Social Media Usage in Teaching and Learning of Science in Colleges of Education in Kaduna State, Nigeria

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Abstract

The research examined the usage of social media in teaching and learning of science in Colleges of Education in Kaduna State, Nigeria. Four research questions guided the study. To achieve this, a descriptive survey research was adopted. The population of the study was Three thousand, four hundred and twenty- nine students (3,429). The researcher used simple random sampling technique to sample Six hundred and nine students (609). A structured questionnaire was used as the research instrument. The questionnaire was validated by four experts in the area of Information Communication Technology (ICT), Test and Measurement(TM), Science and Educational Technology (STE) and English Language. The reliability of the questionnaire was tested using Microsoft Excel version 2016 to determine the item reliability which stood at 0.98 and overall Correlation Coefficient of the instrument stood at 0.99 using Statistical Packages for Social Sciences (SPSS) version 23. The questionnaire was personally administered to the respondents by the researcher. SPSS version 23 was used in computing the four research questions based on frequency in a tabular form. The findings of the research revealed that students have generally been using social media to connect with friends, colleagues and their lecturers both inside and outside the classroom for educational purposes. Recommendations and suggestions were made for inclusion of social media in the curriculum of Nigeria Certificate of Education (NCE) and training and re-training of both teachers and students in the effective use of social media in Education.

Keywords: Social Media, Usage, Science, Teaching and Learning

Introduction

The world is today celebrating the improvements in communication technology which has broadened the scope of communication through information Technologies (ICTs). Mode of technology in communication no doubt turned the entire world into a "Global village", But it is technology like two sides of a coin, brings with both negative and positive sides. It helps people to be better informed, enlightened and keeping abreast with world developments. Technology exposes mankind to a better way of doing things. Social networking sites include: Twitter, yahoo, messenger, Skype, Google talk, Google messenger, iphone and androids. These networking sites are used by most people to interact with old and new friends. Physical or internet friends (Asemah and Edegoh, 2012). The world has been changed rapidly by the evolution of technology; this has resulted into the use of technology as the best medium to explore the wide area of knowledge.

Science is very vast and to be taught within the stipulated time. This has made it difficult for students fully understand before going to examination. Science deals with nature, concept, theories, laws, facts etc. Having known that Science curriculum is very wide, teachers tends to embrace the internet Social media networking and use it any time they are teaching Science so that it will reduce the wideness of curriculum and will make it easy for them to cover syllabus before examination period. This is because it is belief that when internet social media networking is used in teaching and learning of science it helps scientist to access much information within a short possible time.

The social media has become one of the most important communication means in recent times. However, social networking exists so as to provide communication among people regardless of the distance, making it open to people easily share information, files, pictures and video, create blogs and send messages, and conduct real time conversations. Social media has not only changed the way users socialize and communicate, it has also redefined the idea of friendship, community and learning. The wide spread adoption of social media particularly amongst students, all over the world has engendered researches on the impact of social media on student's educational outcome. The last few years has seen dramatic increase in the presence and use of social media, which is define as a "group of internet- based application that built on the ideological and technological foundation of web 2.0. Turning communication into interactive dialogue by allowing the creation and exchange of user- generated content" (Kaplan and Haenlein, 2010). Social media has indeed allowed people to express themselves through blogs, web sites, social networking (facebook, twitter, whatsapp, instagram, flicker, YouTube, 2go, badoo, linkedln)

According to Burnnett and Merchant, (2011). The recent and rapid dissemination of new forms of digital technology has had a noticeable impact on the social and cultural life of large sector of the global population. Along the infusion and availability of more interactive and user friendly interfaces and software design and the increasing sophistication of affordable mobile devices, we are witnessing the emergence of ever-newer forms of popular communication. This system referred to as social, simply because they allow communication with buddies and coworkers as easily and effectively, it is also strengthening the ties between people of those systems. The favourite in the realm of internet sites are face book, twitter, whatsapp, internet and others. These websites and social forums are ways of communication directly with other people socially and in media. They are playing a large and influential role decision – making in occasions from global world economically, politically, socially and educationally. Furthermore, web-based social media makes possible to connect people whose share interest and activities across political, economically and geographically borders through instant messaging. Scholars such as Larose (2011), Livingstone (2006), Boyd and Ellison (2006) have investigated how social media impact on student education in higher education. Boyd and Ellison, (2007) stressed that the implication of social networking sites used in schools. They argue that social networking sites are not only beneficial to students but they can also provide new opportunities for participatory communication among teachers and students. Teachers and students communicate on social networking sites like face book about classroom activities.

