

ASEAN Journal of Science and Engineering Education



Journal homepage: http://ejournal.upi.edu/index.php/AJSEE/

Perception of Undergraduate Students on the Utilization of Social Media to Enhance Learning in University of Ilorin

Gboyega Ayodeji Aladesusi^{1,*}, Ahmed Idris Issa¹, Sunday Oluwasegun Abodunrin², Oluwarotimi Ayodele Boris¹, Ebenezer Omolafe Babalola¹, Kehinde Muritala Nuhu¹

¹Department of Educational Technology, Faculty of Education, University of Ilorin, Ilorin Nigeria

²Department of Mathematics, Faculty of Applied Sciences, Nigerian Army University Biu, Bornu State, Nigeria

Correspondence: E-mail: aladesusigboyega@gmail.com

ABSTRACTS

The objective of this study was to (i) investigate the available social media used by undergraduates for Learning, (ii) examine frequency of utilization of social media to facilitate learning, and (iii) examine undergraduates' perception of the use of social media to facilitate learning. The study employed descriptive research of the survey type to elicit responses from 258 undergraduates. The research questions were answered considering independent t-test statistics. The results indicated that (i) majority of the social media available and adequate within the university, (ii) social media frequently used to enhance learning, (iii) a positive perception towards the use of social media in instruction, and (iv) no significant difference between male and female students in the frequency of use of social media and students' perception on the use of social media for learning. Undergraduate students should adopt the use of social media for learning since this technology is useful for learning. Seminars, workshops, and conferences should be organized for male and female undergraduates on the usefulness of social media for learning since it is no gender bias.

ARTICLE INFO

Article History:

Submitted/Received 18 Jul 2021 First revised 25 Aug 2021 Accepted 31 Aug 2021 First available online 04 Sep 2021 Publication date 01 Dec 2021

Keyword:

Gender, ICT, Perception, Social media, Utilization.

© 2021 Universitas Pendidikan Indonesia

1. INTRODUCTION

Information and Communication Technologies (ICT), including computer applications, mobile technology, or recording and communication systems, have become essential and highly relevant items in teaching. Educational systems around the world are becoming increasingly pressured to apply the new ICT tools to their curriculum to provide students with the knowledge and skills that they need in the 21st century (Hue & Ab Jalil, 2013). Over the past decades, governments and education systems around the world regard the use of information and communications technologies as an important issue for improving the effectiveness of teaching and learning. Information Communication Technology (ICT) has the potential: of accelerating, enriching and deepening skills; motivating and engaging students in learning, of helping to relate school experience to work. In addition, of helping to create economic viability for tomorrows' workers; contributing to the total development of institutions; strengthening teaching and learning, and provide opportunities for connection between the school and world (Bakare & Olaniyi, 2017). Alam, (2016) stated that ICTs in higher education have propounded implications for the whole education process ranging from investment to the use of technologies in dealing with issues of access, equity, management, efficiency, pedagogy, quality research, and innovation.

Abbdulrahman and Soetan, (2018) noted that ICT is the use of scientific tools and techniques for developing, documenting, and communicating information for solving problems or providing needed services in various areas of human endeavor. In addition, ICT is a collection of technologies used for collecting, storing, processing, communicating, and delivery of information connected with the teaching and learning processes (Ogunlade & Anaza, 2017). Information and Communication Technology (ICT) accessibility is a top national objective in Nigeria as stated in the National Policy on Education. ICT is the collection of technological gear and resources, which are made use of to communicate, generate, distribute, collect and administer information. Information Communication Technology (ICT) is also referred to as the totality of methods and tools that are used in gathering, storing, processing, and communicating information.

The process of learning and accessing information has undergone rapid changes in the preceding decade. A global technology revolution has taken place; marked by a transition from 'desktop computing to the widespread use of mobile technologies. Technology is changing the way people learn, work, conduct business, access information, and interact. Information and Communication Technology is regarded as the means of acquisition, processing, storage, and dissemination of information by a combination of computer and telecommunication tools and techniques. ICT is providing efficient trustworthy, reliable, portable, cost-effective information processing, storage, and dissemination network for system interactivity (Ogunlade, 2014). Thus ICT supports activities involving information; such activities include gathering, processing, storing, and presenting data for a certain purpose or futuristic use. Megha also stated that ICT is defined as the combination of informatics technology with other, related technologies, specifically communication technology. ICT has made teaching and learning easy and motivate both the teachers and the students in the educational system. With ICT, teaching and learning in education have been the change from the traditional way of learning to online or hybrid learning; such as, e-learning and mobile learning which are parts of ICT potential to meet the learning needs of individual students and increase self-efficiency.

