## **Integrating Social Media in Nigerian University Education: Prospects and Constraints**

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#### **Abstract**

Social media have become significant part of life of most young people especially those in universities. The media are used for different purposes mostly for social interaction. The main purpose of this paper is to examine how social media platforms can be formally used in teaching and learning in the university education system in Nigeria. Anchored on Technology Acceptance Model (TAM), the paper adopts qualitative research approach. Data were sourced from existing works and semi structured interviews. The population frame of the study includes lecturers and students of the department of mass communication, Nnamdi Azikiwe University Awka. Results revealed that social media are valuable tools for education as they encourage collaborative and cooperative learning among students and lecturers but issues of low social media literacy among older lecturers, online security threat, poor network, distractive tendencies and addiction pose serious challenges to adoption of the media for teaching and learning in universities in Nigeria. Among others, the study recommends that lecturers need to acquire and or update social media knowledge and operational skills while management of universities in Nigeria are called upon to make or improve the provision of free and effective wireless network to lecturers and students.

**Keywords:** Constraint, Education, Integrating, Prospects and Social Media

### Introduction

There has been explosive growth in the number and use of social media sites like Facebook, Twitter, Youtube and WhatsApp among young people globally. The Pew Research Center (2015) reports that, 92% of young people within 18-29 years age group use some form of social media on a daily basis. Some scholars like Prensky (2001) have classified people into Net Generation, I Generation and X Generation. "Net Generation" is those born between 1980 and 1989, "I Generation" refers to those born between 1990 and 1999 while "Generation X" are those born between 1965 and 1979. Research has shown that an average undergraduate student in Nigeria is within the age of 18-30 (Adum, Ekwugha, Ojiakor and Ebeze, 2016; Shadrach, 2016; Anasi, 2006 and Ani, 2010). Thus, students in universities across the nation fall into the "Net" and "I" Generations, generations that function best when networked (Prensky, 2001).

Based on this idea, it is logical to suggest that in order for university education in Nigeria to be more effective there is dire need of integrating social media like Facebook, WhatsApp, Twitter and Youtube into teaching and learning process. Mark Taylor in Lane and Lewis (2013) captures this truth when he observed that, this generation of university study is different from any generation of higher education of time past. Taylor, according to Lane and Lewis, further reveal

that there is ample evidence of a growing divide and mismatch between faculties [Lecturers] and students in teaching and learning as few schools and lecturers are making effort to leverage

students' digital preferences. Stanciu, Mihai and Aleea (2012) and Blair and Serafini (2014) concur that due to the continuous increase of using new communication technologies among students in everyday life, the implementation of these technologies in learning activities becomes a necessity.

Over the years, there has been emphasis on the role that technology can play to harness effective learning. Thus, e-learning principles have attracted the attention of university managements around the world. The provision of internet connection and corresponding technologies like projectors, desktops/laptops and some software were noticed in many Nigerian schools as lecturers were also trained in the use of these gadgets. In some schools, lecturers and students were loaned laptops while internet subscription was deduced from the lecturers' salaries while students' school fees was increased to cover internet subscription fee. This initiative to some extent minimized the poor computer literacy among university lecturers and students in Nigeria. It has lessened and fastened research as well as connected academics and students to global colleagues as such exposed them to large repertoire of information and knowledge. However, the initiative does not keep the pace with innovations particularly the social media, which are very popular, constantly evolving and always appealing and accessed by most students.

Using social media in formal education system like university is no longer an option or a cause of disagreement but an exigency. According to McGraw-Hill President of Higher Education, Brian Kibby as cited by Kim (2012), "Studying effectively and with the right type of technology is one of the best ways to ensure that students succeed..." So far, social media seem to be one of these right technologies that can be explored for effective university education because students are more comfortable and conversant with the social media. Stanciu, Mihai and Aleca (2012) have stressed that, "The technology savvy student's of this decade not only expect the use of social media, they seek it out... educators need to become as savvy as their students".

