



# Mobile phone use for instructions in Senior High Schools in Ghana: Views and opinions of university students

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## Abstract

The purpose of this research was to explore the opinions of second year university students on mobile phone usage and effects in Senior High Schools in Ghana. This was necessary because while the Ministry of Communication and Ministry of Education have disclosed the intention to allow the use of mobile devices in High Schools, the Ghana Education Service insists on banning their use. The study adopted the exploratory and descriptive research methods to explore the opinions of 68 second year students of a public university in Ghana. The study found that there are indeed some educational benefits if Senior High School Students are allowed to use phones in schools. However, the device can also be a deadly destructive tool for students and can make them perform poorly in their academic work. In this regard as stake holders in charge of education in Ghana are still contemplating on whether or not to allow the use of mobile phones in high schools, all the necessary considerations must be done, before the final decision is taken.

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**Keywords:** Mobile phone; High School; education; mobile technology, university students

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## 1. Introduction

### *1.1. Background*

Mobile phones usage in senior high schools has generated a plethora of controversies in Ghana's educational system, lately. This is because while some people believe that mobile phone usage in second cycle institutions is not helpful and acts as a distractive tool, others believe that when students are allowed to use these devices in schools, it will boost their academic performance. According to Kuznekoff and Titsworth(2013), in modern classrooms, one problem encountered by instructors is that they compete with different communication stimuli for students' attention. To many instructors, these mobile phones are potential distracters in the course of teaching and learning as students send text messages, check Facebook, and even play games. However, according to Ferry (2009),

students can use mobile phones to search for information from the internet, change and pass it on, work with students and also create a more media-rich approach to direction. Similarly, Adedaja, Adelore, Egbokhare, and Oluleye (2013) reported that about 90% of students (respondents) claimed that mobile phones enhanced their learning and mobile learning was a necessary innovation.

The controversy surrounding the usage of mobile devices in second cycle institutions calls for the attention of stakeholders, educationists, and researchers especially in this era of COVID-19.

The Ghana Education Service (GES) policy prevents students in second-cycle schools from using mobile phones. In 2017, the Ministry of Communications disclosed that it is planning with the Education Ministry to lift the ban on mobile phone usage in Senior High Schools across the country (Modern Ghana, 2017). In August 2017, the Deputy Minister of Education announced that the Ministry of Education had begun considering lifting the ban for students to bring mobile phones to school as a way to increase their knowledge base in ICT education. Following the disclosure by the two Ministries was a heated argument in the country on whether to allow phones in high schools or not. Heads of senior high schools (SHSs) in the country were strongly against the use of mobile phones by students in SHSs in the country. They are of the view that allowing the use of mobile phones in SHSs would have serious effects on students due to distraction and abuse. They emphasised that they would, therefore, enforce the directive of the Ghana Education Service (GES) on the ban on the use of phones in schools. However, the current situation now has brought a different dimension to this argument. The incidence and fast spread of COVID-19 pandemic across the globe and especially in Ghana led to the closure of all schools in Ghana. In response to this, most educational institutions in Ghana moved all their lessons from the traditional face-to-face mode to various online platforms. This development has necessitated the use of mobile phones by students at the early grade to the senior high schools and even the universities since internet connectivity has not reached most parts of the country. According to the survey conducted by Jumia, an online marketing firm, Ghana has a mobile phone penetration of 119% with about 34 million subscribers. Similarly, statista.com ([www.statista.com](http://www.statista.com)) states that Ghana's mobile penetration as at 2020 was at 140% with the number of mobile subscriptions as of 2018 to be 40.93 million. There is therefore the need to make good use of the mobile phone for educational purposes in this current situation. It is therefore not surprising that most teachers are sending homework and other learning activities to students through WhatsApp or other social media platforms. However, prior to the COVID-19 pandemic era, students at the basic and senior high schools were not allowed to use mobile phones in schools, hence the use of the mobile phones to complete assignments and learning tasks posed a lot of challenges for students. Therefore, examining the views of students about the use of mobile phones in senior high schools is

a genuine course. This study therefore seeks to find out the possible effects, be it positive or negative, on the use of mobile phones in senior high schools.