However, scholar like Manohar (2010) have strongly presented his argument concerning the several negative effect of social media has on knowledge, opinion, attitudes, and level of violence among youth in our schools and society. There are also several and safety concerns on social media that have not yet been addressed in Education. The most frequently

raise issue is with the material posted on social networking sites. This issue involves students posting materials deemed appropriate, which can include violation of privacy (nude pictures, unauthorized information, character defamation etc). Indeed, the posting of these types of materials appears to more frequent. There is certainly no shortage of cases involving the misuse of social media reported in the traditional media all over the world, including Nigeria. These finding raise some interesting questions. If social media is creating and additional distraction for students with so many factors already competing for their time, Should Educational Institutions be promoting the use of social media? Or will entering this arena allow Institutions to redirect some of this time currently spent on social media toward Educational function? The driving factors for adopting social media are the progressively ubiquitous access, convenience, functionality and flexibility of social technologies (Brown, 2010). It has been contented that, poor greater education, social technologies support social constructionist techniques to learning the potentially have improve students construction of understanding and promote students interaction (Schroeder, Minocha and Schneider, 2010). An additional benefits of social technologies provided on the internet is they are frequently free or require marginal investment, eliminating a potential barrier to adoption (Brown, 2010). There has been various overview and opinions which recognized four major advantages of social media use in higher education. These include, enhancing relationship, improving learning motivation, offering personalized course material, and developing collaborative abilities: (Wheeler, Yeomars & Wheeler, 2008). This means that social networking activities have the possibilities of enhancing students contact and it used to improve their participation in online group learning, with less or no anxiety of needing to raise questions before peers at school.

Scholars like Kaplan and Haenlein (2010), Davis and Merchant, (2009), Larose, (2011) have put forward argument that social media offers new and exciting possibilities for education. Some of the identified benefits of social media in higher education includes "enhancing the overall college experience (Davies and Merchant, 2011) and "expanding educational opportunities" (Brown and Adler, 2008). In fact some scholars such as Glenn, (2008), Boyd and Ellison, (2007) have argued that social media technologies can generally be employed through two major approaches in school, students can learn "from" social media technology, and they can learn "with" social media technology.

Reacting to the potentials of social media in advancing modern learning Glenn, (2008) states that no generation is more at ease with online, collaborative technologies than today's young people "digital natives" who have grown up in an immersive computing environment. Where a notebook and pen may have form the tool kits of prior generation. Today's students come to class armed with smart phones, laptops and iPods technology allows students to become much more engaged in constructing their own knowledge and cognitive studies show that ability is key to learning success. This research examines the usage of social media in teaching and learning of science in colleges of Education Kaduna state, Nigeria. The research explores both the negative and the positive dimension of social media networking where Internet literary is still low and traditional method of teaching and learning of science remain dominant despite several studies that indicate that Nigeria has come one of the fasted growing Internet users globally.

In Nigeria, the tradition of teaching and learning processes that involve face – face interaction between the teacher and student using books, chalk board, and other material still dominate our classroom teaching, learning, studies and the education process at almost all level of education process in Nigeria. Sciences like mathematics has been a universally needful subjects that deserves much than just the tradition chalk board, instructional strategies, lecture notes, assignment and examination techniques. However, advances in the world within the electronic technology and ever increasing student population all over the world, 3rd world

National inclusive necessitates a paradigm of shift to the internet through social networking which is adjust to be the most important communication means in recent times.

Purpose of the Study

This study is aimed at achieving the following objectives. They are:

- 1. To find out the types of social media available in colleges of Education in Kaduna state.
- **2.** To ascertain the positive effects of social media in teaching and learning of science in colleges of Education in Kaduna state.
- **3.** To ascertain the negative effects of the usage of social media in the teaching and learning of science and its consequences for future development.
- **4.** To find out the challenges colleges of education in Kaduna state are facing in the usage of social media in the teaching and learning of sciences among students.

1.4 Research Questions

The following research questions will guide the study:

- **1.** What are the types of social media available in teaching and learning of science in Colleges of Education in Kaduna state?
- 2. What are the positive effects of social media usage in teaching and learning of science in Colleges of Education in Kaduna State?
- **3.** What are the possible negative effects of the usage of social media on the teaching and learning of science and its implication for development?
- **4.** What are the challenges faced on the usage of social media in teaching and learning of science in colleges of education in Kaduna state?

Methods and Procedure

In this chapter, the researcher is going to discuss the methods for the study, target population, sample size under consideration and measurement. Also methods of data collection and techniques of analysis will be stated.



Fig. Map of Kaduna State Showing Colleges of Education Source: Kaduna State Ministry of Land Survey and Country Planning.

3.1 Research Design

This study employed the use of survey method in finding solution to the research question because it allows for measurement of individual feelings, values, options and attitude of the students. The study is design to find out the types of social media and its usage in teaching and learning of sciences in Colleges of Education in Kaduna State Nigeria.

3.2 Research Population

The population for the study are the science students in all the Colleges of Education in Kaduna State, Nigeria. The Colleges of Education are as indicated in Table 3.1 below:

S/N	Level of study	Subject Area	Population
1	NCE I	Biology/Chemistry	115
	NCE I	Biology/Geography	139
	NCE I	Biology/Integrated Science	155
	NCE I	Mathematics/Computer	35
	NCE I	Mathematics/Physics	40
	NCE I	Physics/Chemistry	31
	Total		515
2	NCE II	Biology/Chemistry	116
	NCE II	Biology/Geography	140
	NCE II	Biology/Integrated Science	160
	NCE II	Mathematics/Computer	50
	NCE II	Mathematics/Physics	66
	NCE II	Physics/Chemistry	25
	Total		557
3	NCE III	Biology/Chemistry	199
	NCE III	Biology/Geography	106
	NCE III	Biology/Integrated Science	188
	NCE III	Mathematics/Computer	48
	NCE III	Mathematics/Physics	32
	NCE III	Physics/Chemistry	30
	Total		603
	Grand Total		1672

Table 3.1 indicated the population of Federal College of Education (FCE), Zaria.

