

“I have a mobile library” Examining the Use of Social Media for Learning in Less Digitized Environment

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Abstract— In this study, we sought to extend previous studies by looking at how social media are used to promote learning efforts among undergraduates in federal universities in South-East Nigeria. To effectively implement the study, the researchers made use of descriptive survey was adopted while 600 respondents from five universities- Michael Okpara University of Agriculture, Abia State; Nnamdi Azikiwe University, Anambra State; Federal University of Ndufu, Ebonyi State; University of Nigeria Nsukka Enugu State and Federal University of Technology Owerri, Imo State- were selected through a multi-stage sampling procedure. Findings showed that social media also have a positive influence on students' learning. The implications of the results on the theory of e-learning and teaching and learning have also been discussed. Based on the result of this study, the researchers recommended, among others, that stakeholders in the education sectors should explore ways of using social media to improve the quality of teaching and learning in Nigeria.

Index Terms- negative influence, positive influence, social media and undergraduates.

I. INTRODUCTION

Revolution in information and communication technologies have significantly affected the process of knowledge acquisition and transfer. Consequently, new theories are also emerging to explain the use of ICTs for learning. This study is a practical test of the e-learning theory proposed by Aparicio, Bacao and Oliveira (2016). In an article entitled “An e-Learning theoretical framework” published in the *Education and society*, Aparicio et al. listed the three dimensions of the theory to include users, technology, and services related to e-learning. These three dimensions, when examined with regards to the use of social media, could be interpreted as; the students represent the user, the social media represent the technology while the e-learning related services stand for the learning avenues inherent in social media. The rate at which students use social media has only proved one point-stopping them may be impossible. Therefore, researchers and policymakers must adopt ways of converting students' pleasure ground into learning avenues this is more so as several studies (e.g., Fact Bound Research, 2011; Duggan, Ellison, Lampe, Lenhart & Madden,) on age distribution of social media users have pointed out that young people of schooling age utilize the social media platform the most. This perhaps is the reason much scholarly attention has

been shifted to the impact of social media on students' learning undertakings.

Social media are ways people communicate and interact online as well as the relationships that exist between networks of people. Social media also comprise activities that involve socializing and networking online using pictures, words and videos (Nwazor & Godwin-Maduiké, 2015, p. 127). According to Nwazor and Godwin-Maduiké (2015) the increasing Internet penetration among people of different age categories makes the utilization of common and even easier. In the views of Kaplan and Haenlein (2010) social media platforms describe a collection of Internet-based user applications which function solely based on the ideology of web 2.0. It is essential to add here that usually, web 2.0 allows for interactive engagement among users of social media platforms. The effective working of the social media is substantially dependent on the Internet (Nwazor & Godwin-Maduiké, 2015, p. 127). Some of the platforms that help users to network include; Facebook, Google+, hi5, Friendster, LinkedIn, Meerkat, MyLife, Ning, Periscope, Plaxo, Twitter and XING. Others that help in ideas or business promotion include; Bing, Blogging platform Discussion Boards and Forums, Google, Flickr, MySpace, Yahoo, Youtube among several others. Social media has become pervasive communication platforms among university students.

A university education is believed to aid individuals in making career choices, advancing further education, ensuring economic self-sufficiency, and fulfillment of dreams (Brady-Amoon, 2009). For decades, studies about university education have centred upon students' academic achievement (Huang, 2011) and most of the studies (e.g. Ezeah, Asogwa, & Obiorah, 2013; Nwazor & Godwin-Maduiké, 2015; Uzuegbunam 2015) have reported that social media have negative effects on students' academic performance. However, little is known about the positive impact social media have on students with regards to aiding their learning endeavour.

Learning is a coordinated and planned engagement with the sole objective of eternalising ideas. Learning is the hallmark of education as no education can take place without learning actively involved. Cummings (2002) cited in Mosha (2014) noted that learning in which students are interactive produces a far more efficient result. This goes to show that hence social media are primarily interactive, they could aid or mar learning. Dennison and Kirt (1990) noted that the learning model is made up of four elements as Do, Review, Learn and Apply. According to Dennison and Kirt the Do element shows the activity in learning, the review element demonstrates the need for reflection and evaluation, the learn element illustrates the extraction of meaning from the review

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(Learn), and apply element shows the planned use of learning in future action. See also The Institute of Education of London University (2002). In this study, the researchers look at social media from a positive perspective. The researchers made use of e-learning theory to achieve the aim of the study.

