

PARTICIPATION OF STUDENTS AND LECTURERS IN SOCIAL NETWORKING FOR TEACHING AND LEARNING IN PUBLIC UNIVERSITIES IN RIVERS STATE, NIGERIA

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ABSTRACT

The use of social media and mobile devices has become acceptable in virtually all areas of today's world. Hence this study is a survey that was carried out to find out if students and lecturers in public universities in Rivers State use social networking for educational purposes. The sample of the study comprised of 240 students and 99 lecturers from the University of Port Harcourt and the Rivers State University of science and Technology. The study had five research questions, two hypotheses and the instrument for data collection was a 4-point Likert type rating scale questionnaire titled Participation of Students and Lecturers in Social Networking for Teaching and Learning. The data was analysed using mean, standard deviation and z-test. The findings gotten from the analysed data revealed that students participate in social networking using different types of web applications but they hardly use them for educational purposes and lecturers hardly ever communicate with their students using social networking sites. Some recommendations were also made to guide appropriate stakeholders on the proactive steps to take.

Keywords: Internet access, Mobile learning, Participation, Social media, Social networking, Technology.

INTRODUCTION

Tertiary education, also referred to as third stage, third level and post-secondary education, is the educational level following the completion of a school providing a secondary education, such as a secondary school. Potentially, higher education can widen rather than reduce socio-economic growth and human capital development of the country. Countries are under increasing pressure to develop quality assurance systems that operate using internationally recognized practices-whether to facilitate recognition of credentials or assessment of key competencies of graduates (Adepoju & Akinola 2006). In Nigeria, the issue of how best to enhance academic performance has been a challenge especially at tertiary level. According to Basse, Ebuara, Ekpiken and Udida (2009), the challenges facing Nigerian higher institutions are complex; it is a combination of peer academic performance, limited access to instructional resources and rigidity in course selection. Internet access is one of the greatest technological advancements being experienced in the 21st century. It revolves around advancements in Information and Communication Technology (ICT) which has gone a long way to influence the mode of information gathering, storage, retrieval and dissemination in these times (Okiy, 2010).

Computers and Internet connections are becoming widely available in schools and classrooms. In 1999, 99 percent of teachers in the United States had access to a computer in their schools,

and 84 percent had one or more computers in their classrooms. At the same time, Internet connections were also widespread, with 95 percent of schools and 63 percent of classrooms having access. Worldwide, many countries are making the creation and diffusion of information and communications technology (ICT) an important priority. (Education Encyclopedia 2010) Even in developing countries, usage is increasing dramatically. As ICT becomes more widely available, teachers and policymakers are turning their attention to the difficult task of understanding how best to integrate this technology into learning environments. ICT can be used in many different ways, and how it is integrated into educational settings depends largely on teachers' instructional goals and strategies. Changes in the goals of education during the latter part of the twentieth century, coupled with increases in the amount and type of available technology, has created changes in teachers' use of technology. In the 1970s and early 1980s the primary goal of instruction was to have students memorize important information and procedures. Instruction was teacher-led and dominated by lectures, followed by practice using worksheets and short-answer tests. Students worked alone to complete assignments, and whenever help was needed they consulted parents, teachers, or textbooks for assistance. If computers were available in classrooms during this time period, their use mirrored this dominant mode of instruction; that is, they were primarily used to present passages of text and test students' comprehension and memory for information contained in the passages.

The impact of ICT on tertiary education has been felt more in administrative services like administration, registration, payment of fees etc, than in teaching and learning. For instance most universities in Nigeria presently have portals, where registration for academic sessions are done; including payment of fees, accommodation and course selection. The portal is accessible over the internet. This obviously manifests the university's concern for enhancing the registration process (administrative). The importance of technology in the educational process is quite evident. Computers hold a better promise in the instructional process compared to other media such as book materials, chalkboard, radio/television and film that have dominated instructional practices over the ages. Technology can be used to support educators and their quest to teach/learn to meet the needs of their students (Bryant, 2008). The internet has emerged as a major driving force of the dynamic development of Information and Communication Technologies (ICTs) which has imparted positively in virtually every sector of Nigerian economy including education. According to techterms.com social networking websites allow users to be part of a virtual community. The three most popular sites are currently "Facebook", "Myspace" and "Twitter"