### *1.2. The Concept of Mobile Technology*

Mobile technology is one of the growing technologies in the 21st century and more especially in this era of COVID 19 pandemic. And to Daichendt (2018), mobile technology is technology that is portable which refers to any device that an individual can carry around to perform a wide variety of 'tasks'. It is technology that allows tasks to be performed through smartphones, laptops, tablets, netbooks, global positioning system (GPS) devices, wireless debit/credit card payment terminals. A normal mobile device has gone from being a simple piece of technology to a more complex one, a GPS navigation system, a web browser, an instant messenger system and a video gaming system. Mobile technology devices are both portable and offer instant access to information (Kim, Hagashi, Carillo, Gonzales, Makany, Lee & Gàrate, 2011). Personal Digital Assistants (PDAs) and smartphones are mobile devices that enable real-time communication (Chang, Yan & Tan, 2012). The characteristics of mobile technology that make it unique are its ability to be carried easily (portability), its flexible nature, simplicity of use and its ability to be used with other forms of technology (Fotheringham & Alder, 2012). These devices are often said to be found everywhere and are used by people for various activities. Mobile technology devices have become an important and relevant force in learning and are becoming more affordable and compact devices which are more dependable and have greater connectivity. Apart from its advantageous size and convenience, mobile technology allows various tasks such as note taking, telephone, email, music, video audio recording, picture taking and GPS navigation (Akkerman & Filius, 2011; Kuzu, 2011; Mahamud, Andrews & Rockson, 2015; Franklin, Sexton, Lu & Ma, 2007). When compared with traditional computers, mobile devices are portable and affordable, which translate into easier use in education (Kim et al, 2011).

According to Irina (2011), recently the emergence of 'smart phones,' connected to the web, has included many general computing capabilities to the common function of the telephone. These new additions have made phones strong learning aids, which have several educational applications that computers also have. Interestingly, for several reasons, mobile phones are better than computers in the sharing of knowledge in social and professional settings (Attewell, 2005). Mobile technology is transforming the society, communications, and the economy on a global level. Since cell phones, smartphones, and tablets now far outnumber desktop computers, there has been a change in the way people acquire, use, and share information, especially among adolescents (Soyemi, Oloruntoba, & Okafor, 2015). Powerful mobile devices and advanced digital applications allow users to start and build businesses, get access to records of their finances and health care,

communicate with public officials, and complete online transactions fast and easily. Globally, these devices and applications have helped students in rural areas who lack educational resources and technology (Kim et al, 2011).

This change in how individuals and businesses get information, and the far-reaching effects of such uses, shows a fundamental turning point towards technology in human history. For the first time, people are able to connect with each other in a relatively less-expensive and in a very convenient manner all the time. In developing and developed countries, the growth in mobile technology has affected knowledge transfer, security as well as social and economic connections (Soyemi, Oloruntoba & Okafor, 2015).

### *1.3. Advantages of mobile phones use in Education*

There are several uses of mobile phones for various users and according to Gábor and Péter (2015), the reformation and fast rate of development in mobile communication in the past decade has led to a significant change in the social and cultural lives of people. The reality is, this change has already become an everyday reality. The capacity and abilities of contemporary phones are endless; they can be carried easily, and can provide access to different sources of information and data all over the world. This advantage can be exploited for the benefit of education (Gábor & Péter, 2015). Mobile devices as tools for education have come under various criticisms and have faced resistance from the whole society around the world. In Serbia for instance, educators and the Ministry of Education regard the issue of mobile phones in education with contempt while having a hard time including it in the already existing methodological education process. Advancement in technology has never been as available to individuals in the world as mobile communication and so the possibility of including it in education must be considered (Gábor & Péter, 2015).