The existence of Social media started with the use of Bulletin Board System (BBS), it is an online meeting place where people effectively and independently produce the source of

information that allowed users to communicate with a central system where they could download files or games (many times including pirated software) and post messages to other users, which could be accessed over telephone lines via a modem. BBS was often run by hobbyists who carefully nurtured the social aspects. Suddenly the antisocial had become social and BBS continued to gain popularity throughout the '80s and well into the '90s when the Internet truly kicked into gear. Yet there was no stopping the real Internet, and by the mid-1990s it was moving full bore. Yahoo had just set up shop, Amazon had just begun selling books, and the race to get a PC in every household was on.

Social media is a collection of Internet websites, services, and practices that support communication, collaboration, community building, participation, and the sharing of information. Bryer and Zavattaro, (2011) social media are technologies that facilitate social interaction, make possible collaboration, and enable deliberation across stakeholders. These technologies include blogs, wikis, media sharing tools (audio, photos, videos, text), and networking platforms such as Facebook, MySpace, Ning, YouTube, Flickr, Twitter, Friendster, WhatsApp, and so on (Ramdhani & Nandiyanto, 2021; Suroto & Nandiyanto, 2021). Most of these technologies allow individuals to create a profile and then post content (text, video, audio, photos) or link to things that correspond to their areas of interest or expertise.

Social media implies a change in social structures and social behavior, which is intrinsically tied to Information and Communication Technologies (ICT). The use of social media platforms has to increase collective action, which has eventually lead to a political revolution, demonstrates the significance of ICT and social media in people's ability to organize. This points out how developed methods for organizing and managing information, which is possible primarily in digital form and with intangible information-objects, which in turn affect people's organization. In many contexts, information is not organized in linear and predefined hierarchies any longer, but rather in a network form with flexible, adaptable, and context-relevant structures. Groups of people now communicate with each other simultaneously and organize in a network.

Kaplan and Haenlein, (2011) see social media as a set of internet-based applications build on the technological foundations of Web 2.0, and that enables user-generated content to be created and exchanged. Web 2.0's participatory technologies facilitate information sharing, participation, and collaboration. Social network media are seen to support a range of applications that display qualities associated with educational technologies already in use at the university level such as communication, participation, interactivity, and collaboration. Therefore, there are opportunities that social software technologies to provide good spaces or platforms for students' learning (Selwyn, 2008).

It's now glaring that the global village has indeed materialized, with new ideas and information being shared between people all over the world. Since education has always been about exposing people to new ideas, it's not surprising that the impact of social media is being felt in the education sector. Here are some specific ways in which social media is changing the education system for both students and educators, even though middle scholars are not necessarily taking part in social media sites themselves, they are learning the skill sets required for successful social networking. Children are also being taught new concepts like online privacy at the same time they're learning how to read and write. This means that social media is influencing education at its very foundation.

Social media is perceived as a means through which students learn various skills by which they will need to survive in the business world. Being able to create and maintain connections to many people in many industries is an integral part of developing a career or building a

business. While spending much time working with new technologies, students can develop more familiarity with computers and other electronic devices. With the increased focus on technology in education and business, this will help students build skills that can aid them throughout their lives.

The media allow all their enthusiastic users all familiar with the fast-growing world of technology and the internet to freely and quickly share with their family, friend and colleagues, the most significant moment of their lives, in addition to their ideas, opinions, and beliefs. The use of social media such as email, instant messaging, discussion forums, blogs, aggregate sites, and virtual worlds for formal and informal learning and communication is ubiquitous. The need for the use of social media tools for the learning and teaching process cannot be overemphasized. This is due to the enhancement and effectiveness of learning as well as facilitation of desirable change in the behavior of learners (Keller & Cernerud, 2002).

Some study claimed that social media are pedagogical tools that had assisted educationists for connectivity and social support, collaborative information, discovery and sharing, content creation, knowledge on information agitation, and modification to enhance student to student interaction and to value each other's opinion. The use of social media tools such as Instagram and Pincester has enabled teachers to easily upload photos and graphics related to their lesson plan. Teachers can also use Twitter and Facebook to guide their students in research projects with links. Social media is the best platform that helps teachers and students to create a professional learning network. Teachers can also record the session and upload it to YouTube so that students can view or access it when they are struggling with their homework in their homes. This is one of the effective ways of teaching where students can learn at their own pace.

