



Utilization Of Web 2.0 Tools By Undergraduates In Ambrose Alli University, Ekpoma, Nigeria

¹Adetona, Charity Onoimiuko Mrs (CLN) & ²Obinyan, Gabriel Aine Ph.D. (CLN)

¹Head, Readers Services Department,
Ambrose Alli University Library, Ekpoma, Nigeria
Email: charityadetona@gmail.com

²Senior Lecturer, Department of Library and Information Science,
Ambrose Alli University, Ekpoma, Nigeria
ORCID Number: <https://orcid.org/0000-0002-3747-3579>
Email: obinyan.gab@aauekpoma.edu.ng

ABSTRACT

This study surveyed the utilization of web 2.0 by undergraduates of Ambrose Alli University, Ekpoma toward the enhancement of their learning and academic activities. The study was prompted due mainly to the realization that the majority of the undergraduates stay hours on chatting or networking with friends besides academics work. Descriptive survey method was used in this research, and a questionnaire was used to elicit data for the study. Accidental sampling technique was used to sample 1140 undergraduates from the total population in the institution. Out of 1140 copies of the questionnaire distributed, 1080 were retrieved properly completed to give a return rate of 94.7%. The responses were analyzed using frequency counts, percentages and means where necessary. The result of the analysis showed that beside WhatsApp (100%), Yahoo group (93.5%), Wikipedia (85.2%), Email (50.0%), and Google + (38.9%), students rarely use web 2.0 tools for academic purposes. The study also revealed that the attitudes of the undergraduates towards the non- use of web 2.0 tools were a result of some challenges like irregular internet connectivity, high cost of data, and lack of confidence in using web 2.0 tools. The study recommended the provision of network facilities in the university such that lecturers can give assignments that would warrant the use of web 2.0 tools by the undergraduates to deepen their academic performance. It is to furnish stakeholders in education in our clime the value of inclusion of web 2.0 tools to leverage the academic performance of undergraduate. The work has no conflict of interest.

Keywords: Web 2.0, Undergraduates, Social Network and Academic, Ambrose Alli University

INTRODUCTION

Over the past two decades or so, phenomenal changes have taken place in educational subsector owing to technological development and innovation of web technologies and tools. In contemporary times, learners learn in a dynamic and flexible way using web 2.0 tools for content development and knowledge exchange. The new generation of web tools and services called web 2.0 by Reilly (2005) had marked a distinct break from the internet applications of the 1990s and early 2000s, facilitating interactive rather than broadcast forms of exchange, in which information is share many-to-many rather than being transmitted from one to many. According to Reilly (2007) web 2.0 application are built around the appropriation and sharing of contents among communities of users, resulting in various forms of user-

driven communication, collaboration and content creation and recreation. Web 2.0 has the components of social software that create room for social engagement as well as knowledge exchange particularly among students. As social software, according to Alexander (2009), blogs, wikis, social networking sites, RSS (Really Simple Syndication), Mashups, Podcasts, social bookmarking, tags, and folksonomies are an integral part of web 2.0.

Some scholars had argued, that web 2.0 technologies and tools have the power to transform learning and teaching (Kohut, Parker, Doherty & Dimack 2007; Lytras & Naeve 2015). With the use of web 2.0 tools as represented by MySpace, Facebook, blogs, and wikis have now become a basic part of students' lives; to the extent that they have translated from being passive recipients of knowledge and/or information to creators of knowledge. According to Wilson (2010),

Information behaviour of students entails the totality of human behaviour concerning sources and channels of information including active and passive information seeking. In the quest for information, different kinds of behaviours are manifested as students have different reasons for wanting information, different levels of search skills and preferences for some types of information-bearing materials.

Contributing, Leckie, Pettigrew and Sylvain (2015) affirmed that information seeking involves personal reasons for seeking information, the kinds of information which are being sought, and the ways and sources needed information is being sought.

To this end, this study surveyed the utilization of web 2.0 by undergraduates of Ambrose Alli University, Ekpoma toward the enhancement of their learning and academic activities. Especially, the study sought to:

4. ascertain the purpose(s) for which undergraduates at Ambrose Alli University Ekpoma, Nigeria use web 2.0 tools
5. determine the frequency of use of web 2.0 tools by undergraduates at Ambrose Alli University Ekpoma, Nigeria, and
6. Identify the challenges undergraduates at Ambrose Alli University, Ekpoma, Nigeria experience in their use of web 2.0 tools.