Higher Education teaching practices have evolved over the last twenty years, with more emphasis on student-centered pedagogy or interactive learning. With the manner social media are being embraced by students daily and the opportunities for interaction that abide in the media, their (social media) integration in higher education precisely university education is cardinal if not, there would remain a disconnect between our ambition for interactive learning and the realities of our practice. Nevertheless, the question is— how can social media be fuse into formal education considering the fact that the media have been subject to much debate and criticism. Whilst growing numbers of educators celebrate the potential of social networking to (re)engage learners with their studies, others fear that such applications compromise and disrupt young people's engagement with "traditional" education provision. Despite this carping views against social media, the media are consistently being adopted among students thereby posing a serious task before education policymakers at tertiary level like university. The 2008 Horizon Report states that, "...the challenge faced by the educational community is to seize those opportunities [for use of social networking and other collaborative tools] and develop effective ways to measure academic progress as it happens".

Certainly, there is a well-developed body of literature that supports informal learning via social media. Researchers have analyzed interaction that has taken place in social networking sites and have identified sharing of ideas, providing of peer feedback, and engagement in critical thinking as the aftermath of using social media in learning process (Selwyn, 2007). However, academic discussion and debate on integrating social media in formal education remains largely

speculative rather than well informed and certain. Only minute studies and mainly from developed nations attempted to report specific learning gains and benefits from social media as formal tools in learning environments. In Nigeria, studies about social media mostly focus on use pattern, purpose of use, type of social media use, challenges of use and time spent on the media. Thus, there exists a gap in literature regarding social media and university education in the country. Against this backdrop, this study investigates how social media can be integrated into university education system in Nigeria as well as the benefits and challenges therein.

#### **Theoretical Framework**

This study is premised on Technology Acceptance Model (TAM). The theory was propounded by Fred Davis in 1986 to explain why people accept or reject particular technology (Davis, 1989). According to Davies, there are two factors that may lead to adoption or rejection of any new technological innovation. These factors are "perceived usefulness of the technology" and "ease of use of the technology". Perceived usefulness (PU) is the degree to which a person believes that using a particular device would enhance his or her job performance while perceived ease-of-use (PEOU) is the degree to which a person believes that using a particular device would be free from effort or has less effort.

TAM has been widely criticized, leading to expanded versions of the model called TAM 2 (Davies, Bagozzi and Warsaw 1992). The model is criticized for limited explanatory and predictive power, triviality, and lack of practical value (Chuttur 2009). Furthermore, Lunceford in Bagozzi (2007)have argued that the framework of perceived usefulness and ease of use overlooks other issues, such as cost and structural imperatives that force users into adopting or rejecting a particular technology. Despite the criticisms above, the model (TAM) remains relevant in explaining technology adoption and/or use. This is because the theory encompasses elements from theories like uses and gratification by Katz, Blumler and Gurevitch (1973), and ACE (Accessibility, Control and Excitement) model by Wu, Tao and Yang, (2008) which are established theories often use to explain use of technology. In addition, Lee, Cheung and Chen (2005) suggested that TAM is a solid and valid theoretical model to apply in explaining use of technology among students. It is based on these beliefs that the model fits the current study in that, the perceived usefulness of integrating social media into university education as well as the perceived easiness of the media such as portability, flexibility, affordability and interactivity will be brought to fore as key to adoption of social media in university education system in Nigeria.

### **Empirical Review of Literature**

Interest in social media as tools for teaching, learning and research has inspired diverse researchers. A Survey Research Group in collaboration with New Marketing Labs and the education-consulting group Pearson Learning Solutions in America drew samples from almost 1,000 colleges and university lecturers which revealed that more than 80 percent of professors were using social media in some capacity and more than half used these tools as part of their teaching. The survey noted that 30 percent were using social networks to communicate with students while more than 52 percent were using online videos, podcasts, blogs, and wikis during class time. It was also found that older faculty (those teaching 20 years or more) used social media at almost the same level as their younger peers (Blankenship, 2011). This implies that there is great

adoption of social media among academics particularly in developed nations. This might not be the case in developing countries like Nigeria.

Earlier, Lockyer and Bennett (2006) conducted a longitudinal study that used experimental approach to examine social media and experience in a formal education context among postgraduate students and lecturers in Regional Australian University during the 2007 academic year. A course, "Network-based learning" that has been part of the postgraduate studies in the school with particular focus on how education can be supported by the use of web-based and other networked technologies was used for the study. The course was delivered fully online for 13-week semester to twelve (12) registered students using a range of tools such as live chat, discussion forums and wikis as well as tools like Facebook and Flickr. At the end of the semester, students completed three main assessment tasks in which they analyzed the network-based learning and the weekly online class activities. Participants did not only report the potential of social media to provide deeper engagement in the topic but also identified challenges related to literacy among teachers and learners.