Social media may have started out as a fun way to connect with friends, but it has evolved to become a powerful tool for education. Sites such as Facebook and Twitter and tools such as Skype are connecting students to learning opportunities in new and exciting ways. Social networking has its greatest (potential) impact in the classroom. Classroom social networking is the grouping of students into specific groups to effectively administer instruction and to maximize academic performance of students. Although classroom social networking is possible in person, it is most popular online. In general, social networking provides new ways to connect and share information and create networks of interest. While in more traditional learning environments much of this must be orchestrated and planned by the instructor and organized through the grouping and pairing of students, when using a social networking tool this level of connection can happen immediately. Interest in social networking in education is global, as evidenced by the wiki [Social Networks in Education](#), which contains a "must-see" extensive list of social networks used in a variety of educational environments or for educational purposes. As internet access increases and programs and software advance the

educational possibilities also increase. Just as other technologies have found their way into the classroom, social networking, too, will become a major influence in our schools.

This study examined the participation of students and lectures in social networking. The study was carried out in two public universities in Port Harcourt, Rivers state in Nigeria. Data for the study was collected from students and lecturers of the University of Port Harcourt and the Rivers State University of Science and Technology in Port Harcourt Rivers State Nigeria.

LITERATURE REVIEW

Technology has been married to education for decades, beginning with the creation of the first vacuum tube-based computer in 1946, with the help of multiple universities. Ten years later technology was playing an even bigger role, strengthened when Russia launched their satellite Sputnik into space. During this time, schools were still abiding by the system that highlighted the teacher as the facilitator and only source students received information from within the classroom (Jones, 2012). During the 1960s educational technology was synonymous with audio visual based media. The first definition on educational technology presented by the Association for Educational Communications and Technology (AECT) reaffirms this notion (Perera, 2011).

According to benefitof.net (2009) the term “Technology” is derived from the Greek word “Technologia” and “techne” means “craft” and “logia” means the “study of something”. Technology is a very broad concept and is used to refer to several braches of science and study. Some examples are information technology, medical technology and biotechnology. According to Vikram, (2009) Technology is the knowledge of the manipulation of nature for human purposes. He went ahead to say that technology is an entity that intervenes in the life of human beings in multifarious ways, directly or indirectly, trying to alter behaviours. Thus has an ethical dimension. This implies that all practical or technical skills ultimately derive from alternations or manipulation of nature.

Properly used, technology will help students acquire the skills they need to survive in a complex, highly technological knowledge-based economy. Technology also changes the way teachers teach, offering educators effective ways to reach different types of learners and assess student understanding through multiple means. It also enhances the relationship between teacher and student. When technology is effectively integrated into subject areas, teachers grow into roles of adviser, content expert, and coach. Technology helps make teaching and learning more meaningful and fun (Edutopia.org,2008)

Kessler (2010) observed that “Technology is helping teachers to expand beyond linear, text-based learning and engage students who learn best in other ways. Its role in schools has evolved from a contained “computer class” into a versatile learning tool that could change how we demonstrate concepts, assign projects and assess progress.”

Constructivism is basically a theory based on observation and scientific study about how people learn. It says that people construct their own understanding and knowledge of the world, through experiencing things and reflecting on those experiences. (Thirteen Ed Online, 2004) Constructivism's central idea is that human learning is constructed, that learners build new knowledge upon the foundation of previous learning. This view of learning sharply contrasts with one in which learning is the passive transmission of information from one individual to another, a view in which reception, not construction, is key.(Frameworks Seneca online, 2009)

An online Survey of K-12 Educators on Social Networking and Other Content-Sharing Tools, co-sponsored by edWeb.net, MMS Education, and MCH, Inc.(2010) showed that overall, 61% of the educators who responded had joined one or more social networks. However, the results varied for the three groups surveyed—principals, teachers, and school librarians. Principals were the least likely (54%) to have joined a social network, teachers fell in the middle (62%), and librarians were the most likely (70%) to have joined a social networking. Key Findings from the Online Survey include the following:

- i. Most principals indicated in the survey that social networking sites have value in education as a way for educators to share information and resources; to create professional learning communities; and to improve school-wide communications with students and staff.
- ii. Educators who have used social networking technology are more positive about the benefits than those who have not.
- iii. Educators who have joined a social networking site, and those who have not, expressed a strong preference, going forward, for joining a social networking site dedicated to education.
- iv. If schools and districts are to develop advocates for appropriate and effective integration of social networking with instruction, they will need to expose more educators to this technology

A survey from the University of Phoenix College of Education that surveyed more than 1,000 teachers found 47 percent of all k-12 teachers said participation in social media platforms could help enhance their students education and about four out of five use social media for personal use. A large majority (80 percent) say they are concerned about separating their personal and professional lives and worry that they have not been properly trained to use social media in a professional setting. (Vikram, 2009)

Implication of the Review of Literature to the Study.

The review of literature shows that the positive effects of social networking sites in education are profound. Also, students, lecturers and administrators who are already engaging in social networking could benefit from incorporating it into education.

Through utilizing teaching techniques that incorporate social media, teachers/educators are able to increase students' engagement in their education, increase technological proficiency, contribute to a greater sense of collaboration in the classroom, and build better communication skills.

METHODOLOGY

The research design for this study was survey research design. The survey design was chosen to investigate this study as it is the most suitable method to gather information on behavioural patterns. The target population for this study comprised of all students and lecturers from the University of Port Harcourt (UPH) (Students: 40,000 Lecturers: 1600) and the Rivers State University (UST) (Students: 17,000 Lecturers: 558) Students and lecturers used in this study were from the Faculty of Education of both universities. 120 students were purposefully selected from each institution. Also, 60 lecturers were selected purposefully from the University of Port Harcourt Faculty of Education. (10 lecturers each from the six (6) departments). For that of the Rivers State University of Science and Technology, all the 39 lecturers in the Faculty of Technical and Science Education and Institute of Education were selected because they were few in number. For the successful conduction of this research work,

the instrument that was used was a questionnaire with 31 items named “Participation of Students and Lecturers in Social Networking for Teaching and Learning”. The instrument comprises of a 4-point likert type rating scale which ranged from one (lowest response) to four (highest response). The method of data analysis used for this study was mean and standard deviation and Z test approximation of t- test for a large sample size ($N > 30$). A standard reference mean of 2.50 was adopted for the purpose of determining the degree of availability and effectiveness of the use of social networking sites in higher institutions in Port Harcourt metropolis. Below are tables showing the population and sample representation (as at the time the study was conducted) of the study.

Institution	Students Population	Lecturers Population
UP H	40,000	1600
UST	17,000	558
TOTAL	57,000	2,158

Table 1: Population

Sources: University of Port Harcourt Academic Internal Department, www.ust.edu.ng, www.uniport.edu.ng

Institution	Department	Student Sample Size	Lecturers Sample Lecturers Size
UPH	Curriculum Studies&Edu Tech	20	10
	Educational Management	20	10
	Foundations	20	10
	Psychology	20	10
	Human Kinetics&Health Edu	20	10
	Adult&Non Formal Edu.	20	10
	Total Sample Size UPH	120	60
Rivers State University	Business Education	40	10
	Foundations	40	14
	Science&Tech. Edu	40	12
	Institute of Edu	40	03
Total Sample Size UST	120	39	
TOTAL SAMPLE SIZE	240	99	

Table 2: Sample of Study

RESULTS / DISCUSSION

Research Question One: To what extent do students of public universities in Rivers State collaborate through social networking sites?

Table 3: Mean and Standard Deviation of Students Responses to the Extent Students

Collaborative elements of Social Networking Sites(SNS) in the classroom	Students Response								Mean	Std dev
	Most Oft (4)		Often (3)		Rarely (2)		Not At All (1)			
	UPH	UST	UPH	UST	UPH	UST	UPH	UST		
1. Students work in teams to create content knowledge while using SNS	10	7	9	5	76	49	25	59	1.85	0.82
2. You can get instant feedback	19	43	53	50	32	12	16	15	2.82	0.96
3.Social networking sites provide visualization in a variety of formats	42	54	50	47	15	18	13	1	3.15	0.87
4.Students comment on each other's assignment while using SNS	8	10	11	28	55	36	46	46	1.93	0.92
5.Individuals share best practices and also learn from other people	51	53	46	20	16	21	7	16	3.13	0.99
6.The use of SNS increase flexibility of presentations	29	41	27	42	42	28	22	9	2.74	1.02
7.SNS enables demonstrations of complex concepts	12	14	18	16	69	44	21	46	2.08	0.92
8.Students can stay connected anywhere	49	65	30	34	25	19	16	2	3.14	0.97

