

Lecturers' Knowledge of Social Network Media: Implication for Accessibility and Usability Need in Open and Distance Education

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Abstract

This paper determined the level of lecturers' knowledge of social network media, the factor which is paramount to accessibility and usability need of the learners in open and distance learning. Population of the study comprised of lecturers in distance learning universities in Nigeria. Out of this population, 80 samples were selected using stratified random sampling from all the schools of the universities. Also, 50 of these lecturers came from single mode university while, the remaining 30 were from dual mode university. Forty-seven were male and 33 were female. The instrument used to obtain data was a self-designed questionnaire with a reliability coefficient of 0.75 using test-retest method. Three research questions and two hypotheses guided the study. Descriptive (mean, frequency count and percentages) were used to analyse the research Questions. The two hypotheses formulated were analysed with t-test statistical analysis. It was discovered that most ODL lecturers only have the knowledge of Facebook. It was, therefore, recommended that ODL lecturers should be given training that is e-learning- oriented in social network media through, workshop and conferences to better their contribution to accessibility and usability needs of the learners.

Keywords: social network media, accessibility, usability, open and distance education

Introduction

Open and distance learning serves to remove barriers to learning, for total development of able and disabled learners. To achieve this goal, the National

Policy on Education (NPE, 2004) places emphasis on the use of a variety of media and technologies. Since the acquisition of knowledge and skills in ODL is through mediated information and instruction, encompassing all technologies and other forms of learning at a distance.

Open and Distance Learning (ODL) refers to the form of study where students are not in direct physical contact with their lecturers. Distance education has the goal of providing access to quality education and equity in educational opportunities for those who otherwise would have been denied. Also, most ODL systems have the philosophy that aims to remove barriers to education and allow learners to study what they want, when they want and where they want (Commonwealth of Learning (COL), 2000). Therefore, ODL is about increasing educational access and increasing educational choice.

The goals of ODL can only be realised through appropriate accessibility and usability of the learning resources to meet the needs and preferences of all learners. Cooper (2012) defines usability as the effectiveness, efficiency and satisfaction with which user can achieve specified learning goals in a particular environment with particular learning resources, while accessibility according to Global Learning Consortium (2002) is the ability of the learning environment to adjust to the needs of all learners. Milken (1998) had earlier reported that information and communication technologies under the right conditions have the potential to accelerate, enrich, and deepens knowledge acquisition. Web 2.0 technologies include social networking sites, blogs, wikis, video sharing sites, hosted services web applications and others. Social network media is an unmatched and essential channel through which meaningful knowledge, skills and ideas could be imparted and, or transmitted to the learners (Omoniyi, 2009). According to Brag (2006), social networks are a body of applications that augment group interaction and shared spaces for collaboration social connection, and aggregates information exchanges in a web-based environment. Social networking tools are more diverse and some are better fit for a particular purpose. The specific applications that are devised to be used as a teaching tool are often referred to as e-learning platforms. Through this application, students can participate, create his own studying schedule, exchange information with other students and interact with the instructor in real-time, while teachers are privilege to monitor the performance of their

students in specific tasks, and can give them support, feedback and assistance (Merril, 2007).

In the National Policy of Education (NPE, 2004), it is stated that no education system can rise above the quality of its teachers. Therefore, it is worthwhile to know that knowledge of lecturers remains the key factor for any strategy put in place to ensure students' success in education. According to the Oxford Advanced Learners Dictionary, knowledge is the information, understanding and skills that are gained through education or experience. Open and distance learning focuses on removing the barriers to learning thus, the lecturers' knowledge of social network media give them advantage to conduct study that supports this move, through quality research and recommendations which the experts and developers in accessibility and usability of learning resources incorporate in their software design. In addition, the lecturers' knowledge put them at an advantage of acquiring knowledge of specific standards of the appropriate social network media, thus help them to detect violations of established accessibility and usability principles and then provide feedback to the designer about possible design improvement. In a similar manner, Davis (2012) opines that quality curriculum needs a qualified workforce to achieve quality outcomes.