Source: Dean of Science Office FCE Zaria, 2016

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S/N	Level of study	Subject Area	Population
1	NCE I	Biology/Chemistry	200
	NCE I	Biology/Geography	199
	NCE I	Biology/Integrated Science	131
	NCE I	Mathematics/Computer	147
	NCE I	Mathematics/Physics	201
	NCE I	Physics/Chemistry	129
	Total		1007
	NCE II	Biology/Chemistry	100
	NCE II	Biology/Geography	64
	NCE II	Biology/Integrated Science	52
	NCE II	Mathematics/Computer	79
	NCE II	Mathematics/Physics	54
	NCE II	Physics/Chemistry	41
	Total		390
	NCE III	Biology/Chemistry	85
	NCE III	Biology/Geography	50
	NCE III	Biology/Integrated Science	73
	NCE III	Mathematics/Computer	41
	NCE III	Mathematics/Physics	56
	NCE III	Physics/Chemistry	52
	Total		357
	Grand Total		3429

Table 3.2 indicated the population of Kaduna State College of Education (KSCOE),Gidan Waya.

Source: Dean of Science Office KSCOE Gidan Waya, 2016

3.3 Sampling Population

Half of the population were sampled from NCE II and NCE III from each of the subject area making a total sample size of six hundred and nine students (609) out of the three thousand four hundred and twenty- nine (3,429) of the two Colleges of Education in Kaduna State Nigeria as Table 3. 3 below:

	S/N	Level of study	Subject area	Sampled population
		NCE II	Biology/Chemistry	20
		NCE II	Biology/Geography	20
		NCE II	Biology/Integrated Science	20
		NCE II	Mathematics/Computer	20
		NCE II	Mathematics/Physics	10
		NCE II	Physics/Chemistry	10
		Total		100
		NCE III	Biology/Chemistry	20
		NCE III	Biology/Geography	20
		NCE III	Biology/Integrated Science	20
		NCE III	Mathematics/Computer	10
		NCE III	Mathematics/Physics	15
		NCE III	Physics/Chemistry	14
		Total		99
		Grand Total		299
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Table 3.3 indicated the Sampling population of Federal College of Education (FCE) Zaria.

Source: Field survey, 2016

Table 4.4 indicated the sampled population of Kaduna State College of Education (KSCOE) GidanWaya.

S/N	Level of study	Subject Area	Sampled Population
2	NCE II	Biology/Chemistry	30
	NCE II	Biology/Geography	22
	NCE II	Biology/Integrated Science	25
	NCE II	Mathematics/Computer	24
	NCE II	Mathematics/Physics	26
	NCE II	Physics/Chemistry	20
	Total		147
3	NCE III	Biology/Chemistry	32
	NCE III	Biology/Geography	25
	NCE III	Biology/Integrated Science	33
	NCE III	Mathematics/Computer	20
	NCE III	Mathematics/Physics	27
	NCE III	Physics/Chemistry	26
	Total		163
	Grand Total		310
	Overall Grand total		609

Source: Field survey, 2016

3.4 Sampling Technique

A random sampling technique of six hundred and nine (609) students were selected with Federal College of Education(FCE) Zaria, having two hundred and twenty nine (299) students, while three hundred and ten (310) students were selected from Kaduna State College of Education(KSCOE) Gidan Waya, as indicated in Tables 3.3 and 3.4 above respectively.

3.5 Description of the Instrument for Data Collection

For the purpose of this work, the instrument used for the data collection was questionnaire. The

researcher personally used the questionnaire as the instruments to administer to the respondents. He supervised and collected the filled questionnaire at the spot. Data were collected using four major structured instruments namely: (a) Types of Social Media Resources on Students (TSMRS) (b) The positive effects of social media usage in learning of sciences on students (PESMLSS) and(c) Negative effect of Social Media usage in Learning of Sciences on Students (NESMLSS),(d) The challenges of using social media on learning of sciences on students (CSMLSS).

Questionnaire on availability, usability and challenges of social media in teaching and learning of sciences in the two Colleges of Education, Kaduna State were structured based on either Yes, No, and the level of frequency of the response ranges from sometimes, rarely, never to once a day, few times a week, few months, multiple times a day.

To correlate the result of the pilot study so as to make correct prediction whether the result has a positive or negative relationship of the two continuous variables, Cohen, (2011), has offered guidelines for the interpretation of a correlation coefficient as indicated in Table

	Tuble 2.5. Conten 5 Interpretation of Correlation Coefficient			
Correlation	Negative	Positive		
None	-0.09 to 0.0	0.0 to 0.09		
Small	-0.3 to -0.1	0.1 to 0.3		
Medium	-0.5 to -0.3	0.3 to 0.5		
Large	-1.0 to -0.5	0.5 to 1.0		
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Fable 3.5:	Cohen's	Interp	retation	of (Correlation	Coefficient

Source: Field survey, 2016

Cohen (2011) has observed, however, that all such criteria are in some ways arbitrary and should not be observed too strictly. According to him, the interpretation of a correlation coefficient depends on the context and purposes. He pointed out that a correlation of 0.9 may be very low if one is verifying a physical law using high-quality instruments, but may be regarded as very high in the social sciences where there may be a greater contribution from complicating factors.