The e-Learning Theory

As stated earlier, this study is a follow-up to the e-learning theory proposed by Aparicio, Bacao and Oliveira (2016). Aparicio et al. after a review of literature came up with a theoretical framework for explaining e-learning. The e-learning theoretical framework of the trio contains the three main components of information systems. These components, according to Aparicio et al., are people, technologies, and services. The trio argued that people have interaction with e-learning systems while E-learning technologies aid the direct or indirect interaction of the different groups of users. On the other hand, technologies give support to incorporate content, ensure communication, and provide collaboration tools.

A careful examination of the holistic e-learning theoretical framework showed that the e-learning stakeholders (people) are made up of customers professional associations. The second dimension which e-learning technologies is made up of contents (communication and collaboration). The last dimension which is e-learning activities has a pedagogical model. Finally, the model has what the trio called instructional strategies which include contextualizing instruction, presenting and cuing content, activating learning processes, activation and assessing learner outcome, synthesizing and sequencing process into instructional lessons, promoting or supporting authentic learning activities, facilitating problem solving, promoting collaboration, supporting role playing, supporting multiple perspective, modeling and explaining scaffolding. Commenting on the contribution of their study. Building from this premise, our interest in this theory was to examine social media usage among undergraduates from South-East Nigeria from the perspective how it promotes e-learning. We were interested in investigating how social media tools are deployed for learning. Therefore, we raised this poser-how do undergraduates from South-East Nigerian Federal Universities use social media to promoting learning activities? This poser formed the basis of this study.

Social Media Usage among University Students

Social media platforms now play essential role in determining how young people of school age utilize their time (Aramide, Ladipo & Adepoju, 2015). In the present day society, it is gradually becoming impossible for people not to make use of one social media platforms or the other. On a daily basis, people utilize Facebook, Twitter, YOUTUBE, among others (Acar, 2008). Aramide, Ladipo and Adepoju (2015) information sharing is significantly taking place now through social media platforms. Boyd and Ellison, (2008) note that social media platforms are now critical sources of information among large number of people.

It is gradually becoming difficult to separate social media from 21st-century students. This is large because social media have come part of students such that they consider it is part of their daily activities for which they must do. In addition to helping establish and maintain interpersonal connections, studies have revealed how social media sites provide students

entering an unfamiliar social environment with the needed information to survive (Aramide et al., 2015). Scholars (Miners, 2009 Mojaye, 2015) wonder if social media could be useful as learning tools. This is because, social media platforms now serve as village squares where people meet frequently. The potential of social media to enhance information dissemination fast and in different format make them good learning tools. Social media platforms may as well as considered as mobile libraries through which relevant information can be shared. However, less attention has been paid in literature regarding the role of social media in learning. This is despite the fact that social media use has continued to increase globally.

Social Media Use and Learning outcome Undergraduates in Nigeria

The researcher examined previous studies that have examined the impact of social media on learning. The objective of doing this was to ensure that relevant empirical data are provided on the issue. The aim was also to see if previous studies have paid attention to the relevance of social media in learning. Asemah, Okpanachi, and Edegoh (2013) Conducted a study to interrogate if social media platforms have impact on learning with particular attention to undergraduates. The researchers reported that there high exposure to social media among th sample examined. They also reported that platforms have negative impact on the learning outcome of undergraduates. The researchers did not look at the positive side of social media. They concentrated only on the negative side.

Ogedebe, Emmanuel and Musa (2012) examined the use of Facebook among undergraduates. They equally looked at the impact that Facebook use has on learning. Their result showed that Facebook use has a significant negative impact on learning. The researchers, although looked at social media and learning, they only focused on the negative side. Nwazor and Godwin-Maduike (2015) paid attention to students who were enrolled to study business education from South-East Nigeria to determine the impact that social media platforms have on their learning. They made use of descriptive survey with questionnaire as the instrument for data collection. Their result showed that social media platforms have adverse effect on learning.

