The Use of Social Media Platforms for Academic Purposes: A Case Study of Federal University of Technology, Minna, Niger State

M.A Owodunni[1], C.S. Tukura[2], A.S. Owodunni*[3], & M.A Balogun[4]

[1]Nigerian Educational Research and Development Council, Sheda
[2, 3, 4]Federal University of Technology Minna

Abstract

This study examined students' perceptions of how social media can be used to support teaching and learning in Nigerian Universities using Federal University of Technology, Minna as a case study. Three research questions and three null hypotheses guided the study. The population was made up of 550 final year students of the School of Science and Technology Education out of which a total of 155 students were randomly selected for the study. The study was a qualitative research which involved the use of questionnaire as instrument for data collection. The instrument was validated by three experts in Information and Communication Technology. The reliability coefficient index computed for the instrument was 0.81using Cronbach Alpha formula. The data were analysed using mean and Spearman Correlation Coefficient. The findings revealed among others that students are aware of social media tools that can be used to perform academic tasks such as Images and photographs, document creation and presentations; while students also classified Communication, Videos and instant messaging as the most familiar, frequent and important academic activities carried out on social media platform. Furthermore, the results showed no significant correlation between gender and awareness; gender and frequency; gender and importance. Awareness was highly correlated to the frequency and moderately correlated to the importance. Frequency was highly correlated to the importance. Consequently, it was recommended among others that since awareness of social media platforms roughly translated into actual usage, more enlightenment campaign should be carried out by the university Community to encourage students on the use of these social media platforms.

Keywords: Social media, academic purpose, frequency, awareness, gender

Introduction

The world today live in a generation of continuous digital revolution. Information and communication technologies (ICTs) and the Internet are used virtually in all aspect of human life. ICT technology plays an important role in people's lives especially today's university students. It has become routine among university students, permeating many aspects of their lives, including academic. Universities have begun to incorporate a diverse array of digital technologies across their teaching, research and public relations activities (Lupton, 2014). Ralston (2012) stressed that ICT technology is a fact of life as a medium of daily communication affecting learning.

Evidence from literature reveals that ICT technology has been used frequently in academic settings. Computer- assisted Instruction has been used to enhance students' attitude and achievement (Adeyemi, 2012; Zeynep and Mine, 2015; Danjuma, 2015; Kareem, 2015).Computer assisted instruction was also used to inform, and for drill and purpose exercises (Liu, Moore, Graham and Lee, 2002); Facebook as a pedagogical tool in a learning environment (Abu-Shanab and Al-Tarawneh2015; Aloraini, 2012) and to identify students learning styles (Vimala, 2016**)**. Er, Özden and Arifoglu, (2009) pointed out that online learning environment is becoming more frequent in teaching and learning than ever before and the most common online learnings according to Hrastinski, (2008) and Er, Özden and Arifoglu, (2009) are synchronous and asynchronous learning technologies. Recent study conducted by the Center for Analysis and Research, University of Washington on Faculty's and student's perception and experiences with social media as an academic resource reveal that social media assists students with acquiring new information, facilitates connections with course material and peers, and improves productivity (Tara and Janice, 2015).

These aforesaid studies reveal the advantages of using social media technologies in classrooms and the increase of utilization in the academic setting (Montrieux, Vanderlinde, Schellens, and De Marez, 2015; Griesemer, 2009). Boyd and Ellision, (2008) define "social networking sites as web-based services that allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection, and view and traverse their list of connections and those made by others within the system" (Boyd and Ellison, 2008). In the same vein, Kaplan and Haenlein (2010) point out that social networking sites "allow users to connect by creating personal information profiles, inviting friends and colleagues to have access to those profiles, and sending e-mails and instant messages between each other." (Kaplan

and Haenlein, 2010) stress further that there is a limitation to the understanding of the exact meaning of the term social media and as such various definitions exist. However, it is a broad term covering a large range of websites (Nations, n.d.), its classifications depends on the extent of it focus area.

