that students in tertiary institutions (especially college students) frequently used Facebook and WhatsApp and other social networking sites more than networking sites meant for

academic purposes such as LinkedIn.com and other academic-inclined networking sites (Viatonu, Adesanya and Olagunju, 2014; Chen and Bryer 2012; Galuszka, 2007).

As a corollary to the foregoing, the study further revealed that students spend quality time on their mobile phones to perform various online operations. For instance, it was found that majority (324; 72%) of the respondents spend more time (one hour or more) chatting with friends on social networking sites than they spend (20 minutes or less) on downloading school assignments (see table 3). The implication of this development, in line with the foregoing submission, is that the students seem to create more for time social activities than their academic activities. This perhaps has negatively affected their academic performance (Kirschner and Velayuthano, 2010).

The study has further revealed the websites that the students mostly spend their time browsing or visiting on their mobile phones. The results show that majority (298; 66.2%) of the students visited Social Networking Sites (SNS) more than any other websites. This is followed by Games Sites (90; 20%). It is disturbing to note that Educational Sites (5; 1.1%) is one of the least sites visited by the students (see table 4). It can therefore be inferred from this finding that majority of the students used their mobile phones to improve their social lives, make social contacts and for other social reasons rather than for formal learning and administrative purposes. This finding is in line with earlier studies which found that students who visited or browsed social networking sites especially for academic activities scored low grades and are likely to drop out of school (Madge, Meek, Wellens and Hooley, 2009; Kirschner and Velayuthano, 2010). However, some previous studies have established that students who used their mobile phones to browse social networking sites for academic purposes performed better in reading skills examination than those who did not use it (Bonner, Grandt and Schwartz, 2012; Karen, 2012).

The present study has also revealed the kind of skills students acquire when using their mobile phones as most (362; 80.5%) of them acquired technological skill; 74 (16.4%) acquired academic intelligence skill while a paltry 14 (3.1%) acquired literacy skill. This finding is a pointer to the fact that students are not ready to use their mobile phones to acquire and or enhance their basic academic knowledge such as simple literacy or academic skill (see table 5). This finding contrasts with an earlier one which highlighted some of the skills and benefits of using mobile phones to include creating opportunity for improving technological skill among individuals, encouraging greater social interaction, improving students' reading ability (literacy skill) and creating room for creativity (Zwart, Lindsday, Henderson and Phillips, 2011). The finding however aligns with earlier an earlier study which showed that students acquired some technological skills using their mobile phones (Jamogha and Jato, 2012).

The study also found that gender of students (whether male or female) does not influence the use of mobile phones among senior secondary school students in Lagos State. This is in view of the fact that the hypothesis which states that there is no significant difference between male and female senior secondary school students' use of mobile phones was accepted. The implication of this finding is that gender of

student (whether male or female) does not influence the use of mobile phones. This finding corroborates earlier studies which found no gender influence on the use of mobile phones especially for browsing the internet among students of educational institutions (Lawal, Viatonu and Adesanya, 2013; Mishra, Yadava and Bisht, 2005). This finding however is contrary to the findings of other studies which established that female students use mobile phones more than their male counterparts especially to make calls and exchange information (Adesanya, 2008; Hampton, Sessions-Goulet, Rainie and Purcell, 2011).

## **Conclusion**

The boom in the Information and Communication Technology (ICT) era has led to an important aspect in the life of individuals (including secondary school students) especially in the use of mobile phones. This mobile device has enabled students to perform a wide range of operations ranging from making voice calls, video calls, browsing the internet, chatting with friends, colleagues and family members, download music and videos/movies, download school assignments (which they rarely do with their mobile phones) to using their mobile phones to snap pictures. However, as good and important as the mobile phones may be, it has become a source of distraction to students from their school work as some students get hooked on it for the wrong reasons which make them waste valuable time on it. This can make them lose track of their academic purpose in life and lead them to some anti-social behaviours in the society. This has been particularly true of the Nigerian society since the introduction of the Global System for Mobile Telecommunication (GSM) in the year 2001. Though the introduction of the GSM has brought some benefits to the Nigerian populace, such as making communication cheaper, easier, more flexible and reducing human and vehicular movement on the road yet it has led to distraction of students' attention from their normal academic activities and the focus of attention on immoral and at times, criminal activities especially on the internet which they use their mobile phones to connect most of the time. Although students mostly use their mobile phones as a tool for socialization, it can still be relatively useful in ensuring increase access to quality education in developing nations like Nigeria.

## **Recommendations**

In the light of the foregoing, the following recommendations are made:

- i. Major stakeholders in education (Parents, guardians and teachers) should monitor the activities of their children/wards/students at home and in school on the use of mobile phones to watch some of the things they (the students) do with their mobile phones. This has become imperative in view of the many atrocities students, especially teenagers, commit with their mobile phones.
- ii. The Nigerian Communications Commission (NCC) should collaborate with the telecommunication companies to develop software security that can restrict school age children from using their mobile phones in browsing some websites that affect their learning negatively.

- iii. Teachers can also encourage the use of mobile phones as a platform to improve collaborative discussion, where dialogue and exchange of ideas can take place. Teachers can give the students tasking projects/assignments that will encourage the use of mobile phone to enhance educational achievement.
- iv. School librarians/media specialists can also provide a platform through social networking sites for the school library to initiate constructive discussions in the school community and ensure effective participation of their community members (students, teachers, non-teaching staff and parents) through their mobile phones.

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