Besides social benefits, there are a number of positive pedagogical advantages when it comes to mobile phones. “Mobile learning does not put emphasis on the place of learning, does not separate workplace from public space, home from learning environment, and does not even alter the notion of learning opportunities” (Kukulaska-Hulme, 2010; Gábor & Péter, 2015). According to Gábor and Péter (2015), following this thought process of Kukulaska-Hulme (2010), we may say that mobile communication has some advantages in connection with education: it is an effective tool for less privileged individuals in lower layers of society who cannot afford computers; course information is widely available because of podcasts, mobile applications, blogs, and e-books all accessible to users; less privileged people, through mobile phones, can have the chance to raise the quality of education in their society; School lesson plans and methods behind them can be improved through information from learners; phones can be an essential tool for science for learners located in dispersed areas, which would provide them access to local information and knowledge, as well as scientific research material (Gábor & Péter, 2015). Irina (2011)

adds that mobile devices are the easiest to access electronic devices that a large number of teachers and students have. Irina (2011) agrees with Gábor and Péter (2015) that in the less privileged parts of the society, where access to computers at schools is difficult coupled with no access to computers at home, creates a 'digital divide' between the low income and high income countries and the social strata. Hence, as globally, mobile phone subscriptions infiltrate and get to the bottom of the all economic pyramids, it can be used for learning in the absence of computers. Obringer and Coffey (2007) also opined that cell phones can help students in planning after-school work and other activities. The camera phone has a number of educational benefits; It can be used to record field trips or school and other events, to enhance reports with visuals, and to develop photo essays (Dyrli, 2004; Obringer & Coffey, 2007). Due to the fact that mobile phones are a huge part of their lifestyles, learners show a great level of familiarity with the growing number of applications. Findings show that students are better than their teachers in putting the potential of mobile technology to use in order to suit their needs and to students; mobile devices are their choice of technology (Irina, 2011). The instances for using cell phones as a learning tool are numerous: from short written assignments, quizzes, surveys, podcasts to blogs, e-books, electronic dictionary, vocabulary games, etc. In short, the incidental learning of various kinds that can take place anywhere and anytime with mobile technologies can effectively support direct language instruction (Irina, 2011). Mobile communication is a part of the everyday lives of learners and it will be truer in the future, therefore it is going to become a universal educational tool as video, computer, or internet have become (Gábor & Péter, 2015).

#### *1.4. Disadvantages of using mobile phones in schools*

That notwithstanding, aside all the advantages there are also downsides to mobile phone use in education. Obringer and Coffey (2007) Stresses that educators, administrators, and school boards are concerned about many issues related to the use of mobile phones at school such as: phone calls disrupt the environment of the classroom which interferes with the attention given to classroom work, and can affect the performance of learners (Baron, 2008). In a similar situation, texting during class work leads to split focus and poorer performance on students school work. The literature also reports cheating with mobile phones in examinations, harassment, bullying, gossiping and other antisocial activity. Lately, misuse of mobile phone cameras in public facilities such as washrooms, swimming pools, locker rooms, to take embarrassing pictures of classmates and share them with others electronically, has led to restrictions on mobile phones in schools (Irina, 2011; Gilroy, 2003; Meer, 2004; Danforth, 2003; Obringer & Coffey, 2007). Many parents believe that phones would be useful specifically in emergency situations in the school. However, 68 percent of police officers assigned to schools in the US believe that phone use would rather jeopardise school safety in a crisis (National School Safety and Security Services, 2005).

According to Grabill (2011), students' main form of writing and mobile phones were the lead platforms for writing. Here, teachers are worried, since these texts are written in shorthand text characterized by extreme use of abbreviations, emoticons, contracted syntax and often without following spelling and punctuation rules. Although some researchers and individuals consider such mastering of the usage of phones as part of the digital literacy required for the people of this age, others think traditional literacy is under threat due to this style of writing and grammar. The concern of teachers on texting is supported by sufficient evidence that texting often finds its way into academic writing (Irina, 2011).

In another study conducted by Kuznekoff and Titsworth (2013) to examine the impact of mobile phone usage on student learning, it was found out that the control group scored highest on the multiple-choice test, followed by the low-distraction group and the high-distraction group indicating that students who use mobile phones during class lectures tend to write down less information, recall less information, and perform worse on multiple-choice test than those who abstain from using their mobile phones during class.

Similarly, Soyemi, Oloruntoba, and Okafor (2015), conducted a study on the analysis of mobile phone impact on student academic performance in tertiary institution and it was revealed that the students know of the social networking sites and had access to them. Findings also indicated that students are influenced to a great extent by social media negatively because they are focused on chatting, music and others while their academic activities are given little attention and left to suffer. Also, the study discovered that the use of mobile phones is uncontrollable among students, which is the leading cause of poor academic performance.