Research Questions

Against the background provided by the objectives, the following research questions were drawn to be answered in this study:

1. For what purpose do undergraduates at Ambrose Alli University Ekpoma, Nigeria use web 2.0 tools?
2. What is the frequency of use of web 2.0 tools by the undergraduates at Ambrose Alli University, Ekpoma, Nigeria?
3. What are the challenges undergraduates at Ambrose Alli University, Ekpoma, Nigeria experience in their use of web 2.0 tools?

Literature Review

Web 2.0 technologies are so popular and diffused in their applications that they now exact overwhelming control over everyday personal and professional life of users. To this end, there are perceptible increases in students' creativity and responsibilities concerning educational content in so far as web 2.0 technologies serve as supplements to traditional courseware. Many studies have been carried out on students' usage of web 2.0 technologies and tools. According to Thomas and Thomas (2012), "social and digital technologies have the beauty of immediacy reach and flexibility" which make it easier for users most especially students to adapt to it. It can be developed around any academic discussion and learning thereby inducing knowledge and knowledge exchange. According to Murugesan (2007, 34), "Web 2.0 is not solely technology but offers many more possibilities which include:

1. " Web design, creative reuse, and updates;
2. Provision of a rich, responsive user interface;
3. Facilitation of collaborative content creation and modification;

4. The creation of new applications by reusing and combining different applications on the Web and/or by combining data and information from different sources;
5. Establishment of social networks of people with common interests; and
6. Sustains collaboration, and helps in gathering collective intelligence.

Web 2.0 seems to provide a way to create information and knowledge in dynamic ways for undergraduate students, Mutula (2012) study on the use of web 2.0 revealed that majority of the respondents he sampled felt comfortable using web 2.0 technologies to connect with other students, to discuss home works, assignments and examinations. In the same vein, Tautkeviciene and Dubosas (2015) confirmed that “ students tend to relate to target learning to specialized learning as a means of getting knowledge and information; in addition to web 2.0 serving as learning resource, and social networking tools to them.

In a study conducted by Shrivastau and John (2014) about students' use of the internet for sharing information with their friends, discovered that social networking sites and wikis were the most used web 2.0 tools. In terms of awareness, Suthananya's (2018) pointed out that “ the majority of the first-year students in WU were aware of web 2.0 tools in addition to making specific but moderate use of YouTube, Blogs, wikis, social bookmarks, instant messaging and Facebook. All the web 2.0 tools were used for academic purposes by the students. Eze (2016) finding also corroborated the finding that students use web 2.0 tools for academic purposes.

It has, however, become a fact from series of studies conducted overtime "that students use web 2.0 technologies to search for information, to communicate with lecturers on academic work (Chawinga and Zinn, 2016). In line with this, Mugwanga, Marsden and Boateng (2011) reported that about students use of podcasting which is one of the web 2.0 tools that their a certain proportion of their study population were aware and familiar with podcasts amidst low utilization; a situation that is contrary to the students frequent and significant use of Wikis, WhatsApp, Google Apps, and YouTube. were the web 2.0 technologies mostly used by the students. Devapatsva, Mitrovic and Dietrich (2014), however, went on to identify some specific application of web 2.0 technologies. According to them, “ students use web 2.0 technologies to publish their own writings, discuss group assignments, and conduct peer reviews for one another's work.

The challenges encountered while using the technologies as reported in extant literature ranged from lack of knowledge (Mugwanga, Marsden and Boateng (2011) to lack of internet facilities. Atuloma (2010) stated that fluctuation of electricity supply restricts all computer-linked activities such as the use of Blogs and other online tools, and inadequate communication infrastructure is part of the challenges facing the utilization of web 2.0 technologies by students.