In another study, Shen and Eder (2009) examined students' intentions to use the virtual world Second Life (SL) for education, and explored factors associated with their intentions. "Second Life is a three dimensional (3D) electronic environment where members can socialize, hold virtual meetings, or conduct economic transactions. Survey was conducted among business school students who participated in Second Life in upper level MIS courses. Results suggested that perceived ease of use affects user's intention to adopt SL and Computer self-efficacy and computer playfulness are significant antecedents to perceived ease of use of virtual worlds. This implies that the perceived advantages and easiness of new media technology is a motivation for the integration of the media in higher education environment.

Another study by Li and Pitts (2009) interrogated the use of virtual office hours as a medium for students to communicate with their professors using Facebook and Instant messaging (IM) Apps. Participants in the study included both "traditional" and "nontraditional" undergraduate students enrolled in MIS courses at a public U.S. university in the southeast. The findings suggested that students' use of virtual office hours is not significantly different from their use of traditional office hours; however, participants in classes that offered virtual office hours reported higher levels of satisfaction with office hours than students in classes that offered only traditional face-to-face office hours. Implicatively, the study showed insight to some benefits of integrating social media in formal learning environment.

In addition, Selwyn (2009) presented an in-depth qualitative analysis of the "Facebook" "wall" activity of 909 undergraduate students in a UK university. Analysis of these data showed how much of students' education related use of this social networking application was based around either the "post-hoc" critiquing of learning experiences and events, the exchange of logistical or factual information about teaching and assessment requirements. Others were supplication and moral support about assessment or learning, or the promotion of oneself as academically incompetent and/or disengaged. With these themes in mind, the paper concluded that rather than necessarily enhancing or eroding students' "front-stage" engagement with their formal studies, Facebook use must be seen as being situated within the "identity politics" of being a student. In particular, "Facebook" appears to provide a ready space where the "role conflict" that

students often experience in their relationships with university work, teaching staff, academic conventions and expectations can be worked through in a relatively closed "backstage" area."

Furthermore, Junco, Heiberger and Loken (2010) carried out semester-long experimental study in South Dakota State University, to determine if using Twitter for educationally relevant purposes can affect college student engagement and grades. A total of 125 students taking a first year seminar course for pre-health professional majors participated in the study (70 in the experimental group and 55 in the control group). With the experimental group, Twitter was used for various types of academic and co-curricular discussions. Engagement was quantified by using a 19-item scale based on the National Survey of Student Engagement. The researchers also conducted content analyses of samples of Twitter exchanges. The ANOVA results showed that the experimental group had a significantly greater increase in engagement than the control group, as well as higher semester grade point averages. Analyses of Twitter communications showed that students and faculties were both highly engaged in the learning process in ways that transcended traditional classroom activities. This study provides experimental evidence that Twitter can be used as an educational tool to help engage students and to mobilize faculty into a more active and participatory role.

Additionally, Irvin, Ball and Desbrow (2012) examined students' perceptions of using 'Facebook pages' within individual university (Griffith University and University of Queensland). Individual "Facebook pages" were developed for four university courses and used to provide information relevant to the courses and allow opportunities for students' interaction. Earlier an initial questionnaire was administered in the first lecture of the semester and the instrument indicated that nearly all students (n=161, 93.1%) possessed an active Facebook account. Most students (n=135, 78.0%) anticipated that a Facebook page would facilitate their learning, by increased interaction with other students and instructors, and notifications for course information. A second questionnaire was completed in the final lecture of the semester indicating that 81.9% of students engaged with the course Facebook page at some stage. However, perceptions of the effectiveness of the page as a learning tool were variable, with only 51% of students stating that it was effective. Despite this, the majority of students (n=110, 76.4%) recommended using Facebook in future courses.

Similarly, Stanciu, Mihai and Aleca (2012) in a study about the impact of social networks on educational process in Romanian higher education, employing a theoretical framework regarding the educational value of the social networking web sites, proposed a model of implementing Facebook usage in higher education leaning processes. Data were gathered through survey on students and academics at the Bucharest Academy of Economic Studies. Results revealed that social networking sites have become very popular among students and might be considered as valuable tools for education. By implication these studies suggest that social media have the potential to promote collaborative and cooperative learning and open a wide perspective on students' availability to use social networking sites but fail to adequately show how such technologies can be integrated. Thus, further research is required to understand if and how the media can enhance learning outcomes.