Finally, Asogwa, Ojih and Onojah (2015) found a similar result after they examined the impact of social media on learning. They reported that social media platforms have serious negative impact on learning. It is essential to add here that most of the studies reviewed appear to assume that social media platforms only have negative impact on learning. They did not investigate the potentials of social media as learning platforms.

II. METHODS

A cross-sectional, descriptive survey method was employed in eliciting data for this study. A survey is often a suited method for the descriptive, explanatory and exploratory purpose (Babbie, 2013; Bhattacharjee, 2012; Haralambos & Holborn, 2013) and hence this study seeks to assess the positive influence of social media on undergraduates, the survey was considered most suitable.

Area of the Study

The study was carried out in federal universities in the South-Eastern Part of Nigeria. The South-East consists of five independent states of Abia, Anambra, Ebonyi, Enugu and Imo. These five states have one federal university each namely, Michael Okpara University of Agriculture, Abia State; Nnamdi Azikiwe University, Anambra State; Federal University of Ndufu, Ebonyi State; University of Nigeria Nsukka Enugu State; Federal University of Technology Owerri, Imo State. The South-Eastern part of Nigeria comprises of five states, and it is one of the most educationally advanced regions with the highest literacy rates

when compared with other regions in the country (Agbor, 2009). Within these federal institutions, the majority of the students are from the south-east, while others are from other regions of the country including the North-West, North-East, South-South, South-West and North-Central. The federal universities in the study area have access to basic infrastructures (e.g., electricity) that allow students to utilize the social media. The schools also have wireless internet facilities thereby making it easier for students to access social media.

Table 1: Showing the population distribution of students, numbers of faculties and departments in South-East, Nigeria:

S/No	University	Population	Number of Faculties	No of Departments					
1	MOUUAU, Abia	10,707	8	40					
2	NAU, Anambra	24,476	14	86					
3	FUNAI, Ebonyi	1000	3	16					
4	UNN, Enugu	40,000	14	98					
5	FUTO, Imo	22,581	5	30					
Total	5	98,764	44	270					

At this point, the researchers adopted a probability multistage sampling technique. The reason for this is because of the unavailability of a sampling frame that contains the lists of respondents in the areas of study hence the technique is best suited for this circumstance as Babbie (2013, p. 153) succinctly averred that multi-stage cluster sampling “may be used when it’s either impossible or impractical to compile an exhaustive list of elements composing the target population.” This was a three-stage sampling approach. The researchers began the first stage by stratifying the institutions by their geographical differences, dividing the five institutions by departments. This led to five sampling frames containing the lists of departments in different institutions.

At the second stage, the researchers employed a systematic sample with a random start. Here, the researchers randomly selected one department from each frame after which every Kth (where sampling interval, $K = N/n$) elements (Department) was systematically selected. Following the selection of departments, a random sampling technique also employed to select different levels (e.g., 100 level, 200 level, 300 level and so forth). Any level that was selected served as student respondents for this research work. The reason for this sampling technique was to ensure representation and generalizability of results. Students were afterwards purposively selected from the chosen levels.

Instrument for Data Collection

A structured, self-designed questionnaire instrument of two sections was employed for this study. The reason for the choice of the structured questionnaire was to give respondents a balanced avenue to attempt questions that will generate data that is quantifiable and measurable.

Validation of Instrument

The questionnaire instrument was subjected to face validation by three experts, two in computer education and one in measurement and evaluation, all from the University of Nigeria, Nsukka. The experts were required to examine the instrument with regards to its relevance regarding items, appropriateness of contents and representativeness of the various areas of the study. The comments and observations made independently by the experts helped the researchers to modify and produce the final instrument.