Again, Matimbwa and Anney (2016) investigated on teachers' and students' perception of self-driven acceptance of mobile phone use as an ICT teaching tool and findings showed differences in the responses on how useful mobile phones are as teaching tools; teachers were questioned on its usefulness. This finding shows teachers had doubts concerning the use of mobile phones for communicating with students because mobile devices are not allowed at schools. Findings also indicated that mobile devices in class will cause disturbances during lessons and after class, they will delay take-home assignments because students will be on their phones rather than concentrating on the lessons; they also make students vulnerable to sexual relations, and in the case of girls it may lead to pregnancy. Mobile phones may also cause students to exhibit bad behaviours both at home and at school by ignoring other important activities.

### *1.5. Students' attitudes towards the use of Mobile Phones*

A study on mobile technologies in the teaching and learning process in Portugal by Ferreira, Moreira, Santos-Pereira and Durão (2015) showed that the mobile technology is mostly used as a tool rather than as a teaching medium. From the

literature, there is a consensus that mobile technology by itself does not guarantee success in learning; however, when used as part of an effort to support the involvement of active learning, there is evidence that they can lead to an increase in students' motivation and learning. Fakokunde (2017), Chen, Seilhamer, Bennett and Bauer (2015) also revealed the pervasiveness of mobile phones among university students in Florida but revealed that the devices are not used by the students for the purpose of enhancing learning which suggests there is a need for pedagogical support which will aid the use of phones for educational purposes.

A study by Soyemi, Oloruntoba and Okafor (2015) revealed negative effects of mobile phones on polytechnic students in Nigeria premised on the fact that the students use mobile phones for non-educational purposes such as chatting and listening to music. Similarly, Fakokunde (2017), Beland and Murphy (2016) revealed that students performed better academically in schools where using phone devices was prevented in England with a more positive effect on students from low socioeconomic backgrounds as well as low achievers. Furthermore, Business Insider Nordic report on 30th August, 2016 revealed students support for the ban of mobile phone use in schools in Sweden. The ban according to the report, "will decrease distraction in the students' working environment, allow students to engage in more exercise during recess at school, and decrease internet bully and abuse". According to Irina (2011) a survey was conducted on phone use and attitudes towards phones as tools in education among 40 faculty and 64 third-year students in one Japanese business university. When asked if there is the need to use mobile devices for teaching, only 2.8% of teachers answered favourably, 42.9% were unsure and 54.3% disagreed. The students' had opposing views: 47% agreed, 50% not sure. Also, 60% of teachers had never come across any successful innovative uses of such devices in educational practice, however 60% of students had. Only 28% of teachers agreed to try using phones in teaching and learning. Considering these attitudes, it is not surprising that 78% of teachers are in favour of the policy of preventing the use of phones at school. Surprisingly however, was the fact that 60% of students agreed with teachers on this issue. This finding is not in line with the usual student support towards cell phone use in educational institutions (Irina, 2011).

### *1.6. Usage of Mobile Phones by Senior High School Students*

A study conducted by Fakokunde (2017) on secondary school students' awareness and use of mobile phones for academic purposes highlighted the fact that most of the participants know of the educational uses of mobile phones. This implies that a large number of the SHS students know of the different ways through which their mobile devices can be used for learning purposes. The studies further showed that most of the participants do not always use their mobile phones for learning. The respondents usually use the alarm clocks on their mobile devices to wake them up to read and prepare for

school which shows the ineffective use of cell phones as a learning tool by SHS students. This implies that SHS students use their mobile phones for non-academic purposes which may account for high levels of indiscipline and poor academic performance of the students. The study also revealed a positive relationship between the respondents' level of awareness of the educational use of mobile devices and the use of the device for learning (Fakokunde, 2017).