METHODOLOGY

An explanatory survey research design as an alternative term for "descriptive survey research design" was applied to guide the research. The instrument used for data collection was questionnaire copies of which were directly distributed among the respondents in their various lecture halls to enhance return rate. The total population for this study comprises the undergraduates at Ambrose Alli University, Ekpoma, Nigeria. A total of 1140 of the total population was drawn using an accidental sampling technique. Out of the 1140 copies of the questionnaire, 1080 copies were retrieved in usable form to produce a 94.7% return rate. The data collected were analyzed using frequency counts, simple percentages and means where necessary.

DATA ANALYSIS AND DISCUSSION

Table 1: Web 2.0 Tools Used by Undergraduates for Academics and Non-academics Purposes

Web 2.0 Tools		Academics	%	Non-academics	%
Social Networking	Facebook	70	6.5	1010	93.5
	WhatsApp	1080	100.0	-	0.0
	Twitter	70	6.5	1010	93.5
	Skype	0	-	1080	100.0
Video sharing sites	YouTube	180	16.7	900	83.3
Photo sharing	Flicker	0	-	1080	100.0
Blogs	Weblog	0	-	1080	100.0
	Blogger	40	3.7	1040	96.3
	Diaries	0	-	1080	100.0
Online discussion forum	Yahoo group	1010	93.5	70	6.5
	Google +	420	38.9	660	61.1
Emails	Emails	540	50.0	540	50.0
Wikis	Wikipedia	920	85.2	160	14.8
Social bookmarking tools	Delicious	60	5.6	1020	94.4
Slide sharing sites	Slide share	380	35.2	700	64.8
Others (specify)	Vigo	340	31.5	740	68.5
	Time toast	20	1.9	1060	98.1

Judging from the result in Table 1, we could affirm that web 2.0 tools were not sufficiently deployed and used for academic purposes by undergraduates at Ambrose Alli University, Ekpoma. The only exception to this overt non-use of web 2.0 tools for academic purposes was WhatsApp (100%), a Discussion forum with special reference to Yahoo (93.5%), Wikipedia (85.2%), and Emails (50.0%). Just as the name implies social networking tools comprising Skype, Flicker, Tweeter, Facebook, delicious, Time toast among others are used by most of the respondents for Networking and related social activities.

Table 2: Frequency of Use of Web 2.0 Tools

Web 2.0 tools	Very often	Often	Not often	Rarely	Mean
Facebook	720(66.7%)	230(21.3%)	130(12.0%)	0(0%)	3.6
Twitter	430(39.8%)	300(27.8%)	120(11.1%)	230(21.3%)	2.9
WhatsApp	730(67.6%)	300(27.8%)	50(4.6%)	0(0%)	3.6
Skype	220(20.4%)	180(16.7%)	240(22.2%)	400(40.7%)	2.1
YouTube	110(10.2%)	340(31.5%)	180(16.7%)	450(41.7%)	2.1
Blogger	190(17.6%)	120(11.1%)	380(35.2%)	390(36.1%)	2.0
Google +	400(37.0%)	330(30.6%)	110(10.2%)	240(22.2%)	2.8
Voice thread	20(1.9%)	280(25.9%)	190(17.6%)	590(54.6%)	1.8
Slide share	50(4.6%)	50(4.6%)	680(62.9%)	300(27.3%)	1.9
Wiki space	60(5.6%)	210(19.4%)	610(56.5%)	200(18.5%)	2.1
Visual dictionary	0(0%)	260(24.1%)	400(37.0%)	420(38.9%)	1.9
Time toast	0(0%)	120(11.1%)	700(64.8%)	260(24.1%)	1.9
Vigo	0(0%)	150(13.9%)	370(34.3%)	560(51.8%)	1.6

Table 2 shows the frequency of use of web 2.0 tools by the respondents. The web 2.0 tools that are very often used by the students include WhatsApp (x = 3.6), Facebook (3.6), and Twitter (x = 2.9). Among the rarely used Web, 2.0 technologies by the students include Vigo (1.6), Voice thread (1.8), Slide share (1.9), Visual dictionary (1.9) and Time toast (1.9).