In another related study, Kimberly and Dede (2013) investigated the integration of social media in an Online Graduate Youth Development Course in North Carolina State University, United States of America. Data were collected through interviews, a course reflection paper, and

open-ended survey questions. Results showed that although few students entered with strong technology skills, they left with new abilities and strong attitudes about the importance of using social media in their professional roles. This reinforces the fact that students are interested and willing to learn new skills and ideas as long as social media are adopted as learning tools.

Roebuck, Samia Siha and Bell (2013) conducted a survey on the perceptions of professors using social media in the classroom, what kinds of mobile devices are used to access the social media, and what drives individuals to use them. In addition, it tries to identify the advantages and concerns faculties have with the use of social media for classroom instruction. Professors, regardless of sex or rank, held statistically the same views of the advantages as well as the concerns related to social media usage in the classroom. The advantages include students feedback from multiple sources, more engaged students, information sharing, stronger classroom community, higher quality student collaborative work, discussion opportunities, improved creativity, and preparation for the work environment, while the concerns shared by the respondents include monitoring, liability, a need for institutional approach, overabundance of information, and time intensive.

In the same vein, Holotescu and Gabriela (2013) studied how social media are perceived and use in Romanian higher education. The study sought answers to the following questions: How do lecturers use social media as reflective and collaborative teaching and learning tools for research and professional development, what are the potential benefits, challenges, and disadvantages in using social media in universities? They study also wanted to if there was a need for training the educational actors in this topic? The researchers developed and applied an online questionnaire for scholars from different universities and colleges from Romania. Findings revealed an increasing use of social media by educational actors in Romania but only a few universities have adopted coherent strategies and policies for pedagogical integration of social media and development as the best methods for teaching and learning based on these strategies. This implies a need for further research like the current one.

As can be seen above, there are several studies already conducted on use of social media technologies in higher education, however, studies up to this point have not made detail explanation on how social media technologies can be adopted into university education system. More specifically, most of the studies that attempted to examine social media as tools for educational intervention are from developed nations with wider forms of social media, powerful network service, better economy and literacy level compared to Africa and Nigeria in particular. Thus, the findings of these studies and their implementing in the Nigerian system may not yield the needed results. Therefore, there is need to domesticate such studies to fit into the Nigerian educational landscape and scenario. The current study is an effort toward actualizing such noted gap.

## **Research Methodology**

This study adopted qualitative approach based on the use of both primary and secondary data. Secondary data were gathered from internet sources (journals) and conventional books while primary data were generated from online interviews with 9 lecturers of department of mass communication, Nnamdi Azikiwe University, Awka and online group discussion among the 26 registered students of 2015/2016 Master of Science (M.Sc.) programme of the same university

(Nnamdi Azikiwe University, Awka) and department (Mass communication). The lecturers were sent interview questions via whatsapp chat to illicit information about their opinion regarding integration of social media in teaching and learning in university system in Nigeria. Similarly, items soliciting information from the students regarding the subject matter were posted in the Whatsapp group chat of the class and the students were asked to respond. Nineteen (19) out of the twenty-six (26) registered students and members of the group chat responded. Data collected were summarized and analyzed thematically.

#### **Presentation of Interview Results**

It was discovered that social media are powerful tools that can be used to share relevant course material. One academics interviewed puts it this way, "links, photos or multimedia content related to specific subjects can be made available to students within seconds through social media." According to him, social media tools can be used to share resources, promote brainstorming, extend class discussion and promote student sense of community. For example, students could be assigned to create their own customized reading lists on particular topics. An educator may use Twitter to create and update their class reading or news lists. Interestingly, social media gives lecturers the opportunity to share every form of message be it video, audio, written text, animation and images. With Youtube, for instance, a lecturer can create succinct and powerful video presentation and send it to students to watch and learn from it especially when the lecturer is not around or is out of the country. Thus, with social media, "plethora of useful contents and links to relevant materials like posting bibliographical notes or hyperlinks is possible". Supporting this position, another lecturer interviewed states that: "as an academic tool, social media can be used to enhance online studies where people take classes without practically or physically meeting under a roof". Another lecturer said, social media can be used to track and study feedbacks about particular subject or class, area of difficulty, delivery style among others. According to him, with such feedbacks, the lecturer would improve delivery as well as clarify difficult concepts by providing additional examples. However, lecturers interviewed were of the opinion that social media have some weaknesses that might put the whole learning process at risk. They majorly identify issue of distraction, low ICT literacy among most of them and dearth of ICT infrastructures as key issues that will mitigate effective integration of social media in university education system in Nigeria.