Darling-Hamond (1999) opines that what lecturers know and do have positive influence on what the learners achieve. As such there is need to consider the area of specialisation of lecturers while assessing the lecturers' knowledge of social network media. Also, it takes a skillful lecturer to produce high level students through quality instructions that are taught using an appropriate medium. In addition, quality lecturers provide an environment that allows students reach their potential. Researchers have found that the lecturer becomes more efficient and more effective as he stays longer in his profession by learning more and more on the job, learn more about the difficulties learners encounter while learning (Olokoba, 2002; David, 2004). His grooming experience helps students gain insight into how to overcome. In a study conducted by Adeyemi (2008), he found that institutions having more lecturers with five years and above teaching experience achieve better results than those having more teachers with less than five years teaching experience. Similarly, Rice (2003) reported that lecturers become more skilled with experience. For open and distance learning to realise its vision of providing highly accessible and enhanced

quality education anchored by social justice, equity, equality and national cohesion through a comprehensive reach that transcend all barriers, it is imperative for both male and female to have knowledge of appropriate social network media. Studies on gender reveal inconsistency in results. For instance, Hargittads (2007) reported that women use social network media more than men. In contrast, Mazman and Usluel (2011) and the data collected Pew Internet and America Life Project found that men use social network media than their women counterpart.

The mode of university might also influence lecturers' knowledge of social network media, which in turn could have implication on the media accessibility and usability exercise. Study has revealed that Nigeria has one single-mode open university, the National Open University of Nigeria as well as six dual - mode universities (conventional universities with distance learning institutes) recognised by the National Universities Commission. These are the Universities of Ibadan, Lagos, Abuja, Maiduguri, Obafemi Awolowo, He - Ife and Federal University of Technology, Yola (Okebukola, 2013).

Statement of the Problem

Given the role of technology in removing barriers in education, and promoting accessibility and usability need in Open and Distance Learning (ODL), the knowledge of social network media by the lecturers can be seen to have huge potentials for providing quality recommendations and useful feedback to software developers on the accessibility and usability need of learners, which ensure pedagogical effectiveness in distance education. Thus, surveying the lecturers' knowledge of social network media as a prerequisite to effective accessibility and usability development in distance learning is a topic worth researching.

Research Questions

1. What types of social network media do lecturers in ODL have knowledge most?
2. Does the ODL lecturers' area of specialisation influence their knowledge of social network media?

3. Do the years of experience influence lecturers' knowledge of social network media?

Hypotheses

1. There is no significant difference between male and female lecturers' knowledge of social network media.
2. There is no significant difference between lecturers' knowledge of social network media in single mode and dual mode open and distance education.

Methodology

Research design

A descriptive survey employing the ex-post factor design in which none of the variables used was manipulated, but was utilised as they occur.

Population of the Study

The population of the study was made up of all lecturers in open and distance learning universities in Nigeria.

Sample and Sampling Techniques

The sample for the study was 50 lecturers drawn from the only single mode distance university - National Open University of Nigeria (NOUN) and 30 lecturers from one of the oldest dual mode universities (The Distance Learning Institute of the University of Lagos). Using stratified sampling technique, 19, 10, 19, 16, and 16 of these lecturers were drawn from school/faculty of Education, Law, Management Science, Art and Social Sciences, and Science and Technology respectively. The lecturers were the representative of the staff in each of the schools. Among the sample were 47 males, and 33 females, and also 40 were experienced and also 40 were less experienced.

Instrument and Data Collection

The instrument used for data collection was a self-designed questionnaire. The instrument comprises of two sections. Section A deals with personal information such as name of school/faculties, lecturers' gender and teaching

experience. Section B contains items that elicit information from lecturers on their knowledge of social network media, using a close ended questions regime, YES/NO answer. The questionnaire instrument was validated by colleagues at school of education, National Open University of Nigeria. The reliability of the instrument was determined through a test - retest method, and value was found to be 0.75. The research assistants ensure the questionnaires were collected in person; this ensures 100% rate of return. The data collection took two weeks.

Data Analysis Procedures

Data collected for the study were analysed using descriptive to statistics (frequency and percentages) to ascertain the level of lecturers' knowledge of social network media. The bar charts were drawn to represent extent of knowledge of social network media among ODL lecturers. The hypotheses were tested using t-test.

Results and Discussion

Research Question 1: What types of social network media do lecturers in ODL have knowledge most?