3.6 Validity and Reliability of the Instrument

3.6.1 Validity of the Instrument

The quality of any research depends on the extent to which it is valid; therefore, for this research questionnaire to be valid, it has to be moderated by four experts in the area of Information and Communication Technology (ICT), Science and Technology of Education (STE) Test and Measurement (TM) and English Language. It was necessary to validate the instrument to ensure that it measured what was intended to measure. The researcher had initial discussions on the various items of the instrument with his supervisor which yielded fruitful results as some modifications were made. The second stage of the validation was the various sections of the items which were subjected to the content validation carried out by my supervisor to determine the degree to which the items actually measured what it was supposed to measure. This was to establish their content validity of the instrument. Based on these validity measures, certain adjustments were made. His input and modifications were helpful in this research. It was therefore presumed that the 31 items instruments used for the study possessed a requisite validity.

3.6.2 Reliability of Instrument

The instrument in this research work was selected and ascertained it reliability by three experts. Test and Measurement(TM), Science and Technology Education (STE) and also Information

and Communication Technology (ICT). The reliability co-efficient of the instrument was found to be 0.99% as found in Appendix 3.

The pilot test of the instrument was conducted to randomly selected total number of One thousand and thirteen (1,013) students of NCE 1. Five hundred and fifteen (515) students of the Federal College of Education, Zaria and NCE I. Four hundred and ninety-eight (498) of the Kaduna State College of Education, Gidan Waya. The internal consistency (reliability) of the instruments was tested using test-retest methods within two weeks. The results of the test were subjected to item analysis. After the item by item analysis of the test, only all the questions were accepted having all the 31 administered. Later, the test items were subjected to reliability test using Microsoft Excel version 2016 method of establishing the reliability coefficient. Finally, the scores of the two test were obtained during the first and second administration of the instruments using Pearson Product Moment Correlation Coefficient with Microsoft Excel 2016 and SPSS version 23 respectively.

The AVERAGE function in Microsoft Excel which calculated the mean of set of samples, was also very useful in statistical analysis. The calculation was done by adding the raw scores of the 1st test and the raw scores of the second test and then dividing by the count of those scores. The formula used was=CORREL (AH2:AH610, AI2:AI610). This was to determine the extent to which the scores of the 1st test correlate with the scores of the second test. The reliability coefficient of the 1st test was found to be of 0.99 while the reliability coefficient of the 2nd test was 0.98. NCE 1 of both the colleges were not among the colleges selected to participate in the main study, but has satisfied the characteristics of the colleges to be used in the study.

3.7 Procedure for Data Collection

The method employed by the researcher for the collection of the data is questionnaire. The question consists of two (2) session i.e. section A and B, the researcher used a level of frequency of the response ranges from sometimes, rarely, never to once a day, few times a week, few months, multiple times a day. All the questionnaire were administered personally to the respondents after consulting the Deans of the sciences in both institutions.

3.8 Method of Data Analysis

The researcher used simple percentages to represent the four research questions in a table form. Frequency was used to determine the percentages of the responses.

Data Presentation and Analysis

This chapter presents the results of the research conducted in the two Colleges of Education, Kaduna State namely: Federal College of Education, Zaria and Kaduna State College of Education, GidanWaya respectively. The results are presented based on the research questions in chapter one as follows:

Table 4.1: Name of Institution		
Name of Institution	Frequency	Percent
Kaduna State College of Education, Gidan Waya	310	50.9
Federal College of Education, Zaria	299	49.1
Total	609	100

Data Presentation Table 4.1: Name of Institution

The result in Table 4.1 revealed that 310(50.9%) of the respondents are from Kaduna State College of Education while 299(49.1%) are from Federal College of Education, Zaria.

Table 4.2: Gender		
Gender	Frequency	Percent
Male	303	49.8
Female	306	50.3
Total	609	100
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Source: Field survey, 2016

The result in Table 4.2 showed that 303(49.8%) of the respondents are male, while 306(50%) were female.

Table 4.3: Level of study

Level of study	Frequency	Percent
NCE I	213	35.0
NCE II	198	32.5
NCE III	198	32.5
Total	609	100

Source: Field survey, 2016

The result in Table 4.3 revealed that majority of the students 213(35.0%) were in NCE 1, while 198(32.5%) were in NCE II and III respectively.

Table 4.4: Students subject area

Students subject area	Frequency	Percent
Biology/Chemistry	138	22.7
Mathematics/Physics	121	19.9
Biology/Geography	30	4.9
Mathematics/computer	87	14.3
Physics/Chemistry	116	19
Biology/Integrated Science	117	19.2
Total	609	100

Source: Field survey, 2016

In Table 4.4 above, the students' subject area were: 138(22.7%) were studying Biology/ Chemistry Education. 121(19.9%) of the students were studying Mathematics/Physics. 30(4.9%) of the students were studying Biology/Geography as double major. 87(14.3%) of the students were studying Mathematics/Computer as a double major. 116(19%) of the students were studying Physics/Chemistry Education, while 117(19.2%) of the students were studying Biology/Integrated Science Education as a double major.

Table 4.5: Age Range		
Age Range	Frequency	Percent
20-30 years	572	94.0
31-40 years	31	5.1
41 years and above	6	1.0
Total	609	100

IIARD – International In	nstitute of Academic	Research and	Development
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The results in Table 4.5 showed that majority of the students 572(94.0%) were age ranging from 20 years to 30 years. 31(5.1%) of the students were ages ranged from 31 years to 40 years, while just 6(1.0%) of the students age ranged from 41 years and above.