Collaborate through Social Networking Sites(SNS)

Table 3 shows the mean and standard deviation of student's responses to the degree of social networking sites usage in the classroom. The items were responded on a 4-point scale quantified 4, 3, 2 and 1, with a standard reference mean of 2.50. Based on the value, any item in Table I with a mean score above 2.50 is seen as an acceptable degree to which students collaborate using social networking sites. Hence the items 2,3,5,6 and 8 indicated a mean cut above 2.5 and were regarded as relevant extent of usage. On the other hand items 1, 4 and 7 indicated a mean below 2.50 and were regarded as irrelevant.

Research Question 2: Which of the different kinds of web applications are commonly used by students?

Table 4: Mean and Standard Deviation of Students' Responses to the Different Types of Web Applications Commonly used.

S/N	Favorite web application	Student Response								Mean x	Std dev
		Most often (4)		Often (3)		Rarely (2)		Not at all (1)			
		UPH	UST	UPH	UST	UPH	UST	UPH	UST		
9.	Facebook	69	78	25	33	19	7	7	2	3.43	0.83
10.	My Space	2	0	1	0	17	15	100	105	1.17	0.44
11	Twitter	68	67	30	25	12	17	10	11	3.27	0.98
12.	Goggle Chat	3	3	5	10	33	31	79	76	1.47	0.72
13	Whatsapp	78	82	26	22	8	10	8	6	3.48	0.87
14	Wikipedia	47	44	31	29	25	23	17	24	2.84	1.11
15	You Tube	18	22	5	27	49	38	48	33	2.13	1.06
16	Instagram	56	143	33	19	8	28	23	10	3.07	1.09
17	Skype	8	7	10	4	32	51	70	58	1.65	0.85
18	Messenger	2	4	9	7	38	20	71	89	1.45	0.73

Table 4 shows that mean ratings of 3.43, 3.27, 3.48, 2.84, and 3.07 of items 9, 11, 13, 14, and 16 respectively are above the standard reference mean of 2.50. This indicates that the kinds of web applications commonly used by students include; Whatsapp, Facebook, Youtube, Twitter and Wikipedia. Also the table shows that mean ratings of 1.17, 1.43, 2.13, 1.65 and 1.45 are below the standard reference mean of 2.50 and this indicates that students hardly use these web 2.0 sites; my space, goggle chat, you tube, Skype and messenger.

Research Question 3: Which of the different kinds of web applications are commonly used by lecturers?

Table 5: Mean and Standard Deviation of Lecturers' Responses to the Different Types of Web Applications Commonly used .

S/N	Favorite web application	Lecturers Response								Mean	Std Dev
		Most often		Often		Rarely		Not at all			
		UPH	UST	UPH	UST	UPH	UST	UPH	UST		
9.	Facebook	4	2	5	6	8	10	43	21	1.59	0.91
10.	My Space	0	0	0	0	0	0	99		1	0
11	Twitter	2	8	3	6	43	20	12	5	2.12	0.81
12.	Goggle Chat	5	0	2	0	15	20	38	19	1.55	0.77
13	Whatsapp	0	0	2	1	2	5	56	33	1.31	0.42
14	Wikipedia	24	20	11	20	2	9	8	5	3.07	1.04
15	You Tube	4	5	3	3	23	26	13	22	1.89	0.87
16	To go	0	0	0	0	8	5	50	34	1.15	0.36
17	Skype	2	9	13		18	15	32	10	1.93	0.99
18	Yahoo Messenger	2	0	8	10	10	20	29	20	1.73	0.83

Table 5 shows that mean ratings of item 14; 3.07 is the only one above the standard reference mean of 2.50. This indicates that the web application commonly used by lecturers is Wikipedia. Items 9, 10, 11, 12, 13, 15, 16, 17 and 18 all have mean ratings below the standard reference mean of 2.50. This indicates therefore that lecturers hardly engage in web 2.0 sites like facebook, my space, twitter, goggle chat, whatsapp, you tube, to go, skype and yahoo messenger.