Tablet: The Social Network Media the Majority of Lecturers have Knowledge Most

S/N	Social network media	Yes (%)	No (%)
1	Flicker	32 (40)	48 (60)
2	Diigy	4(5)	76 (95)
3	Xanga	13(16.3)	67 (83.8)
4	Twitter	41 (51.2)	39 (48.8)
5	Tumble	8 (10)	72 (90)
6	Friendstar	9(11.3)	71 (88.8)
7	Twiki	14(17.5)	66 (82.5)
8	Messenger	50 (62.5)	30 (37.5)
9	Stumbier	13(16.3)	67 (83.8)
10	Technorati	3 (3.8)	77 (96.3)
11	Najialonge	9(11.3)	71 (88.8)
12	Facebook	64 (80)**	16(20)

13	Linkedin	30 (37.5)	50 (62.5)
14	Fresqui	8(10)	72 (90)
15	Hi5	15(18.8)	65 (81.3)
16	Skype	38 (47.5)	42 (52.5)
17	Mspace	27 (33.8)	53 (66.3)
18	Yigg	9(11.2)	71 (88.8)
19	Livejournal	8(10)	72 (90)
20	Google Plus	45 (56.3)	35 (43.8)
21	Orkut	15(18.8)	65 (81.3)
22	Twacle	5 (6.3)	75 (93.7)
23	Propeller	2 (2.5)	78 (97.5)
24	Reddit	4(5)	76 (95)
25	Bebo	3 (3.8)	77 (96.3)
26	Tagged	1 (1-3)	79 (98.8)
27	Cafemom	5 (6.3)	75 (93.8)
28	Meetup	9(11.3)	71 (88.8)
29	Youtube	46 (57.5)	34 (42.5)

**= The social network medium that the majority of the lecturers had knowledge.

From Table 1, most ODL lecturers generally have knowledge of Facebook (N=64, %=80) among all the types of social network media, followed by Messenger (N=50, %=62.5), Youtube (N=48, %=57.5) and Google Plus (N=45, %=56.3) in that order. The least ones are Tagged (N=2, %=1.3), Propeller (N=2, %=2.5) and Technorati (N=3, %=3.8).

Research question 2: Does the ODL lecturers' area of specialisation influence their knowledge of social network media?

Table 2: The Influence of Area of Specialisation on Lecturers' Knowledge of Social Network Media in ODL

Lecturers	Education	Law	Management Science	Art & Social Sciences	Science & Technology
Mean score	70.70	65.75	76.71	72.34	77.96
Rank	4	5	2	3	1