However, gender differences are also present in the internet and social media usage, although usage patterns have shifted over time. Teenage boys are reported to using computers more often than girls (Liu, 2013). However, both genders were embracing the internet as a means of communicating with their friends. Gross, (2004) noted that the most common activity among higher institution school students is chatting via instant messaging. Boys were more likely to upload online videos and use video-sharing applications. Boys spend more time using computers, especially playing video games and visiting video websites such as YouTube. However, girls create and share more videos and also are more likely to video chat, in keeping with their more active texting and mobile communication behaviors.

From the discussion so far, it can be deduced that social media can go a long way to affect the learning outcome of most undergraduate students if only they can effectively show a positive perception of and utilize the technologies to enhance learning. However, the contribution of this study to the field of education cannot be underestimated in Nigeria. The outcome of this study will provide additional knowledge; hence, the need for this study, perception of undergraduate on the use of social media to enhance learning in the University of Ilorin.

The main purpose of this study is to investigate the perception of undergraduates on the use of social media to enhance learning at the University of Ilorin. Specifically, the study will;

- (i) investigate the available social media used by undergraduate students for Learning
- (ii) examine undergraduates' frequency of utilization of social media to facilitate learning;
- (iii) examine undergraduate students' perception of the use of social media to facilitate learning;

Based on research questions 1 and 2, the following hypothesis was formulated and tested at a 0.05 level of significance.

- (i) H01; There is no significant difference between male and female undergraduate students in the frequency of use of social media for learning.
- (ii) H02; There is no significant difference in the perception of undergraduates' students on the use of social media for learning based on gender.

2. METHODS

The study was descriptive research using a survey design. This method enabled the researcher to describe events just as they appear without the manipulation of external researchers. The target population consisted of all undergraduate students at the University of Ilorin. The sample size was all undergraduate students from the chosen University. A simple random sampling technique was used to select 258 undergraduates from the sampled University while the Israel model was used to determine the sample size of the respondents used for the study.

The instrument for this study was a researcher's designed questionnaire and it was validated by the researcher's supervisor and three educational technology lecturers in the Department of Educational Technology, University of Ilorin, reviewed the questionnaire for its appropriateness, content coverage in terms of acceptability, adequacy, and relevance to the stated objectives. Their comments, suggestions, and corrections were used to produce a final draft of the instrument. The reliability of the questionnaire used in this study was achieved by administering twenty copies of the questionnaire to twenty undergraduate students in the University of Lagos, Lagos, Nigeria which was not part of the sampled institutions. Cronbach alpha was used to test the reliability of the instrument at 0.71. The researcher personally administered 300 questionnaires to the respondents and was able to collect only 258 that is, 95% from the respondents. The collected data were analyzed using descriptive and inferential statistics. Percentage, mean, and t-test were used to analyze data for the research questions and hypotheses with the aid of a statistical package for social science (SPSS) version 20.0 at a 0.05 level of significance.

3. RESULTS

3.1. Research Question One: What are the available social media used by undergraduate students for Learning?

In **Table 1**, the result showed that 95% of respondents reported that Facebook is available social media used for learning while 88.7% also stipulated the availability of the yahoo mail used for learning. Furthermore, 85.4% of respondents reported that Twitter is available and useful for learning. However, few of the respondents responded to the unavailability of social media within the university. Drawing conclusion from **Table 1**, it could be adduced that majority of the social media are available and adequate within the university.

3.2. Research Question Two: How frequently do undergraduates utilize social media for learning?

Table 2 shows social media used by undergraduate students. They used almost the same characteristics of social media.

Table 1. Available social media used by undergraduates students for learning.

S/N	Item	Available%	Not Available%
1	Facebook	144(95.0%)	6(4.0%)
2	Twitter	129(85.4%)	21(13.9%)
3	WhatsApp	122(80.8)	28(18.5%)
4	You Tube	126(83.4%)	24(15.9%)
5	Google	126(83.4%)	24(15.9%)
6	Gmail	109(72.2%)	41(27.1%)
7	LinkedIn	127(84.1%)	23(15.2%)
8	Yahoo	134(88.7%)	16(10.6%)
9	Blackberry Messenger (BBM)	133(88.1%)	17(11.3%)
10	Instagram	6(4.0%)	144(95.4%)

Table 2. Social media frequently used by undergraduates students at University of Ilorin.