Reliability of Instrument

The validated instrument was trial tested using 20 respondents. It was comprised of 4 students from 5 faculties at Enugu State University of Science and Technology, Enugu which is outside the study area. To determine the internal consistency of the instrument, Cronbach's Alpha was used in its analysis. The Cronbach Alpha value was 0.78 The Statistical Package for Social Sciences (SPSS 20.0) was employed in the analysis of data. Mean, and standard deviation were used in the analysis of data for the study. The bench mark for accepting or rejecting a statement was 2.5. This is because it was a four-point Likert scale ranging from strongly agrees to strongly disagree. The questionnaire instrument also had an open-ended question which read, how can social media be used to promote e-learning among undergraduates? The essence of this question was to find out, from the students’ perspective, how social media can become a learning ground as articulated by the e-learning theory.

Results

Out of the 600 copies of the questionnaire that were administered, 578 copies were returned and found useful.

Table 2: Use of social media for learning

S/N	Items	X	SD	Decision
1	Social media help students to engage in their studies	2.3	.056	Rejected
2	Social media helps students to get materials for their project	2.4	.078	Rejected
3	Social media helps students get educational resources from students in other environments	3.1	.068	Accepted
4	Social media helps in circulating academic updates or news among students (e.g., sharing information on home work, classes and examination)	3.4	0.89	Accepted
5	Social media helps students to buy books and other materials online.	2.8	0.90	Accepted
6	Social media serves as a field of study for students who want to undertake online survey (e.g. eliciting data on Facebook).	2.9	0.78	Accepted
7	Social media serves as a bridge between lecturers and students on purely academic matters	3.1	0.89	Accepted
8	Social media helps students access extra lectures online (e.g., downloading needed lectures on Youtube for learning)	2.8	0.78	Accepted
9	Social media helps student perform better in their writing skills (e.g., learning how to write academically on blogs)	3.2	0.67	Accepted
10	Social media use in the class encourages more participation by students	1.5	.078	Rejected
11	Social media sites increase student collaboration	2.2	0.56	Rejected
12	Academic resources can be shared quickly when using social media in the classroom	3.2	0.78	Accepted
13	Social media helps keep parents, lecturer and students all on the same page as parents and lecturers check students activities online	2.9	0.89	Accepted

The result from the table above showed that social media also has some positive impact on the academic activities of students. Based on the result, the students accepted that social media help in circulating academic updates or news among students such as sharing information on home work, classes and examination. The students also accepted that social media help them to buy books and other materials online, social media serve as field of study for students who want to undertake online survey (e.g. eliciting data on Facebook), social media serve as a bridge between lecturers and students on purely academic matters, social media help students access extra lectures online (e.g., downloading needed lectures on Youtube for learning. Social media helps the student perform better in their writing skills (e.g., learning how to write academically on blogs and finally social media help keep parents, lecturer and students all on the same page as parents and lecturers check students activities online.

Result of the Open-ended Question

The result of from the open-ended question revealed that most of the respondents in suggesting how to use social media for e-learning noted that such e-learning efforts must incorporate both texts and video materials. The responses of the respondents have been presented in three broad themes as (a) uploading learning texts manual on social media (b) Up loading a video on YouTube (c) Creating internet classes through group chats. The researchers further discussed these themes below:

Up Loading Manual Texts

Most of the respondents in their responses noted that dedicated social media like Google+ would help in promoting e-learning. The respondents in this suggestion reported that lecturers should circulate information in this regards and advice their students to create Google+ accounts from where learning materials will be circulated to students. One of the respondents writes:

It will go a very long way in promoting e-learning if Google+, for example, is used to circulate learning materials. Students will then be encouraged to visit Google+ and get their learning materials and read. There should also be an option for students to submit their assignment through this medium.

It was also found that the respondents reported that as a way of encouraging students to engage in sourcing for materials from the dedicated social media, lecturers should minimize giving out hard copies of materials circulated through the social media.

Uploading video on YouTube

It was also found that the respondents reported that video lectures should be up loaded through the YouTube from where students should be encouraged to download and watch. It was found that the respondents reported that lectures on YouTube should be simplified such that learners can easily understand. A respondent wrote:

Lectures up loaded on YouTube can serve students even more than the one in the physical class room because the learners have the chance of watching the same lecture for as many times as possible, unlike the fleeting one in the class room.