	Frequency	Percent
Facebook	236	38.8
WhatsApp	83	13.6
Twitter	9	1.5
YouTube	9	1.5
Instagram	9	1.5
Wikipedia	11	1.8
All of the above	237	38.9
None of the above	15	2.5
Total	609	100

 Table 4.6: What are the social networking sites you know?

Source: Field survey, 2016

The results in Table 4.6 revealed that majority of the students 236(38.8%) agreed that they know Facebook sites. 83(13.6%) of the students know WhatsApp. 9(1.5%) of the students know Twitter, YouTube, Instagram respectively as Networking sites. 11(1.8%) of the students believed that they know Wikipedia as a Networking sites, while 237(38.9%) of the students know all of them as networking sites. 15(2.5%) of the students said they do not know all of the above as a social networking sites.

	Frequency	Percent
Facebook	302	49.6
WhatsApp	190	31.2
Twitter	7	1.1
YouTube	20	3.3
Instagram	21	3.4
Wikipedia	15	2.5
All of the above	42	6.9
None of the above	12	2
Total	609	100
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Table 4.7: Which one of these social media do you often use?

Source: Field survey, 2016

Table 4.7 revealed that majority of the students 302(49.6%) often use Facebook. 190(31.2%) of the student often use WhatsApp. Only 7(1.1%) of the students often use Twitter. 20(3.3%) of the students often use YouTube. 21(3.4%) of the students often use Instagram, 15(2.5%) of them often use Wikipedia while 42(6.9%) often use all of the above and only 12(2%) often use none of the above.

Table 4.8: Why do you prefer the social media you often use?			
	Frequency	Percent	
It is faster	224	36.8	
It is cheaper and reliable	164	27.0	
It opens multiple pages at the same time	43	7.1	
It has wider participation	112	18.4	
It has good reception	66	10.8	
Total	609	100	

Source: Field survey, 2016

The results in Table 4.8 showed that majority of the students 224(36.8%) agreed that such social media is faster, 164(27.0%) of the students agreed that it is cheaper and reliable. 43(7.1%) of the students agreed that it opens multiple pages at the same time. 112(18.4%) of the students agreed that it has wider participation. While only 66(10.8%) of the students agreed that it has good reception.

Table 4.9: Do you have a social networking account?

			Frequency	Percent
Yes			530	87.0
No			79	13.0
Total			609	100
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Source: Field survey, 2016

The result in Table 4.9 indicated that majority of the students 530(87.0%) agreed that they have social networking account. Only 79(13.0%) of the students did not have social networking account.

	Frequency	Percent
Facebook	319	52.4
WhatsApp	126	20.7
Twitter	18	3
YouTube	24	3.9
Instagram	10	1.6
Wikipedia	14	2.3
All of the above	64	10.5
None of the above	34	5.6
Total	609	100

Table 4.10: If yes to the above question, which of the social networking site?

Source: Field survey, 2016

In Table 4.10, the result showed that 319(52.4%) agreed that they have Facebook social networking account. 126(20.7%) of the students had WhatsApp social networking account. 18(3%) of the students had Twitter social networking account. 24(3.9%) of the students had YouTube account. 10(1.6%) of the students had Instagram account. 14(2.3%) of the students had Wikipedia account. 64(10.5%) of the students had all the social networking account while only 34(5.6%) of the students had none of the social networking account.

Table 4.11: How often do you log into the networking site you have?		
	Frequency	Percent
Multiple times a day	279	45.8
Once a day	137	22.5
A few times a week	105	17.2
A few times a month	54	8.9
Very rarely ever	34	5.6
Total	609	100

Source: Field survey, 2016

The results in Table 4.11 revealed that majority of the students 279(45.8%) often log into the social networking site at multiple times a day. 137(22.5%) of the students log into the social networking sites a day. 105(17.2%) of the students log into the social networking sites a few times a week. 54(8.9%) of the students log into the social networking a few times a month, while only 34(5.6%) of the students very rarely ever log into the social networking site.

	Table 4.12:	How many	hours do	you spend	online in	a day?
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	Frequency	Percent
1/2 hour	192	31.5
1 hour	214	35.1
2 hours	122	20
4 hours	45	7.4
6 hours	36	5.9
Total	609	100

Source: Field survey, 2016

The result in Table 4.12 showed that 192(31.5%) of the students spent $\frac{1}{2}$ hour online in a day. Majority of the students 314(35.1%) of them spent 1 hour online a day. 122(30%) of the students spent 2 hours online. 45(7.4%) of the students spent 4 hours online while 36(5.9%) of the students spent 6 hours online.

Table 4.13: What do you use the social networking site for?