Furthermore, Thomas and Muñoz (2016) survey of 628 high school students made up of 307 (48.9%) females and 321 (51.1%) males from Midwest region of the United States showed that 90.7% of the students reported the use of mobile phones for school-related work. The 628 students reported the following as hindrances to the usage of mobile devices in the classroom: (a) mobile phones ringing (54.0%) (b) cheating (40.0%) (c) disruption of class (39.3%) (d) cyber bullying (36.5%) (e) access to inappropriate information on the Internet (34.2%) (f) sexting (27.9%) (g) negative impact of texting on student writing (23.4%) (Thomas & Muñoz, 2016)..

## **2. Method**

This qualitative exploratory and descriptive research utilised an opinion poll among second year University of Ghana students who graduated from high school, not too long ago. The study sought to answer the question: Whether or not senior high school students in Ghana should be allowed to use mobile phones in school? This study involved all second year Teacher Education students from the University of Ghana who had registered for one of the education courses at the Department of Teacher Education. However, only 68 students consented to participate in the study. The sample size of 68 that was conveniently selected was deemed appropriate for this study because it was an exploratory research. The participants then asked to fill in or provide their responses to the open ended question that was posted online on the University of Ghana Learning Management System called Sakai. Answers were collected and registered automatically in Sakai database. The students' responses were then coded and transcribed into data for emerging themes.

## **3. Results and Discussions**

Out of the 68 students (42 females and 26 males), 50 students articulated that phones should not be allowed in high schools (35 Females and 15 Males) and 13 students were of the view that phones should be allowed in high schools (8 Males and Females 5) and 5 did not decide whether phones should be used in high schools or not.



### *3.1. High School Students in Ghana should not be allowed to use Mobile Phones in School*

According to the 50 respondents who took the stand that phones should not be used in high schools because in spite of all the advantages the use of mobile phones in senior high can bring, the disadvantages outweigh the advantages. They cited the following explanations to buttress their stands: “Senior high school students should not be allowed to use mobile phones in school because it serves as a source of great distraction for most students.” “Its usage can waste the valuable time that students need to study their academic work.” Thus its usage can be a threat to the academic work of students, as students will use all their time chatting on social media platforms, making calls, playing games and using their phones for non-academic purpose. One respondent in particular said ‘I personally encountered these situations when I was in the SHS. Students who were engrossed in their phone never performed better’. These assertions corroborates with Obringer and Coffey (2007) assertion that educators, administrators, and school boards are concerned about many issues related to the use of cell phones at school including how they can disrupt students’ academic work. A study by Soyemi, Oloruntoba and Okafor (2015) showed negative effects of mobile phones on polytechnic students in Nigeria because students are committed to the use of mobile phones for chatting, music and other non-educational purposes. Another respondent articulated that ‘the basic responsibility required from a senior high school student is to study and be able to pass his/her examinations. And I do not think if you really want students to pass their examination and be academically inclined, you would allow them to use mobile phones in school, especially at the Senior High level’. Again some respondents were of the view that even when the usage of phones are allowed in high schools, most of the students would not use it for what it is supposed to be used for, but rather, they use it negatively like watching pornographic movies, sexting (sending of sexually provocative pictures or messages of students which can lead to the victims even committing suicide), cheating in examinations, playing of music at night which will disturb other students. A respondent thus expressed ‘students are more likely to use their phones for everything other than studies even under strict supervision’. This reflects Irina’s (2011); Gilroy’s (2003); Meer’s (2004); Danforth’s (2003) explanation that the literature is full of reports about cheating with mobile devices in examinations, harassment, bullying, gossip and other anti-social activities. Consequently misuse of cameras of the devices in public facilities such as washrooms, swimming pools, locker rooms, etc. has led to more restrictions on mobile phones in schools. Chen, Seilhamer, Bennett and Bauer (2015) also noted the pervasiveness of mobile phones use among university students in Florida but the device is not used by the students to improve learning. This then comes as no surprise as the high levels of indiscipline and poor academic performance of secondary school students in Osun State, Nigeria, has led to the ban on the use of mobile devices by learners in school

(Fakokunde, 2017). One respondent raised an important concern on the fact that students normally communicate on social media platforms with shorthand and broken English which can all affect students writing skills and English if they are allowed to use phones at that level. According to Irina (2011) teachers are concerned, about the use of shorthand, negligence of spelling and punctuation rules in sending messages as it is considered a threat to traditional literacy. Irina (2011) makes it known that there is sufficient evidence that texting often penetrates into academic writing.