Table 3: Challenges Experienced in the Use of Web 2.0 Tools

Challenges	Yes	(%)	No	(%)
Lack of confidence in using the web	990	(91.7%)	90	(8.3%)
The high cost of data	1000	(92.6%)	80	(7.4%)
The sophistication of web 2.0 devices	500	(46.3%)	580	(53.7%)
The slow speed of the internet	870	(80.6%)	210	(19.4%)
High duplication of materials	880	(83.8%)	200	(18.5%)
The slow speed of internet connectivity	1010	(93.5%)	70	(6.5%)
Over dependent on search engines(e.g. Google)	330	(30.6%)	750	(69.4%)
Lack of contact between learner and education providers	350	(32.4%)	730	(68.0%)

It was shown in Table 3 that of the barriers experienced by undergraduates in their use of web 2.0 tools is irregular internet connectivity with 93.5% relative frequency being highest according to the attestation of the corresponding number of the responding students. This was followed closely by 92.6% of the total respondents that indicated the high cost of data as a major challenge in their use of web 2.0 tools. To 990(91.7%) respondents, lack of confidence accounted as a major barrier in using web 2.0 tools. is a major barrier. By and large, slow speed of internet connectivity constitutes a major challenge to 80.6% of the respondents in using web 2.0 tools. Majority of the respondents as represented by 69.4% relative frequency do not see over-dependent on search engines as a challenge because, without search engines, there is little or nothing one could do to plough and retrieve requisite information from the morass of data available to contend with.

DISCUSSION OF FINDINGS

Based on the three research questions analyzed, the result of the study showed that the students’ use of Web 2.0 tools is majorly on WhatsApp, Facebook, twitter, YouTube, and Skype. In other words, the popularity of WhatsApp, Facebook, and twitter among the undergraduates is as a result of the fact that the larger students’ population is aware of web 2.0 services. This is supported by the work of Suthanya (2018). It was also revealed that Facebook, WhatsApp, Twitter, YouTube and Skype were mostly utilized web 2.0 services by students especially when doing assignments. No doubt, these applications have become so popular among both the young and the adults, and as such students used them for communicating details for their school work, sending assignments and enquiries via attachments and videos. This outcome could be corroborated by Sandars and Schroter (2012) reported “ that over 90% of the most highly used tools are instant messaging and social networking sites”, which further, revealed that web 2.0 services are not adequately used for the academic purpose; the few exceptions to this are those using e-mails, wikis and online discussion forums. In the work of Kennedy et al. (2008) on the survey of the first year, undergraduate students in Australian universities; the authors asserted that "there is no clear evidence that indicate web 2.0 has been assimilated well in current students learning".

Lastly, it was found that of the challenges experienced in the use of web 2.0 tools, the irregular internet connectivity, high cost of data and lack of confidence in using the web were the most experienced barriers.

Summary of findings

Based on the research questions and data collected, the following are the major findings:

- It is obvious from the study that most of the students are aware of web 2.0 tools but their use has not been properly domesticated and channelled for academics. In the main, majority of the students prefer to use the services for playing games, communication with peers, sending spam and junk mails, reading sports news and downloading videos and songs.
- The study also revealed that students utilize quite a several web 2.0 tools or services, but not in their entirety. For example, WhatsApp, Facebook, Twitter, YouTube and Skype were mostly utilized web 2.0 tools by students.

- Based on the frequency of the use of web 2.0 technologies, it is revealed that as high as 67.6% and 66.7% of the responding undergraduates use WhatsApp and Facebook respectively. Web 2.0 tools like Vigo were scarcely used by the respondents as 51.8% of the respondents had indicated. Similarly, voice thread and visual Skype were hardly used by the respondents as attested to by 54.6% and 40.7% respectively.
- Lastly, the result showed that of the challenges facing the undergraduate use of web 2.0 services, the high cost of data and irregular internet connectivity was highest with 93.5% and 92.6% as attested to by respondents. Other major challenges were lack of confidence in using the web and high duplication of materials on the web.

CONCLUSION AND RECOMMENDATIONS

From the findings of this study, web 2.0 is seen as a great tool with great potentials if rightly used by the students most especially to supplement traditional learning methods; it is also necessary to align instructional activities with the affordability of the tools in the educational sector. The tools are interactive, they can be used asynchronously, and they are collected together as a group of resources in a virtual platform that students could effectively integrate seamlessly into their studies to deepen educational outcomes. The following recommendations were made:

- Need to address the challenges outlined by the undergraduates most especially internet facilities in the University as this will assist the students and lecturers efforts to design learning activities which will be facilitated by web 2.0 tools,
- Need to develop an information literacy programme to encourage the use of web 2.0 tools for academic purposes among undergraduate students. This will allow students to develop their confidence in the use of web 2.0 tools.