	Frequency	Percent
Academic	248	40.7
Sport and News	56	9.2
Entertainment	86	14.1
Pornography	6	1
Finding friends	60	9.9
All of the above	146	24
None of the above	7	1.1
Total	609	100

Source: Field survey, 2016

The results in Table 4.13 showed that majority of the students 248 (40.7%) used the social networking site for academic. 56(9.2%) of the students used the social networking site for sports and news. 86(9.2%) of the students used the social networking site for entertainment. 6(1%) of the students used the networking site for pornography. 60(9.9%) of the students used the networking site for pornography. 60(9.9%) of the students used the networking site for pornography. 60(9.9%) of the students used the networking site for pornography. 60(9.9%) of the students used the networking site for pornography. 60(9.9%) of the students used the networking site for pornography. 60(9.9%) of the students used the networking site for pornography. 60(9.9%) of the students used the networking site for pornography. 60(9.9%) of the students used the networking site for pornography. 60(9.9%) of the students used the networking site for pornography. 60(9.9%) of the students used the networking site for pornography. 60(9.9%) of the students used the networking site for pornography. 60(9.9%) of the students used the networking site for pornography. 60(9.9%) of the students used the networking site for pornography. 60(9.9%) of the students used the networking site for pornography. 60(9.9%) of the students used the networking site for pornography. 60(9.9%) of the students used the networking site for pornography. 60(9.9%) of the students used the social networking site for pornography. 60(9.9%) of the students used the social networking site for pornography. 60(9.9%) of the students used the social networking site for pornography. 60(9.9%) of the students used the social networking site for pornography. 60(9.9%) of the students used the social networking site for pornography. 60(9.9%) of the students used the social networking site for pornography. 60(9.9%) of the students used the social networking site for pornography. 60(9.9%) of the students used the social networking site for p

sites for all the above, while only 7(1.1%) of the students did not use the social networking site.

	Frequency	Percent
Receiving calls	28	4.6
Text messaging	25	4.1
Checking mail	20	3.3
Browsing the net	109	17.9
Google research	202	33.2
All of the above	116	19
None of the above	109	17.9
Total	609	100

Table 4.14: What do you use you	r handset (GSM)	for in the classroom?
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Source: Field survey, 2016

The results in Table 4.11 indicated that 28(4.6%) of the students used their GSM for receiving calls. 25(4.1%) used the GSM for text messaging. 20(3.3%) of the students used GSM for browsing the net, while majority of the students 202(33.2%) used their GSM for google search. 116(19%) of the students used their GSM for all the above. Only 109(17.9%) of the students did not use GSM for any of the above reasons.

 Table 4.15: How frequent do your lecturers post course learning materials on social media for you?

	Frequency	Percent
Frequently	108	17.7
Often	53	8.7
Sometimes	139	22.8
Rarely	96	15.8
Never	213	35
Total	609	100

Source: Field survey, 2016

In Table 4.15, 108(17.7%) of the students indicated that their lecturers post course learning materials on social media for them. 53(8.7%) of the students agreed that their lecturers often post course learning materials for them on social media. 139(22.8%) of the students believed that their lecturers sometimes post course learning materials for them on social media. 96(15.8%) of the students said their lecturers rarely post course learning materials for them on social media. 96(15.8%) of the students 213(35%) believed that their lecturers never post course learning materials on social media for them.

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Fahle 4 16• How	often do v	vou use social	media for	vour acad	emic work?
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			_
	Frequency	Percent	
Frequently	278	45.6	
Sometimes	268	44	
Rarely	40	6.6	
Never	23	3.8	
Total	609	100	
			_

The result in Table 4.16 showed that majority of the students frequently used the social media for academic work. 268(44%) of the students sometimes use the social media for academic work. 40(6.6%) of the students rarely use the social media for academic work. 23(3.8%) of the students never use the social media for academic work.

 Table 4.17: How frequent do you exchange online academic materials with your classmates in the department?

	Frequency	Percent
Frequently	152	25
Sometimes	297	48.8
Rarely	111	18.2
Never	49	8
Total	609	100

Source: Field survey, 2016

Table 4.17 revealed that 152(25%) of the students frequently exchange online academic materials with their classmates in the department. Majority of the students sometimes exchange online academic materials with their classmates in the department. 111(18.2%) of the students rarely exchange online academic materials with their classmates in the department. Only 49(8%) of the students never exchange online academic materials with their classmates in the department.

Table 4.18: How often do you learn about campus activities within or outside your department?

	Frequency	Percent
Frequently	164	26.9
Sometimes	290	47.6
Rarely	107	17.6
Never	48	7.9
Total	609	100

Source: Field survey, 2016

The results in Table 4.18 above showed that 164(26.9%) of the students frequently learn about campus activities within or outside your department. Majority of the students sometimes learn about campus activities within or outside your department. 107(17.6%) of the students rarely learn about campus activities within or outside your department. Only 48(7.9%) of the students never learn about campus activities within or outside your department.

Table 4.19: How frequent do you find out what social activities your classmates or students within the department are doing?

	Frequency	Percent
Frequently	214	37
Sometimes	257	42.2
Rarely	86	14.1
Never	52	8.5
Total	609	100

The results in Table 4.19 indicated that 214(37%) of the students frequently find out what social activities your classmates or students within the department are doing. Majority of them sometimes find out what social activities your classmates or students within the department are doing. 86(14.1%) of the students rarely find out what social activities your classmates or students never find out what social activities your classmates or students never find out what social activities your classmates or students never find out what social activities your classmates or students within the department are doing. 52(8.5%) of the students never find out what social activities your classmates or students within the department are doing.

Table 4.20: As a student of this institution, do	vou belong to any soc	ial networking group?
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		Frequency	Percent
Yes		497	81.5
No		112	18.5
Total		609	100
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Source: Field survey, 2016

The results in Table 20 showed that majority of the students belong to any social networking group, while minority of the students do not belong to any social networking group.