Other respondents simply wrote with regards to YouTube: 'Lectures on YouTube will be perfect,' 'Visual lectures will be okay,' 'Up loading lectures on YouTube will aid

e-learning' among others. Most of the comments in this regards were mainly saying the same thing-encouraging e-learning through YouTube.

Creating Internet Classes through Group Chats

The respondents reported that online group chats could greatly promote e-learning among students. In this regards, most of the respondents were quick to mention Facebook as a viable option. Names like 'Facebook class,' 'internet class,' 'Online classes among others were suggested by the respondents to christen the e-learning group chat. The result showed that the respondents were of the view that internet classes can be held with the lecturer giving out instructions while the students are also allowed to ask questions where applicable. A respondent wrote:

Lecturing through group chats will be effective because one of our lecturers tried it when we were in our second year, and the outcome was encouraging. He was on sabbatical but was given a course to teach. Hence, he decided that the lectures would hold on Facebook. A group chat named 'Mac 202 lectures' was created for the class and classes were holding every Saturday from 10 am -12 none: The experience was awesome, and most students performed well in the course.

The comment above is very relevant because it has provided insight into the importance of converting students' entertainment ground into an e-learning avenue.

III. Discussion of Findings

The findings of this study suggest that social media also have some positive impacts on students learning exercise. The result of this study runs contrary to that of Nwazor and Godwin-Maduike (2015) who reported that 73% of the respondents were found to have indicated that the use of Facebook negatively influences their academic performance. The result is also inconsistent with that of Asemah, Okpanachi, and Edegoh (2013) who found that the use of social media negatively influences students' academic performance. With regards to the result of this study, the researchers argue that although social media have their negative part, they could also to use to promote good academic performance among students. This result has implications on efforts aimed at improving the quality of teaching and learning in Nigeria. It is hoped the curriculum planners will find the result of this study useful in considering ways of including social media as part of the learning tools. Hence it has become clear that undergraduates in particular and students, in general, can hardly do without social media, we argued that teachers and other stakeholders in the education sectors should incorporate social media into their teaching strategies as a way of motivating learning and reducing the perceived negative influence of social media. Also, school administrators who are interested in implementing new teaching methods like distance learning, collaborative learning, and computer-mediated learning will also leverage on this result.

Implications of the Results on the e-learning Theory

The result of this study has implications on the e-learning theory as proposed by Aparicio, Bacao and Oliveira (2016). Hence the result showed that social media serve the e-learning purpose, it runs similar to the three dimensions of the e-learning theory. Specifically, the aspect of the result

which showed that students use social media for academic purposes runs similar to the first dimension which posits that the e-learning stakeholders (people) such as students. What this means is that undergraduates from South-East Nigeria are critical stakeholders in the considering the adoption of e-learning through the social media. Therefore, efforts at implementing e-learning in Nigeria should incorporate social media.

Secondly, the result has implications on the second dimension of the e-learning theory because which notes that e-learning technologies is made up of contents like document, digital audio and video, authoring tools, visualization tools, knowledge repositories, journal/newsletter, learner web, post area, web link manager, audio and video capturing, edutainment content, search engine, learner online, glossary and assessment and communication like discussion area, chat, forum, social network, email, synchronous communication among others. Specifically, this dimension is related to the aspect of our findings which suggest that social media serve as a source of academic information sharing among undergraduates. What this means is that social media can actively promote the transfer of knowledge among students.

Finally, the result has implication on the third dimension which posits that is e-learning activities have a pedagogical model like open learning, distribution learning, learning communities among others. This is evidenced in the narration of the respondents who reported how their lecturer once used social media chat group as a teaching and learning ground.

IV. CONCLUSION/ RECOMMENDATIONS

Based on the result of this study, the researchers conclude that even though previous studies have shown that social media have negative effects on the academic performance of students, social media could also be used for positive academic activities. The researcher, therefore, makes the following recommendations:

- Stake holders in the education sector should adopt ways of positively using social media to promote academic activities.
- Students should make sure that their engagement in social media serves their academic purposes for which they are in school.
- Further studies should be conducted to find out the appropriate strategies to be deployed in using social media to promote academic activities.

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