Most students that contributed during the online discussion for this study explained that social media could be used in publishing news on lecture schedules, tests, exams and seminars among others. They said the media could also be used in tracking news about books, journals or treaties available in the libraries within and outside the school. Another student particularly said that, "Whatsapp group chat remains the best channel of informing classmates about all that need to be known; on such a platform, the message gets faster and since most students always log to their Whatsapp, the message gets to almost all at very cheap cost. The student went ahead to say that to him, a class without official Whatsapp group chat would have information crisis." Similarly, students identified social media as ideal venues of meeting to discuss issues bothering them as a class while everyone, according to them, is at his or her comfort making useful contribution. However, the students also suggested some likely problems associated with social media in educational system in Nigeria. Most of them argued that poor internet service in most Nigeria University and negative perception toward social media among older generation and lecturers would not allow effective integration of the media into the Nigerian University system.

Furthermore, one of the students posits that "...online security threat, invasion of privacy and information overload are problems that must be dealt with while integrating social media into teaching and learning process..."

## Findings of the Study

One major advantage of social media tools, which has been reported many times in the research, is the creation of community where students and lecturers can meet for academic purposes. Social media foster communication, engagement, and collaboration (Hung and Yuen, 2010; Junco, Heiberger, and Loken, 2011). A community can be created locally for a particular class, beyond the boundary of a single classroom, for the university, or even beyond the campus using a virtual world. Hence, use of social media tools complement face-to-face classes enhance learning and engagement particularly among students. While some introverted students may find it difficult to participate in face-to-face classes, they may be more comfortable posting comments and thoughts to special groups on Facebook or any other social medium. It was observed from the data generated that most lecturers are adamant about the benefits of social media integration in university education unlike the students. To most of the students, social media are beneficial because they can give them access to lecturer during off days or when dealing with lecturers that are not always accessible face-to-face manner. Previously, Lockyer and Benneth (2008) emphasize that social networking sites provide support for collaborative learning. Users of social networking sites can join study groups corresponding to a certain school, class or group they belong to and can share educational resources and knowledge in an easier way.

# Challenges of Adoption of Social Media in University Education

Despite their viability, social media are not without some weaknesses. Since their emergence, social media have been attracting pessimistic views from different quarters. Discourse on their (Social media) adoption as tools for higher education only reinforces most of the pessimistic views against social media use. from the data gathered in this study, both students and lecturers identified series of challenges associated with social media as tools for higher education but it is important to bring to fore that lecturers who commented are more pessimistic on their views against social media than students. The lecturers do not think that social media are useful tools of learning as they provide only superficial contact with peers/staff and can detract them from essential skills which should be developed in Higher Education such as formal academic writing, verbal communication, self -awareness and reflection on the learning experience. This supports the explanation given by Odii (2013) that with all its gains like connectivity, interactivity, exclusivity, alertness and all that; the social media have, the media have downsides, it can pollute language skills especially writing skills of the students.

Other challenges found include poor internet connection, issue of privacy and security. It was discovered that many people do not like to make their details like phone numbers, names, location among others open online due to security reasons because of activities of fraudsters. All these are factors believed could affect adoption of social media in University education in Nigeria. This supports the opinion of Agbawe (2018) that privacy issues and opportunities for misunderstanding and miscommunication are high in social media. Furthermore, the problem of addiction is also discovered to be associated with the use of social media. It was argued that

integrating social media into university educational system would reinforce the problem of computer addiction.

# **Prospects of Social Media in University Education**

Respondents in this study and many scholars have argued that much as the social media have some serious lacunas, the media, no doubt, provided a plethora of opportunities for transforming university education system through interactive information exchange. Thus, social media provide an unlimited gateway to educational advancement of Nigeria university system as the ultimate interactive environment that would move from a teacher-centred approach to learning to a learner-centered approach. This implies that with social media technologies integrated into the university education across Nigeria, students would have better opportunities to take their learning experience outside the classroom and rather than dwelling on the social utilization of the media, the media would then become active and interesting learning supplement. That is why Oluwalanu, Adelabu and Okunade (2014) have argued that using social media among students for learning leads to development of a positive attitude towards using technology systems. This implies that the problematic use of computer and social media which has been an issue of concern today can be mitigated if there are effective educational designs that can enhance the use of social media in Nigerian universities.