The results of a large international survey conducted by Rowlands, Nicholas, Russell, Canty and Watkinson, (2011) revealed that the most popular tools are those that allow collaborative authoring, conferencing, and scheduling and meeting tools. For example, the most commonly used types of social media in government are classify into eleven (11); blogs (e.g., Word Press), social networks (e.g., Facebook), microblogs (e.g., Twitter), wikis (e.g., Wikipedia), video, podcasts, discussion forums, RSS (Really Simple Syndication), Feeds, photo sharing (e.g., Flickr), and employee ideation programs (Types of Social Media, 2013). Based on a set of theories in the field of media research (social presence, media richness) and social processes (self-presentation, self-disclosure), Kaplan and Haenlein (2010) classify social media into six different types: collaborative projects (e.g. Wikipedia), blogs (e.g. Twitter), content communities (e.g., YouTube), social networking sites (e.g., Facebook), virtual game worlds (e.g., World of Warcraft), and virtual social worlds (e.g. Second Life). Despite variability in the classifications of social media types, what they have in common is that Facebook as a social media is classified as a social networking site (SNS).

Jones, Johnson-Yale, Millermaier and Seoane-Perez, (2008) point out that social media activities have become an important aspect of academic life in tertiary institution campuses. The use of social media in tertiary institutions is mainly two-fold: the administrative purpose of facilitating registration, support services and socialization (Madge, Meek, Wellens and Hooley, 2009) and the educational purpose (Eteokleous, Ktoridou, Stavrides and Michaelidis, 2012) of fostering the educational outcomes and facilitating the process of teaching and learning (Cassidy, 2006; Chen and Bryer, 2012; Liu, 2010; Madge, Meek, Wellens and Hooley, 2009). Social media/SNSs have increasingly become a new means of communication and collaboration among academia; which has increased its usefulness among students globally (Eteokleous, Ktoridou, Stavrides and Michaelidis, 2012; Madge, Meek, Wellens and Hooley, 2009).In a case study conducted by Nández and Borrego (2013) on the use of social networks for academic purposes, it was revealed that citation indexes, document creation, edition and sharing tools, communication tools, reference management and time management tools are widely used by the students.

Studies have also revealed that the use and preference of social media tool or site may be influenced by gender. Females use social media for maintaining existing relationship, academic purpose and to follow up agenda more than the males, while males use it for making new relationship at a rate higher than females (Mazman, 2011). This is in line with Atanasora (2016) who opines that male are more likely to use social media to seek information, while female use social platform to connect with people. In the United States (US), gender, income and education have little impact on whether or not someone uses social media (Gallagher, 2018). But these factors do have a big impact on which social network is used and by whom. Many top social network including Facebook, Pintrest and Instagram are strongly skewed towards female users. Pew (2017) reveals that the rate at which women in US will use Facebook in future may increase by 11%, Pintrest by 29% and Instagram by 7%. But Twitter and LinkedIn continue to attract mostly male audience. In a study conducted by Hashtags (2013), more men log on social media platform each month compare to women. Many studies have also found that women are likely to use either specific social network services such as Facebook (Acquisti and Gross, 2006; Johnson, 2008) or MySpace (Salaway and Carvas, 2008; Caverlee and Webb, 2008; Lenhart, 2009) or social network service in general (Tufekci, 2008). However studies have also shown that facebook as well as LinkedIn users were more likely to be male.

For teaching purposes, blogs and wikis are most used, followed by podcasts, LinkedIn, Facebook and Twitter (Hamhtags, 2013). In terms of academic studies, the purpose of blogging, which pre-dates the emergence of social media, has been most often written about. Understanding how students use social media for academic purpose is paramount to their performance. This paper, therefore, focuses on the use of social media platforms among students for academic purpose.

Aim and Objectives of the Study

The aim of the study was to analyze the extent of the use of social media for academic purposes in Federal University of Technology Minna. Specifically, the study sought to:

1. find out the awareness of students on social media platforms usage for academic purpose;
2. determine the frequency of usage of those social media platforms for academic purpose and;
3. examine the important of those social media platforms that are used for academic purpose

Research Questions

The following research questions guided the study;

1. Are the students aware of the social media platforms used for academic purpose?
2. How frequent are the social media platforms used for academic purpose?
3. Are social media considered relevance in academic?