Research Question 4: How do students/ lecturers communicate through social networks?

S/N	How do you communicate using social network sites?	Students Response								Mean	Std dev
		Most often		Often		Rarely		Not at all			
		UPH	UST	UPH	UST	UPH	UST	UPH	UST		
19	By starting a discussion group/page	31	34	30	17	46	40	30	12	2.56	1.07
20	By sending messages/updates	54	66	35	41	9	20	10	5	3.25	0.89
21	Chatting	57	87	9	40	30	11	3	3	3.38	0.85
22	Video calls	4	1	2	7	21	40	77	88	1.39	0.66
23	Voice messaging	4	13	8	5	47		10	63	1.52	0.88
24	Data uploads	30	25	64	65	23	22	8	3	2.95	0.77

Table 6: Mean and Standard Deviation of Students' Responses to how they Communicate Using Social Network Sites

Table 6 shows that items 19, 20, 21 and 24 with mean ratings of 2.56, 3.25, 3.38, and 2.95 respectively, are above the standard mean reference of 2.50. This indicates therefore that the various ways students are likely to communicate using social network sites are; by starting a discussion group/page, by sending messages/updates, chatting and data upload. The table also shows that items 22 and 23 with mean ratings of 1.39 and 1.52 are below the standard reference mean of 2.50. This indicates that students are not likely to communicate by voice calls and voice messaging when using social network sites.

S/N	How do you communicate using social network sites?	Lecturers Response								Mean	Std dev	
		Most often		Often		Rarely		Not at all				
		UPH	UST	UPH	UST	UPH	UST	UPH	UST			
19	By starting a discussion group/page	0	0	7	6	18	19		23	26	1.64	0.70
20	By sending messages/updates	2	6	10	6	28	24		13	10	2.09	0.84
21	Chatting	0	2	9	4	8	30		16	30	1.70	0.77
22	Video calls	1	4	3	1	6	9		42	33	1.38	0.79
23	Voice messaging	0	0	1	1	8	13		36	40	1.25	0.48
24	Data uploads	3	1	4	8	20	17		21	25	1.74	0.48

Table 7: Mean and Standard Deviation of Lecturers' Responses to how they Communicate Using Social Network Sites

Table 7 shows the mean and standard deviation of response of lecturers on how they communicate using social network site. The table shows that all the mean ratings of the items are below the standard reference mean of 2.50. This clearly indicates that lecturers rarely communicate using social network sites.

Research Question 5: What do students and lecturers use web 2.0 sites for?

S/N	Usual Web2.0 sites	Student Response								Mean	Std dev
		Most often		Often		Rarely		Not at all			
25	Sports	31	38	42	29	46	26	20	8	2.75	0.99
26	Movies	40	15	35	30	48	10	52	10	2.47	1.11
27	Music	52	33	60	27	30	18	17	13	2.95	1.00
28	Academic Matters	17	4	19	13	39	42	72	34	1.87	0.95
29	Online dating	16	35	35	35	24	50	37	8	2.53	1.02
30	Initiate business	3	2	9	4	15	14	79	114	1.29	0.66
31	News	28	31	51	20	48	15	15	22	2.59	1.06

Table 8: MEAN AND STANDARD DEVIATION OF LECTURERS' RESPONSES TO WHAT THEY USE WEB APPLICATIONS FOR

Table 8 points out the various sites students explore while engaging in web 2.0 sites. The table shows that students are more interested in Sports, Movies, Music, Online dating and News when it comes to web 2.0 sites rather than sites that are Academic oriented. These items (25, 26, 27, 29 and 30) from the table above have mean ratings of 2.75, 2.47, 2.95, 2.53 and 2.59. Also from the table, items 28 and 30 (Academic matters and initiate business) have mean ratings of 1.87 and 1.33. This in turn shows that students barely use web 2.0 sites for educational purposes.