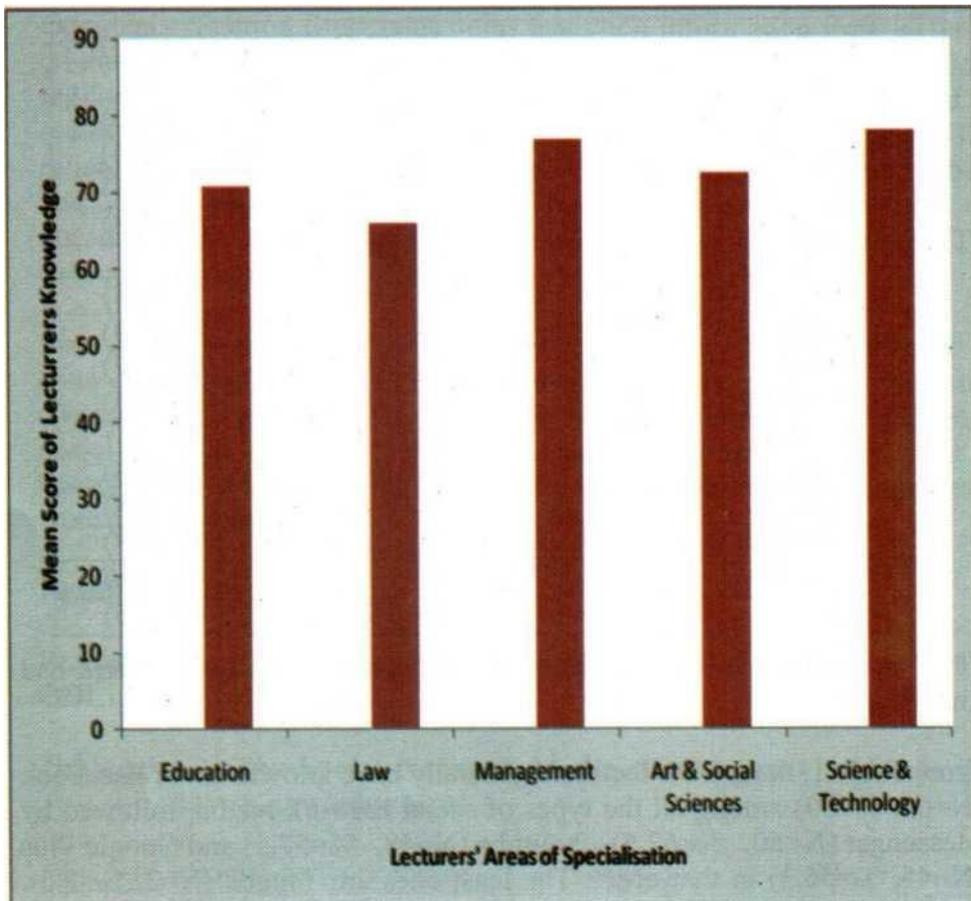


Fig. 1: The Influence of Area of Specialisation on Lecturers' Knowledge of Social Network Media

From Table 2 and Figure 1, it is clear that knowledge of ODL lecturers towards social network media is slightly influenced by their area of specialisation, since all the five schools have almost the same mean. However, lecturers in the school of Science and Technology have the highest knowledge.

Research Question 3: Do the years of experience influence lecturers' knowledge of social network media?

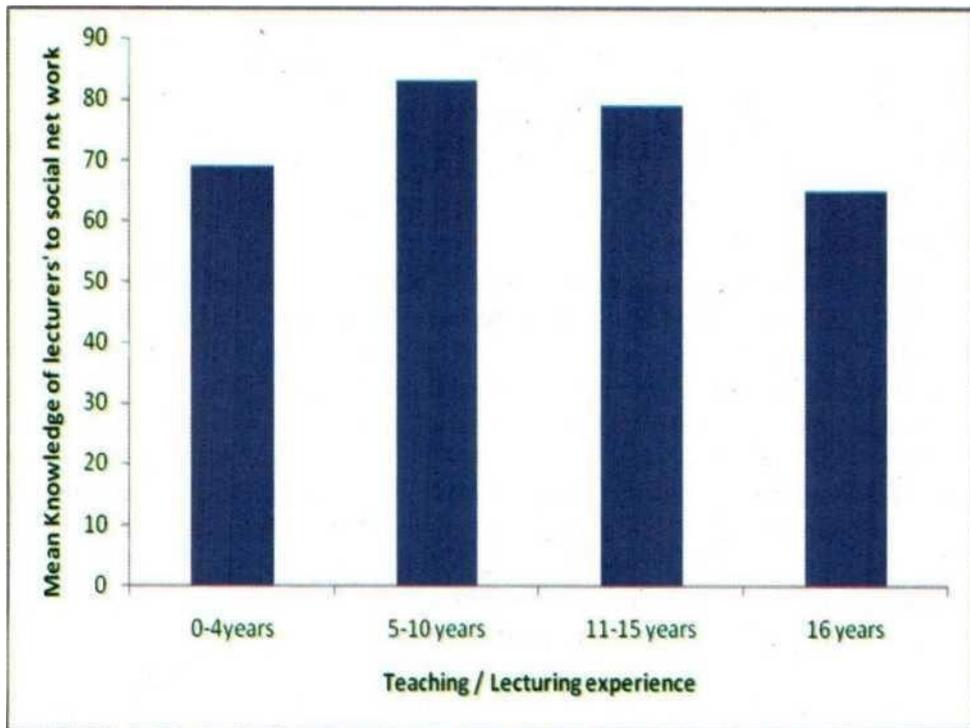


Fig. 2: The Influence of Experience on Lecturers' Knowledge of Social Network Media

Figure 2 shows the knowledge of ODL lecturers in social network media by their years of experience. It can be seen that the less experienced (0-4 years) and the most experienced (16 years and above) lecturers have less knowledge of social network media than the averagely experienced (5 - 10 & 11 -15 years).