Some respondents gave their own personal experiences on the usage of phones at the senior high level “Am very much against this policy because I have been a witness to this issue whereby I and my mates were whatsapping and making calls during prep and class hours, we used to stay awake all night chatting with our girlfriends and friends from other schools”. “I did my Internship in “KK Senior High” where students bring phones to school. While teaching, I would realise the students are on social media platforms and not paying attention”. “I've been a victim when my parents made me addicted to phone at an early age and later my mum got to realise it was the main reason why I was not doing well with my academics. At SHS form 2 she seized my phone and I can testify my grades really improved”. These accounts show that allowing high school students to use mobile phones can indeed be a destruction that can deteriorate the academic performance of students at that level. Their absence too can help students concentrate on their books and improve in their academics as noted by Beland and Murphy (2015) and Fakokunde (2017) on students’ improved academic performance in schools in England where the use of mobile devices were prohibited. Furthermore, Business Insider Nordic report in 2016 reveals students’ support for the ban of mobile phone in schools in Sweden.

Respondents who were of the views discussed above, made mention of alternative avenues where students could get access to information like the library, ICT and computer labs laboratories, urged authorities of schools to keep such places in good shape so students can use them to learn. Also, enough phone booths should be provided for the schools. These suggestions are laudable because if the senior high schools are provided with ICT labs with enough computers and good internet access they can use the computers to search for any additional information they may need and use phone boots to make calls without mobile phones.

### *3.2. High School Students in Ghana should be allowed to use Mobile Phones in School*

Respondents who were in support of the usage of phones in High schools also made it known that, mobile phones are portable, easy to carry around and can be used anywhere at any time. Students can conveniently study online with the device other than a huge text book. Though it can distract learning, mobile phones can be used positively to facilitate teaching and learning and enhance academic work. Gábor and Péter (2015) also

agreed that phones are portable and can provide access to different sources of information and data globally. Kukulska-Hulme (2010) adds that mobile learning does not put emphasis on the place of learning. These qualities of mobile phones indeed make them an effective tool for learning, that is, if indeed one decides to use it to learn because although these respondents are considering the benefits of phones for learning, they also admit that it can be destructive.

Some of the respondents were also of the view that mobile phones provide variety of information than what the teacher can provide and makes research easy. This is supported by literature in the work of Gábor and Péter (2015), positing that course information can be widely accessed using a mobile phone. What this means is that, is true that a wide range of information can be accessed using a phone, but that can also be done using a computer so students in high school can be made to use the ICT and computer laboratories in their schools for such purposes. This also means that heads and authorities of schools would have to ensure internet access and provide enough computers for use in the school. Again these respondents were of the view that strict measures must be laid down to regulate the usage of the phones in high school. This in my opinion is not an easy task for schools to handle because even now that the usage of phones is not permitted in high schools, a lot of the students take them to school anyway and the authorities do not seem to find a way to stop it. Some of these respondents also advocated for high school students to be given prescribed phones that will restrict access to non-educational websites. If high school students are allowed to use phones that can only be used for academic purpose that will be very useful because then they would not have no choice than to use the phones to study.

#### **4. Conclusions**

From the data analysis, respondents who posit that mobile phones should not be allowed in high schools in Ghana raised three main concerns: distraction, time wasting, and usage of phones for other immoral purposes rather than learning. Those who agree that the students should be allowed to use phones in school were concerned about two major issues: mobile phones can provide a student with a wide range of information; they also agreed that phones can be destructive so their use should be regulated strictly by school authorities.

In Ghana, the use of mobile devices by senior high school students in school remains debatable among stake holders within the educational realm and the general public because of the perceived effect of mobile phones on students' academic performance. Those who see phones as a relevant device that can be used to facilitate teaching and learning are advocating its use in high school by students, while others are strongly of the view that it should be prohibited due to its negative effects on the academic performance of students. From both the literature and the analysis of the data, it is clear that there are some educational benefits if senior high students are made to use phones in school and at the same time it can be a deadly destructive tool for students and can make them perform poorly in their academics. The caution here is that, the entire stake holders must weigh all the necessary considerations before taking the final decision.

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