S/N	Statements	Mean (x)	SD
1	Facebook	3.43	0.709
2	Twitter	3.45	0.574
3	WhatsApp	3.39	0.578
4	You Tube	3.35	0.657
5	Google	3.35	0.625
6	Gmail	3.33	0.662
7	LinkedIn	3.21	0.671
8	Yahoo	3.24	0.642
9	Blackberry Messenger (BBM)	3.25	0.677
10	Instagram	3.12	0.560
	Grand Mean	3.41	

It could be noted from **Table 2** that the respondents were of the opinion that Twitter and Facebook were the most frequently used social media for learning at the University of Ilorin as the mean score were 3.45 and 3.43 respectively. Moreover, it was revealed that the usage of WhatsApp and google also gain popularity among undergraduates for learning at the University of Ilorin with a mean score of 3.35. On the other hand, the respondents were also of the opinion that the usage of Gmail, BBM, and Yahoo were very frequent among undergraduates at the University of Ilorin with a mean score of 3.33, 3.25, and 3.24 respectively. Others follow suit, the lower mean score was 3.12 this revealed that Instagram was not frequently used in the University of Ilorin

On the final analysis, the grand mean score for frequent use of social media for learning was found to be 3.41. With 2.0 as the benchmark, it means that most of the itemized social media were frequently used by the undergraduates to enhance learning since its usage was on the very high side.

3.3. Research Question Three: What are the perceptions of undergraduate's students on the use of social Medial for learning

It could be noted from **Table 3** that the respondents were of the opinion that Social media enable them to gain social confidence through interacting with friends online and that Social media promote their experience by learning from others users as the mean scores were 3.93 and 3.67 respectively. Moreover, it was revealed that Social media enable them to use their leisure time effectively with a mean score of 3.67. On the other hand, the respondents

perceived Social media bring learning to the four-wall of the classroom with a mean score of 3.65. Also, it was perceived that Using Social media has made learning more easily for undergraduates and that Social media has improved their academics performance with a mean score of 3.18 and 3.16 respectively.

On the final analysis, the grand mean score for the perceived use of social media to enhance learning was found to be 3.44. With 2.0 as the benchmark, it means that the respondents have a positive perception towards the use of social media in instruction through the perception was not on the very high side.

Table 3. Perception of undergraduate's students on the use of social media for learning.

S/N	Questionnaire Items	Mean x	Standard Deviation
1	Social media make learning more effective and efficient	3.11	0.471
2	Using Social media has made learning easier for me	3.18	0.464
3	Using social media has made me addicted to using social media for social activities rather than learning	3.15	0.429
4	Social media have improved my academics performance	3.16	0.386
5	Social media serve as the agent of distraction while receiving lectures	3.65	0.646
6	Social media enable me to use my leisure time effectively	3.67	0.587
7	Social media bring learning to the four-wall of the classroom	3.66	0.529
8	Social media promote my experience by learning from other users	3.67	0.573
9	Social media enable me to gain social confidence through interacting with friends online	3.93	0.276
10	Social media make me familiar with the emerging technology	3.06	0.120
-	Grand Mean	3.44	

3.3. Hypothesis Testing

3.3.1. H₀₁: There is no significant difference between male and female undergraduate students in the frequency of use of social media for learning.

Table 4 showed that df = 148, t = 1.858, p = 0.548, so, therefore, the hypothesis states that there is no significant difference between male and female undergraduate students in the frequency of use of social media for learning was not rejected. This decision was obtained as a result of a t-value of 1.858 resulting in a 0.548 p-value which was greater than 0.05 significant alpha levels.

Table 4. Significant difference between male and female undergraduates students on the frequency of use of social media for learning.

Gender	N	Х	SD	Df	T	Sig	Remarks	
Male	176	4.41	0. 518	256	1.858	0.548	Not Sig	
Female	82	3.47	0.438				Not Sig.	

3.3.2. H_{02} : There is no significant difference in the perception of undergraduates' students on the use of social media for learning based on gender

Table 5 showed that df = 148, t = 0.488, p = 0.106, so therefore the hypothesis which states that there is no significant difference between male and female undergraduate students' perception of the use of social media for learning was not rejected. This decision was a result of a t-value of 0.488 resulting in a 0.106 p-value which was greater than 0.05 significant alpha levels.

Table 5. Significant difference in the perception of undergraduates students on the use of social media for learning based on gender.

Gender	N	Х	SD	Df	Т	Sig	Remarks	
Male	176	3.41	0.23	256	0.488	0.106	Not Cia	
Female	82	3.47	0.24				Not Sig.	