### **Conclusion**

It has been established in this study that, the world today is a global village; distance is not a barrier in people's engagement across the globe and nations. This is made possible by the internet and its corresponding features such as social media. Social media have continued to serve as platforms for all sort of interaction among people. Based on these realities and findings of the study, there is no doubt that social media technologies like Facebook, Twitter Whatsapp have great prospects in promoting higher education in Nigeria through provision of effective channels of interaction and learning between learners and teachers and among the learners as it is in developed communities like United states, Canada, China and host of others. However, it is important to note that, the perceived usefulness of social media in higher education in Nigeria is accompanied by some technical, financial, legal and literacy challenges. What this implies is that as educators and students are encouraged to embrace social media networks to leverage engagement, appropriate cautions and limitations need to be considered while the scientific world continue to investigate better ways in which our tertiary institutions in Nigeria can adopt social media as tools of learning.

#### Recommendations

- i. Social media platforms officially created for course purposes should be guided by certain rules that will regulate excessive posting of materials that are not needful especially among students. The platforms should not be used for personal discussions. A student that wants to discuss a personal matter with a colleague or his lecturer should use personal inbox.
- ii. Students should be taught how to regulate addiction to computer (social media). This calls for parents, teachers, media and guidance to brace up in their responsibility toward their children.
- iii. One serious challenge identified is low level of social media literacy among adult lecturers. As of now, the students are more literate than their lecturers in terms of social media usage. Though, several studies associated the age issue as one of the factors limiting lecturers use of social media, lecturers especially older ones should enrol into new media coaching classes or trainings in order to learn how to create teaching contents like Youtube tutorial, course blogs, and other relevant sites that can be used for academic purposes.
- iv. Government should improve power supply and as well make legislations that will compel telecommunication companies to introduce cheaper data plan and stable network service affordable to students.
- v. In the same manner, managements of universities should make access to wireless network within school free to registered students

## References

- Adum, A.N., Ekwugha, U.P., Ojiakor, O.E. and Ebeze, U.V. (2016). Screen time, health implications and university students' awareness in Nigeria. *International Journal of Communication and Media Science*, 3 (3).
- Agbawe, M. (2018). Challenges and Prospects of Social Media on Digital Natives: The Case of Nigeria. *Journal of information and knowledge management*, 9 (3): 18-32.
- Anasi, S. (2006). Study on internet use pattern of undergraduate students at Universities of Lagos. University of Dar es Salaam Library Journal 8 (1 & 2) 1-15. Retrieved 23rd June 2016 from http://www.ajol.info/index.php/udslj/article/view/26643.
- Ani, O. E. (2010). Internet access and use: A study of undergraduate students in three Nigerian Universities. Electronic library 28(4) 555-567. Retrieved 23 June 2016 from http://www.emeraldinsight.com/journals.htm?articleid=1878368.
- Bagozzi, R.P. (2007). The legacy of technology acceptance model and a proposal for a paradigm shift. *Journal of the Association of Information System*, 8 (4): 244-254.
- Blair, R. and Serafini, T. (2014). Integration of education: Using social media networks to Engage Students. *Systemics, Cybernetics and Informatics*, 12 (6).
- Blankenship, M. (2011). How social media can and should impact higher education. *Education Digest*, 76(7):39-42.