Hypothesis

Is there any significant relationship between gender, awareness, frequency and importance of social media platforms usage for academic?

Methods

The study adopted a descriptive survey research design. (Descriptive survey research according to Nworgu (2006) is a systematic means of data collection. It is aimed at collecting data and describing the characteristics, features of facts about a given population using questionnaire, interviews and observation as instrument for data collection). The target population for the study was 550 (401 male and 149 female) final year students of School of Science and Technology Education, Federal University of Technology Minna, Niger State. A total of 155 (96 male and 59 female) final year students were randomly selected for the study. A Structured questionnaire with 17 items, 3 sections was the instrument used for data collection. The questionnaire items were rated using 5 point rating scale of Not Aware/Never/Not Important 1 point, Slightly Aware/Rarely/Slightly Important 2 points, moderately Aware/Sometimes/moderately Important 3 points, Very Aware/Often/ Very Important 4 points and extremely Aware/Always/Extremely Important 5 points. The instrument was designed to obtain information from the participants on the use of social media for academic purpose in the university system. The instrument for the study was validated by three expert judges from School of Information and Communication Technology, Federal University of Technology Minna, Niger State. The reliability of instrument was established through a pilot study using30 students from Federal University Lokoja, Nigeria. The reliability coefficient of the instrument was found to be 0.81 using Cronbach Alpha.The questionnaire was administered by the researcher with the help of two trained research assistants. The data collected for the study was analyzed using descriptive statistic (mean) to answer the research questions and Spearman rank correlation to test the hypothesis at .05 level of significance. The data was computed using SPSS package.

Results

Research Questions

1. Are the students aware of the social media platforms used for academic purpose?
2. How frequent are the social media platforms used for academic purpose?
3. How relevance are the social media platforms used for academic purpose?

Table 1: Mean Responses of Students on Awareness, Frequency and Importance of Social Media Platforms used for Academic Purpose

S/N	Social media Tools	Awareness $\bar{X}$	Rmk	Frequency $\bar{X}$	Rmk	Important $\bar{x}$	Rmk
1	Reference management (RefWorks, Zotero, Mendeley, EndNote, CiteULike)	4.05	VA	2.33	Rarely	3.85	VI
2	Time management (Google Calendar, Doodle)	3.26	MA	2.07	Rarely	1.45	NI
3	General social networks (Facebook, Hi5, Ning, LinkedIn, MySpace, Yammer, Xing, Orku, Plaxor)	4.60	EA	4.52	Always	3.97	VI
4	Images and photographs (deviantArt, Flickr, Photobucket, Picasa, SmugMug, Zooomr)	3.99	VA	3.65	Often	3.88	VI
5	Communication (Skype, Google Talk)	4.57	EA	4.59	Always	4.55	EI
6	Instant messaging (Msn)	4.57	EA	3.73	Often	4.63	EI
7	Document creation, edition and sharing (Google Docs, Syncplicity, Docs.com, Dropbox, etc)	4.54	EA	3.92	Often	3.62	VI
8	Social bookmarking (Delicious, Google Reader, 2collab, Connotea, StumbleUpon, folkd)	3.51	VA	3.43	Sometimes	2.21	SI
9	Citations indexes (Google Scholar, CiteSeer, getCITED)	2.28	SA	2.45	Rarely	1.25	NI
10	Blogs and wikis (Science Blogs, MADRI+D, PLoS Blog, Open Wet Ware)	3.69	VA	2.90	Sometimes	3.60	VI
11	Surveys (SurveyMonkey, Survey Gizm, Free Online Surveys, SurveysPro, Google Forms)	2.21	SA	2.27	Rarely	1.27	NI
12	Scientists' databases (Researcher ID, Emerald Research Connections)	3.94	VA	2.25	Rarely	3.53	VI
13	Science news services (SciTopics, Wikio, ScienceDaily, Science 2.0, Science News)	3.67	VA	1.55	Rarely	2.67	MI
14	Scientific social networks (Academici, Epernicus, Lalisio, Methodspace, ResearchGate, Sciencestage)	2.89	MA	1.78	Rarely	3.78	VI
15	Research platforms (HUBzero, NanoHUB, MyExperiment, NatureNetwork, Arts-humanities.net)	2.43	SA	1.05	Never	3.55	VI
16	Presentations: creation, edition and sharing (SlideShare, Prezi, Empressr)	4.59	EA	4.55	Always	4.66	EI
17	Videos (sevenload, Viddler, Vimeo, YouTube, Dailymotion, Metacafe, NicoNicoDouga, Openfilm)	4.55	EA	4.24	Often	3.95	VI