Lecturers Response

S/N	Usual Web2.0 sites	Most Often		Often		Rarely		Not At All		Mean	Std dev.
25	Sports	3	6	7	4	17	5	35	20	1.74	0.98
26	Movies	0	0	0	0	4	1	26	63	1.10	0.30
27	Music	0	0	0	0	0	0	99	99	1	0
28	Academic Matters	43	13	26	10	3	4	0	0	3.49	0.63
29	Online dating	0	0	0	0	0	0	57	42	1	0
30	Initiate business	2	9	10	4	16	10	18	30	1.88	1.03
31	News	2	1	2	3	16	22	21	32	1.58	0.73

Table 9: Mean and standard deviation of Lecturers' responses to what they use web applications for

Table 9 shows the response of lecturers on what they use web 2.0 sites for. From the data presented in table 4.5.2, item no. 28 with a mean rating of 3.49 and standard deviation value of 0.63 is the only item that has a value above the standard reference mean of 2.50. The other items; 25, 26, 27, 29, 30 and 31 have mean ratings below the standard reference mean; 0.98, 0.30, 0, 1.03 and 0.73 respectively. This therefore indicates that lecturers use web 2.0 applications mainly for academic related activities rather than engaging in sites for sports, movies, music online dating and news.

Research Hypothesis One

There is no significant difference in the type of web applications commonly used by students and lecturers.

Group	Mean \bar{x}	Std Dev \hat{d}	N	Df	Std Error	z-cal	z- table α	Decision
Students	2.4	0.87	240	337	0.09	7.56	1.96	Rejected
Lecturers	1.72	0.7	99					

Table10: Z-Test Analysis of the Types of Web 2.0 Applications Commonly Used by Students and Lecturers

Table 10 shows calculated z-value (7.56) is higher than the z- value (1.96) at a freedom of 0.05 level of significance. This indicates that there is significant difference in the types of web 2.0 applications commonly used by students and lecturers. The null hypothesis is therefore rejected.

Research Hypothesis Two

There is no significant difference in the web 2.0 sites explored by students and lecturers.

Group	Mean \bar{x}	Std Dev \hat{d}	N	Df	Std Error	z- cal	z- table α	Decision
Students	2.35	0.96	240	337	0.08	8.38	1.96	Rejected
Lecturers	1.68	0.52	99					

Table 11: Z-Test Analysis of the Types of Sites Explored by Students and Lecturers

Table 11 shows the calculated z-value (8.38) is higher than the z- value (1.96) at a freedom of 0.05 level of significance. This indicates that there is significant difference in the various sites commonly explored by students and lecturers. The null hypothesis is therefore rejected.

CONCLUSION

Based on the analysis of data and findings made, the following conclusions were drawn;

1. Students in public universities in Rivers State participate in social networking using different types of web applications but they hardly use them for educational purposes.
2. The different types of web applications commonly used by students include; facebook, twitter, whatsapp, to go and Wikipedia.
3. Lecturers use mainly Wikipedia web application and have a low level of interest when it comes to other sites.
4. Students communicate through social network sites by chatting, uploading data, sending messages/updates and starting a discussion group.
5. Lecturers rarely communicate with their students using social networks.

Implications

The society we now find ourselves in today is speedily transforming into a digital one. It is therefore very important for universities in Rivers State to adapt to this trend. Social networking and online collaboration tools if incorporated into higher institution classrooms will make substantive changes in students' educational experience. Social Networking allows users to

share knowledge, ideas, thoughts and skills with other users. Just as other technologies have found their way into the classroom, social networking, too, should become a major influence in our nation's schools. Students today are using sites like twitter.com, facebook.com, and others for socialization. With minor adaptations or guidance, sites such as these can become tools for learning not just socialization, but core curriculum.

Recommendations

1. Higher education administrators in Port Harcourt metropolis should make modifications that address the use of social media in academic contexts. These modifications could be in the form of making the use of mobile learning part of the teaching and learning process in public universities.
2. Higher education administrators in Port Harcourt metropolis should provide professional development opportunities and incentives in forms of workshops and seminars for lecturers to learn more about how technologies like web applications can be used effectively to enhance the teaching and learning process.
3. Higher education administrators in Port Harcourt metropolis should commit to moving courses into digital formats, to enable future students have access to digital resources.

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