Hypotheses Testing

Ho 1: There is no significant difference between male and female lecturers' knowledge of social network media.

Variable	N	Mean score	Standard deviation	Standard error	DF	t-cal	
Male	47	21.203	11.98	1.74	78	-1.420	.160
Female	33	25.18	12.82	2.23			

Significant at 0.05 level

Table 3 shows that the mean knowledge of male is 21.20 while that of female is 25.18. The t-calculated is -1.420 (degree of freedom is 78) with p-value of 0.160. The hypothesis is accepted at 0.05 level of significance (p-value > 0.05). It is, therefore, concluded that there is no significant difference between male and female lecturers' knowledge of social network media.

Ho 2: There is no significant difference between knowledge of lecturers in single mode and dual mode ODL towards social network media.

Table 4: t - test of Knowledge of ODL Lecturers in Single Mode and Dual Mode towards Social Network Media

Variable	N	Mean score	Std dev.	Std. Error	DF	T - cal	P
Single Mode	50	73.100	10.22	1.45	78	-793	.430
Dual Mode	30	74.750	6.47	1.18			

Significant at 0.05 Level

Table 4 shows that the mean knowledge of lecturers in single mode is 73.10 while that of those in dual mode ODL is 74.75. The t - calculated is -0.793 (degree of freedom is 78) with p-value of 0.430. The hypothesis is accepted at 0.05 level of significance (p-value > 0.05). It is, therefore, concluded that there is no significant difference between knowledge of ODL lecturers in single mode and dual mode towards social network media.

Discussion

Distance education's focus on opening access to education for those who otherwise would have been denied is mostly achievable through quality lecturers who have knowledge of media technologies.

From this study, Facebook is the social network media that lecturers have knowledge most, closely followed by Messenger, Youtube and Google Plus. This supports the view of eBizMBA (2010) which reported that Facebook is the most popular and most heavily visited social network website. The reason might be because it is the social utility that helps people share information and communication more efficiently with friends, family and coworkers.

Finding on area of specialisation reveals that they are all knowledgeable of social network media; however, certain areas of specialisation were more knowledgeable than the others. The result in Table 3 shows that those in the Science and Technology have the highest mean 77.98; Arts 72.34: and Law 65.75. Winogrod (2000) opines that the role of media technologies in various areas of specialisation is like the role of mathematics to the physical sciences. This underscores the fact that there is no course or discipline that does not require the use of e-learning technologies, especially for lecturers in ODL, who should work towards improving, accessibility and usability of those technologies for learners.

Experience on lecturer's attitude reveals that the less experienced (0-4 years) and the most experienced (16 years and above) lecturers have little knowledge towards social network media. The reason might be because the young lecturers are yet to realise the need to remove barriers in distance education through social network media, while the older ones are still finding it difficult to change from the orientation which they had in conventional institutions (where face-to-face teaching is the main thing) before transferring their services to ODL institutions.

Further findings revealed that there is no significant difference between male and female ODL lecturers' knowledge of social network media. This result is not in agreement with the report of Hargittads (2007) who reports that women use social network media more than men. Also, it is contrary to the

finding of Mazman and Usluel (2010) who found that men use social network media more than their women counterparts.

Findings on knowledge of lecturers in single mode and dual mode institutions towards social network media showed no significant difference between the two. The reasons might be because of the central objective of ODL, which is to provide access to quality education and equity in educational for the learners who would have been denied. Therefore, lecturers in the two both have obligations to do things that will facilitate this objective.

Conclusion and Recommendations

It can be concluded that ODL lecturers' knowledge of social network media can position them to have understanding of its specific standards and thereby, provide huge contributions to accessibility and usability needs of the learners, through quality research and recommendations and feedback offered to the software developers.

It is recommended that:

ODL lecturers should be given training that is e-learning oriented in social network media through, workshop and conferences. Thereby, they will be effective and efficient in their effort towards success of accessibility and usability needs of the learners.

Awareness programme that promotes ODL lecturers' knowledge of social network media should be organised, to further enhance their move for good accessibility and usability exercise in ODL.

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