Key: $\bar{X}$ = Mean, NA/NI = Not at all Aware/Important, SA/SI= Slightly Aware/Important, MA/MI= Moderately Aware/Important, VA/VI= Very Aware/Important, EA/EI = Extremely Aware/Important,

Table 1 reveals that the respondents are quite aware of or familiar with items no 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 13, 16 and 17 as some of the uses of social media in academic, and their mean values fall within 3.51- 4.60 while the students are either slightly aware or moderately aware of items no 9, 11, 14 and 15 with their mean values from 2.21-2.89. However most of the familiar usage are also sometimes, often or always used except item no 1, 2, 12 and 13 which were either rarely used or never used with mean values ranging from 1.05 to 2.33. Items no 1, 2, 3, 4, 5, 6, 7, 10, 12, 13, 14, 15, 16 and 17 are either very important or extremely important to the student for academic purposes with mean values ranging between 3.53 and 4.60 while the remaining item no 8, 9 and 11 with mean ranging between 1.25 and 2.21 are either slightly important or not important to the students.

Hypothesis

HO_1: Is there any significant relationship between gender of the respondents, their awareness, frequency and importance of social media platform usage for academic purpose?

Table 2: A Spearman's rank order Correlation analysis of the gender variables of the respondents, their awareness, frequency and importance of social media platform used for academic purpose

Gender	Correlation coefficient	Gender 1.000	Awareness .229	Frequency .195	Important .146
	Sig. (2-tailed)	.	0.07	.026	.017
	N	167	167	167	167
Awareness	Correlation coefficient	.229	1.000	.897	.532
	Sig. (2-tailed)	.007	.	.005	.042
	N	167	167	167	167
Frequency	Correlation coefficient	.195	.897	1.000	.784
	Sig. (2-tailed)	.026	.005	.	.000
	N	167	167	167	167
Important	Correlation coefficient	.146	.532	.784	1.000
	Sig. (2-tailed)	.017	.042	.000	.
	N	167	167	167	167

A Spearman's rank order correlation was run to determine the relationship between the various socio–demographic variables of the respondents and their

awareness and use of social media for academic resources. The correlation analysis in table 2 revealed that:

1. There was no significant correlation between gender and awareness, gender and frequency and importance;
2. Awareness was highly correlated to the frequency (r=.897, n=167, p=.005) and moderately correlated to the importance (r=.532, n=167, p=.042),
3. Frequency was highly correlated to the importance (r=.784, n=167, p=.000)