4. DISCUSSION

Available social media used by undergraduate students for Learning at the University of Ilorin was investigated using research question 1, the result of the analysis indicated that the majority of the social media are available and adequate within the university. The findings of this study are consistent with the previous study of Mulenga and Marbán, (2020) whose study stated various social media for learning in higher Education such media includes YouTube, Whatsapp, Google Drive, Twitter, Yahoo, Instagram, and so on (Ramdhani & Nandiyanto, 2021; Suroto & Nandiyanto, 2021; Ahmad, 2021; Saefurohman et al., 2021).

Findings on undergraduate students' perception of the use of social media to facilitate learning were examined using research question 2 and hypothesis 1. The result of the findings indicated that respondents have a positive perception towards the use of social media in instruction and there was no significant difference between male and female undergraduate students' perception of the use of social media for learning. The study agreed with the previous study whose study revealed that the media allow all their enthusiastic users all familiar with the fast-growing world of technology and the internet to freely and quickly share with their family, friend, and colleagues, the most significant moment of their lives, in addition to their ideas, opinions, and beliefs.

5. CONCLUSION

The result obtained from the data gathered and analyzed in this study established the fact that social media are available and adequate within the university for all undergraduates. From the study, it is also clear that undergraduate students frequently utilized social media to enhance learning. This implied that the use of social media stimulates undergraduates' students for learning, it was recommended that female undergraduates are to redirect their focus on the use of social media to enhance learning.

6. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

7. REFERENCES

- Abbdulrahman, M. R., and Soetan, A. K. (2018). Lecturers' perceived ease of use of mobile devices for teaching undergraduates in Kwara State, Nigeria. *International Journal for Innovative Technology Integration in Education*, 1(1), 1-14.
- Ahmad, C. V. (2021). Causes of students' reluctance to participate in classroom discussions. ASEAN Journal of Science and Engineering Education, 1(1), 47-62.
- Alam, M. (2016). Use of ICT in higher education. *International Journal of India Psychology,* 3(68), 162-171.
- Bakare, A., and Olaniyi, E. (2017). Use and application of ICT in teaching and learning for quality higher education in Nigeria: A Literature Analysis. *Greener Journal of Educational Reseach*, 7(2), 15-20.
- Bryer, T. A. and Zavattaro, S. M. (2011). Social media and public administration: Theoretical dimensions and introduction to symposium. *Administrative Theory and Praxis*, *33*(3), 325-340.
- Gross, E. (2004). Adolescent Internet use: What we expect, what teens report. *Journal of Applied developmental Psychology*, 25(6), 1-17.
- Hue, L. T., and Ab Jalil, H. (2013). Attitudes towards ICT integration into curriculum and usage among University Lecturers in Vietnam. *International Journal of Instruction*, 6(2), 9-25
- Kaplan, A. M., and Haenlein, M. (2010). Users of the world, unite! the challenges and opportunities of social media. *Business Horizons*, *53*(1), 59-68.
- Keller and Cernerud. (2002). Students perception of e-learning in university education. Journal of Educational Media, 27(1-2), 55-67.
- Liu, C. (2013). Can Facebook use induce well-being?. *Cyberpsychology, Behavior and Social Networking*, *16*(4), 674–678.
- Mulenga, E. M., and Marbán, J. M. (2020). Social media usage among pre-service secondary mathematics teachers in Zambia. *Journal of Research and Advances in Mathematics Education*, *5*(2), 130-147.
- Ogunlade, O. O., and Anaza, A. O. (2017). Assessment of student-teachers' ICT needs using UNESCO ICT-CFT in colleges of education in North Central, Nigeria. *Journal of Science, Technology, Mathematics and Education, 13*(3), 161-176.
- Ramdhani, T., and Nandiyanto, A.B.D. (2021). The use of Whatsapp social media as reinforcement online learning during the COVID-19 pandemic. *Indonesian Journal of Multidisciplinary Research*, 1(1), 107-112.
- Selwyn, N. (2007). Web 2.0 applications as alternative environments for informal learning-a critical review. *Paper for CERI-KERIS International Expert Meeting on ICT and Educational performance*, 16, 17.

- Saefurohman, S., Maryanti, R., Azizah, N. N., Al Husaeni, D. F., Wulandary, V., and Irawan, A. R. (2021). Efforts to increasing numeracy literacy of elementary school students through quiziz learning media. ASEAN Journal of Science and Engineering Education, 1(3), 167-174.
- Suroto, S., and Nandiyanto, A.B.D. (2021). The effectiveness of using whatsapp social media as learning media at elementary school. *Indonesian Journal of Multidisciplinary Research*, 1(1), 79-84.