 Table 4.21: If yes to question to the above question, which one of these groups do you belong to?

	Frequency	Percent
Facebook	365	60.0
WhatsApp	177	29.1
Twitter	24	3.9
YouTube	16	2.6
Instagram	18	3
Wikipedia	9	1.5
Total	609	100

Source: Field survey, 2016

The results in Table 4.21 revealed that 365(60.0%) of the students belong to Facebook. 117(29.1%) of the students belong to WhatsApp. 24(3.9%) of the students belong to Twitter group. 16(2.6%) of the students belong to YouTube, while 18(3%) and 9(1.5%) of the students belong to Instagram and Wikipedia respectively.

Table 4.22: How concerned are you about the image you present to others through your social network profile?

	Frequency	Percent
Very concerned	286	46.9
Concerned	174	28.6
A little concerned	113	18.6
Not concerned	36	5.9
Total	609	100

Source: Field survey, 2016

The results in Table 4.22 revealed that 286 (46.9%) of the students were very concerned about the image they presented to others through their social network profile. 174(28.6%) of the students were concerned about the image they presented to others through their social network profile. 113(18.6%) of the students had little concern about the image they presented to others

through their social network profile. 36(5.9%) of the students were not concern about the image they presented to others through their social network profile.

Table 4.23:	What	do you	think	are t	he most	important	reasons	for	using	social	media
technologies	s in aca	demic s	setting	?							

	Frequency	Percent
Give students more access to education and entertainment	405	66.5
Offer another channel for different learning style	70	11.5
Enable greater collaboration with fellow students	69	11.3
Create room for interactive discussion and creativity	60	9.9
Don't know	5	0.8
Total	609	100

Source: Field survey, 2016

The Table 4.23 indicated that majority of the students 505(66.5%) social media technologies give students more access to education and entertainment. 70(11.5%) of the student believed that social media offer another channel for different learning style. 69(11.3%) of the students believed that social media create room for interactive discussion and creativity. While only 5(0.8%) of the students don't know the reasons for using social media in education.

Table 4.24: On the average, how much time do you spend each day using the social media for the following activities?

	Frequency	Percent
0-60 minutes	241	39.6
1-2 hours	250	41.1
More than two hours	95	15.6
Don't use the social media for this purpose	23	3.8
Total	609	100

Source: Field survey, 2016

The results in Table 4.24 showed that 241(39.6%) students spent 0-60 minutes each spent each day using the social media. 250 (41.1%) of the students spent 1-2 hours each day using the social media. 95(15.6%) of the students spent more than two hours each day on social media. 23(3.8%) of the student don't use the social media for this purpose.

Table 4.25: How often do you communicate with your classmates on social media?

		Frequency	Perce
			nt
30-60 minutes	357	58.7	
One to two hours	171	28.1	
More than two hours	46	7.6	
Don't use the social media for this purpose	35	5.7	
Total	609	100	

Source: Field survey, 2016

Table 4.25 showed that majority of the students spent 30-60 minutes to communicate with their classmates on social media. 171(28.1%) of the students spent one to two hours on communicating with their classmates on social media. 35(5.7%) of the students don't use the social media for communicating with their classmates.

Table 4.26: How often do you use social media for entertainment?		
	Frequency	Percent
30-60 minutes	354	58.1
One to two hours	138	22.7
More than two hours	47	7.7
Don't use the social media for this purpose	70	11.5
Total	609	100

Source: Field survey, 2016

The results in Table 4.26 showed that majority of the students 354 (58.1%) spent 30-60 minutes on using social mediator for entertainment. 138(22.7%) of the students spent one to two hours on social media for entertainment. 47(7.7%) of the students spent more than two hours on entertainment. 70(11.5%) of the students don't use the social media for the purpose of entertainment.

Table 1 27: How often do you use social modio to liston to news?

Table 4.27. How often up you use social media to listen to news.			
	Frequency	Percent	
30-60 minutes	361	59.2	
One to two hours	129	21.2	
More than two hours	43	7.1	
Don't use the social media for this purpose	76	12.5	
Total	609	100	

Source: Field survey, 2016

In Table 4.27, the results showed that majority of the students 361(59.2%) spent 30-60 minutes on social media to listen to news. 129(21.2%) of the students spent one to two hours to listen to news on social media. 43(7.1%) of the students spent more than two hours on news listening to news. 76(12.5%) of the students don't use the social media for this purpose.

Table 4.28: How has the social media impacted on your academic and social development?

	Frequency	Percent
Positively	494	81.1
Negatively	78	12.8
Don't know	37	6.0
Total	609	100

Source: Field survey, 2016

The results in Table 4.28 revealed that majority of the students 494(81.1%) believed that social media has positively impacted on their academic and social development. 78(12.8%) of the students said that social media has impacted negatively on their academic and social development. 37(6.0%) of the students don't know the impact of the social media on their academic and social development.

	Frequency	Percent
Potential increase in student plagiarism	286	47
Students will be more distractive in the classroom	150	24.6
Increase bad behaviour among students and towards lecturers	46	7.6
Potential increase in students cheating in assignment and		
examination	57	9.4
Problem of addiction due to excessive exposure to online		
materials	37	6.1
Don't know	33	5.4
Total	609	100

Table 4.29: As a student of this institution,	what are the possible challenges posed by the
social media to your academic developmen	t?