Discussion of Findings

Table 1 provides answer to research question 1-3, as findings revealed that the students of Federal University of Technology are familiar with social media platforms, such as Reference management software, Time management, Images and photographs, Communication, Instant messaging (Msn), Document creation, edition and sharing, Social bookmarking, Blogs and wikis, Scientists' databases, Science news services, presentation and Videos. At the same time, the findings also reveal that students are not aware of the usage of Research platforms, Surveys, Citations indexes as social media platforms. These findings are in line with the findings of Liu (2010) who carried out a similar study on awareness and knowledge of use of social media by university students and the results revealed that majority of the students are aware and knowledgeable about YouTube, Wiki, and Facebook. In the same vein, the results reveal that the students do frequently use these social media platforms for academic purpose except the few ones such as Reference management software, Time management, Citations indexes, Scientists' databases, Surveys, Science news services and scientific social networks. This finding is also in line with the finding of Nández, & Borrego (2013) who carried out a similar study on the use of social networks for academic purposes among academics in Catalan Universities affiliated institutions and discovered that academics use citation indexes, document creation, edition and sharing tools, and communication tools as In addition, reference management and time management tools were widely used. The high use of citation indexes according to Nández, & Borrego (2013) was due to their importance in literature searches. These results are also in conformity with those of Rowlands, Nicholas, Russell, Canty and Watkinson, (2011), who found that the most popular tools for academic purposes are those that allow collaborative authoring, conferencing, and scheduling and meeting.

On the importance of usage, the table revealed that the students agreed that the usage of Reference management software, General social networks, Images and photographs, Communication, Instant messaging (Msn), Document creation,

edition and sharing, Blogs and wikis, Scientists' databases, Scientific social networks, Presentations: creation, edition and sharing, Research platforms and Videos are important, while Time management and survey platforms are considered not important by the students. A study carried out on high school students of University of Minnesota revealed that social networking sites have a great impact on educational growth of students in high school and exposed students to many important skills such as technological skills, communication skills, creativity and being open for diverse opinions and views, which are all important for the 21st century. For example reference management software according to Fenner, Scheliga and Bartling, (2015) allows for the digitalization of a personal collection of relevant scholarly publications. It helps students find relevant literature, allows them to store papers and their bibliographic metadata in a personal database for later retrieval, and allows students to insert citations and references in a chosen citation style when writing a text. Instant messaging offers real-time text transmission over the Internet and it has hit an important milestone in the life of students and other users. The implication of this finding is that students of Federal University of Technology Minna will be more familiar with these tools and further enhance their knowledge on how to use them for academic purposes. Danciu and Grosseck (2011) discovered in 2011 that more and more colleges and universities from all over the world are widening their curriculum landscape beyond technology by integrating different forms of social media, such as (micro) blogging, collaborative content, social networking, multimedia sharing, casting (pod, screen, etc.), social bookmarking/tagging, and other online social artifacts. This is an indication that social media platforms are very important in academic environment.

Spearman's rank order correlation analysis was used to test the hypothesis as presented in table 2. Findings reveal no significant correlation between gender and awareness, gender and frequency and importance; there was high correlation between awareness and frequency and moderate correlation between awareness and importance. In addition, the findings revealed high correlation between frequency of usage and importance of usage for academic purpose. It therefore means that students can only make use of the social media platform that they aware of. Cha (2010) found that interpersonal utility, perceived ease of use, privacy concerns, and gender does not determine the use (and frequency) of the tools that deliver social media and social networks in particular.

Conclusion

This study investigated the awareness, frequency and importance of social media for academic purpose among University students. Results indicated that gender does not influence the frequency, awareness and importance of using social media by the students of the Federal University of Technology Minna for academic purposes. This study also found that awareness correlated to factors such as frequency of social media use. Awareness of social media platform translated into frequency of using social media for academic purpose. In spite of this, there seems to exist a considerable gap between awareness and importance of using social media in academics by Federal University of Technology Minna students.

In conclusion, the present research demonstrates that social media is gaining popularity in higher institutions. Students are becoming more successful in the use of social media and social networks in particular for their academic work.

Recommendations

Based on the findings of this study and the subsequent discussion, the following recommendations are made:

1. It is suggested that Management of the Federal University of Technology Minna take a look on the benefits and tradeoffs of integrating the use of social media in various aspects of instruction, be it academic or research. A social media-use policy should be carefully crafted to the university's existing acceptable use policy for internet resources.
2 Since the awareness of social media tools usually influence the actual use of social media, more enlightenment campaigns should be carried out by the university to encourage students and lecturers on the use of social networks.
3 Both students and lecturers should take advantage of the social media tools to make learning resources more accessible and available.

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