- Chuttur, M.Y. (2009). Overwiew of the technology acceptance model: Origin development and future directions. *Working paper on information systems*, 9 (37):237-246.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13 (3): 319–340.
- Davis, F.D., Bagozzi, R.P.and Warsaw, P.R (1992). "Extrinsic and intrinsic motivation to use computer in the workplace". *Journal of Applied Social Psychology*, 22 (1):1111-1132.
- Dunn, L.A (2014). Teaching In Higher Education: Can Social Media Enhance The Learning Experience? Interdisciplinary Science Education, Technologies and Learning The University of Glasgow.
- Holotescu, C. and Gabriela, G. (2013). Social media challenges for academia. Available at: http://www.researchgate.net/publications/236015974
- Hung, H. and Yuen, S.C. (2010). Educational use of social media networking technology inhigher education, *Teaching in Higher Education*, 15(6):703-714.
- Irvin, C. Ball, L. and Desbrow, B. (2012). Students perception of using facebook as an interactivelearning resources at the university. *Australasian Journal of Education Technology*, 28 (7): 1221-1232.
- Junco, R., Heiberger, G. and Loken, E. (2011). The effect of Twitter on college studentengagement and grades. *Journal of Computer Assisted Learning*, 27(2): 119-132.
- Katz, E., Gurevitch, M. and Gurevitch, H. (1973). On the use of the mass media for important things. *American Sociological Review*, *38*, 166-167.
- Kim, J. (21<sup>st</sup> October, 2012). "7 questions McGraw Hill's Brian Kibby". Available at:https://www.insidehighered.com/blogs/technology-and-learning/7questions/mcgraw-hills-brian-kibby
- Kimberly A. & Dede, N. (2013). A Case Study on Integrating social media in an onlineGraduate Youth Development Course. *MERLOTJournal of Online Learning and Teaching* 9, (4).
- Lane, S.D. and Lewis, T.N. (2013). "The digital divide" Social media and education-related outcomes. *The Online Journal of New Horizons in Education*, 3 (2):39-49.
- Lee, M., Cheung, C. and Chen, Z. (2005). Acceptance of internet-based learning medium. The role of extrinsic and intrinsic motivation. *Information & Management*, 42 (8), 1095-1104.
- Li, L. and Pitts, J. P. (2009). Does It Really Matter? Using Virtual Office Hours to Enhance Student-Faculty Interaction. *Journal of Information Systems Education*, 20 (2),175-185.
- Lockyer, L. and Bennett, S. (2006). Understanding roles within technology supported teaching and learning: Implications for students, staff and institutions., in Technology Supported

- Learning and Teaching: A Staff Perspective. J. O'Donoghue, S.Editor. 2006, Information Science Publishing: Hershey, PA.
- Odii, C. (2013), Social Media. In N. Okoro (ed), *Contemporary Readings in Media and Communication Studies* (pp.161-173). Lagos: St. Benedette Publishers Ltd.
- Oluwalanu, S.B., Adelabu, O. and Okunade, J. (2014). Adapting social media for formal learning in Nigeria: Challenges and prospects *Arabian Journal of Business and Management Review*, 3(9).
- Pew Research Center (2015). "Social media usage 2005-2015". Available at: https://www.pewinternet.org/2015/10/08/social-networking-usage-2005-2015/
- Prensky, M. (2001). Digital natives, digital immigrants. On the Horizon, 9(5), 1-6.
- Roebuck, D.B. and Siha, S. (2013). Faculty usage of social media and mobile devices: Analysis of advantages and concerns. *Interdisciplinary Journal of E-Learning and Learning*, 9 (1).
- Selwyn, N. (2007). Web 2.0 applications as alternative environments for informal learning acritical review in Background paper for the CERI-KERIS International ExpertMeeting on ICT and Educational Performance. 2007. ChejuNational University: South Korea.
- Selwyn, N. (2009). The digital native myth and reality. *Aslib Proceedings: New Information Perspectives*, 61(4), 364-369, http://www.educationarean.com/pdf/sample/sample-essay-Selwyn.pdf.
- Shadrach, I. (2016). "Screen time, risks awareness and perception among undergraduate students in Northeast, Nigeria". A work submitted to Postgraduate Studies Unit, Mass Communication Department, Nnamdi Azikiwe University, Awka, in partial fulfillment of the requirements of the course: Quantitative Research Method (MAC 841).
- Shen, J. and Eder, L. B. (2009). Intentions to Use Virtual Worlds for Education. *Journal of Information Systems Education*, 20 (2): 225-234.
- Stanciu, A. Mihai, F.and Aleca, O. (2012). Social Networking as an Alternative Environment For Education. *Accounting and Management Information Systems* 11, (1):56–75.
- The 2008 Horizon Report: New media consortium. Available at http://www.horizonreport-2008-
- Wu, Y.L. Tao, Y.H. and Yang, P.C. (2008). The Use of Unified of Acceptance and Use of Technology to Confer the Behavioural Model of 3G Telecommunication Use. *Journal ofStatistics and Management* (online), 11(5):919-949. Available WWW .http://search.ebcohost.com