Source: Field survey, 2016

The results in Table 4.29 showed that majority of the student 286(47%) believed that possible challenges posed by the social media to their academic development is the potential increase in student plagiarism. 150(24.6%) of the students believed that the possible challenges posed by the social media to their academic development is the students will be more distractive in the classroom. 46(7.6%) of the students also believed that the possible challenges posed by the social media to their academic development is the increase bad behavior among students and towards lecturers. 57(9.4%) of the students believed that possible challenges posed by the social media to their academic development is the potential increase in students cheating in assignment and examination. 37(6.1%) of the students said the possible challenges posed by the social media to their academic development is the problem of addiction due to excessive exposure to online materials. While 33(5.4%) of the students don't know the potential challenges posed by the use of social media on their academic development.

 Table 4.30: Do you think your school authorities should restrict/censor some activities on the Internet and social networking sites?

	Frequency	Percent
Yes	328	53.8
No	202	35
Don't know	79	13
Total	609	100
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Source: Field survey, 2016

The results in Table 4.30 showed that majority of the students 328(53.8%) believed that their school authorities should restrict some activities on the Internet and social networking sites. 202(35%) of the students do not support the idea. 79(13%) of the students don't know.

Table 4.31: The time taking to browse, send, receive text and charting distract students' attention?

	Frequency	Percent
Yes	459	75.4
No	150	24.6
Total	609	100

Table 4.31 showed that majority of the students 459(75.4%) took time to browse, send, receive text and charting distract students attention. 150(24.6%) of the students said No.

Discussion of Results

The results in Table 4.6 revealed that majority of the students agreed that they know Facebook, WhatsApp, Twitter, YouTube, Instagram, and Wikipedia as networking sites. In Table 4.7, the majority of the students often use Facebook most. This result is contrary to Moran, Seamain and Tinti-Kane, (2012) finding that YouTube is the most frequently used social media tool in the classroom. The study also revealed that WhatsApp, Twitter, YouTube, Instagram, Wikipedia were also often used accordingly. This implied that they had a preference in the use of these social media, which according to them, they preferred what they used because they were faster, cheaper and reliable, opens multiple pages at the same time, they had wider participation as well as they had good reception.

The results in Table 4.11 revealed that majority of the students 279(45.8%) often log into the social networking site at multiple times a day. 137(22.5%) of the students log into the social networking sites a day. 105(17.2%) of the students log into the social networking sites a few times a week. 54(8.9%) of the students log into the social networking a few times a month, while only 34(5.6%) of the students very rarely ever log into the social networking site.

The results in Table 4.12 indicated the frequency of hours students spent in a day using social media. The results revealed that majority of the students spent half an hour using social media. Although the students tend to spend most of their precious lecture time chatting with their friends, parents and colleges which positively impacted on their academic and social development, students tend to forget on their academic work which has negative effect on them is in line with Green field &Subrahmanyan, (2008) finding that social media has cause distraction during instruction time and had a negative impact on the learning environment. This result also in support of Seyin, (2012) finding that students spent too much time and undue attention to online socialization to the detriment of their academics works. Because of excessive use of social media as indicated in Table 4.29 majority of the students believed that social media had the potential increase in them involved in plagiarism. The excessive exposure to online materials lead students to more distractive in the classroom, bad behavior such as pornography, cheating in assignment and examination malpractice and problem of addiction.

Conclusion

The result from the finding of this study showed that; though social media have negatively affects students, distracting students from their academic work, taking most of their productive time, and such like, they also have benefits and can be used appropriately. For instance, student can form online communities in order to plan for a project, have group discussion about class materials or use social networking sites (SNS) as a way to keep in contact when students who has been absent needs to be updated on current academic information.

The finding of this study and earlier ones showed some noteworthy results. The first independent variable influencing the teaching and learning of students, that is, social media participation was negatively related with student's outcome. While the other independent variables were positively related with student's outcome. The results of this study suggest that lecturers should come up with a template on how their students can maximize the benefits of social media, that school management should incorporate rules and regulations on the use of the social media in the school and that the government should put in adequate control measures to regulate their use among student and lecturers.

Recommendations

In the light of the finding of this study, the following recommendations are made;

- **1.** Students should be educated on the influence of social media on the learning process.
- **2.** Social networking sites should be expanded and new pages should be created to enhance learning activities.
- **3.** Lecturers should come up with a template on how their students can maximize the benefit of social media.
- **4.** Lecturers should ensure the use the social media as a tool to improve the teaching and learning processes.
- 5. There should be a decrease in the number of time spent by students when surfing the net.
- **6.** The student should create a balance between chit-chatting and academic activities. More attention should be directed to research.
- **7.** The use of social media networking by students should focus on the academic relevance of those sites instead of using them negative purpose.
- 8. The adequate measure should be put in place by the government and school authority to regulate their use among students and lectures
- **9.** The inclusion of Social Media in the Nigeria Certificate of Education (N.C.E) Curriculum.
- **10.** A social media policy that promotes education and learning which contains practices and realistic mechanisms of monitoring and feedback for sole purpose of the academic needs of students is highly recommended for tertiary institutions of learning in Nigeria.

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