REFERENCES

- Alexander, B. (2009). Web 2.0: A new wave of innovation for teaching and learning. *EDUCAUSE Review*, 41 (2): 32-44.
- Atuloma, B. C. (2010) Awareness of library 2.0 and participating in the global discussion among librarians in Southwest Nigerian Universities. Retrieved from: webpages.uidaho.edu/~mbolin/atuloma.htm.
- Chawinga, W. D. & Zinn, S. (2016). Use of web 2.0 by students in the faculty of information science and communications at Mzuzu University, Malawi. *South African Journal of Information Management*, 18(1): 1-12.
- Devapatsva, G. P., Mitrovic, Z. & Dietrich, A. D. (2014). Use of social media platforms for improving academic performance at further education and training colleges. *South African Journal of Information Management (SAJIM)*, 16(1):a604. doi:10.4102/sajim.
- Eze, E. M. (2016). Awareness and use of web 2.0 tools by LIS student at university of Nigeria, Nsukka, Enugu State, Nigeria. *Library philosophy and practice (e-journal)* 1355.
- Kennedy, G. E., Judd, T, Churchward, A., Gray, K. & Krause, K. (2008). First year students' experiences with technology: Are they really digital natives?. *Australian Journal of Educational Technology*, 24(1).
- Kohut, A. Parker, K. Keeter, S. Doherty, C. & Dimock, M. A. (2007). A portrait of generation next. Pew Research centre.
- Leckie, G. J., Pettigrew, K. E., & Sylvain, C. (2015). Modeling the information seeking of professionals: A general model derived from research on engineers, health care professionals, and lawyers. *Library Quarterly*, 66(2): 61-193.
- Lytras, M. & Naeve, A. (2015). A semantic e-learning synthesizing fantasies. *Britain Journal of Educational Technology*, 37 (3): 479-491.
- Mugwanya, R. Marsden, M. & Boateng, R. (2011). A preliminary study of podcasting in developing higher education institutions. *Journal of Systems and Information Technology*, 13(3): 268-285.

- Murugesan, S. (2007). Understanding web 2.0. *IT Professional*, 9(4):34-41.
- Mutula, S. M. (2013). Ethical Dimension of the information society: Implications for Africa. In *Information Ethics in Africa: Cross-cutting Themes*, Pretoria: AC, 29-42.
- O. Reilly, T. (2005). What is web 2.0. O. Reilly network .
<http://www.oreilly.de/artike/web2.0html> accessed Nov 22, 2019.
- O' Reilly, T. (2007). What is web 2.0 design patterns and business models for the next generation of software. *Communication and Strategies*, 1: P17. First-quarter 2007 retrieved from.
- Sandars, J. & Schroter, S. (2007). Web 2.0 technologies for undergraduate and postgraduate medical education: An online survey. *Postgraduate Medical Journal*, 83(986): 759-762.
- Shrivastau, P. & John, K. (2014). Web 2.0 technologies and its application: A study of management science students AVV, Indore, M.P. *IOSR Journal of Humanities and Social Science*, 19(5): 82-87.
- Suthananya, D. I. (2018). Exploring the awareness and use of web 2.0, tools by the first-year information science students, Walailak University, Thailand. *International Journal of Information and Education Technology*, 8(4):279-284.
- Tautkeviciene, G. & Dubosas, M. (2014). The purposes of students' use of web 2.0 Tools for learning at the university. *Journal of Emerging Trends in Computing and Information Sciences*, 5(12): 962-967.
- Thomas, M. & Thomas, H. (2012). Using new social media and web 2.0 technologies in business school teaching and learning. *Journal of Management Development*, 31(4): 358-367.
- Wilson, T.D. (2010). Fifty years of information behaviour research. *Bulletin of the American Society for Information Science and Technology*, 36(3).