

## **INFLUENCE OF SOCIAL NETWORKS ON LEARNING OUTCOMES OF UNDERGRADUATES**

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### **Abstract**

The study investigated the influence of social network sites on learning outcomes of undergraduates in Ekiti State University, Ado Ekiti and College of Education, Ikere. The study adopted descriptive research design of the survey type. The population for the study consisted of all students in the faculty of education of the Ekiti State University, Ado Ekiti and all students in College of Education, Ikere Ekiti. In all, 350 respondents made up the sample. Stratified random sampling and purposive sampling techniques were used to select the respondents. An instrument tagged Comparative Influence of Social Network Sites on Learning Outcomes of Undergraduate Students was used to elicit relevant information from the respondents. Reliability coefficient of 0.83 was obtained for the instrument. The data collected were analyzed using frequency counts, percentage scores and t-test statistic. Result showed that SNs were used for various purposes such as friendship and communication network, surf for useful information, used to having group discussion, reading news update, post inspirational links, blogging, sharing files, music, videos, pictures, software and getting solutions to most class work, projects and group works. The study also revealed that there is no significant difference between undergraduates using SNs in Ekiti State University, Ado-Ekiti and College of Education, Ikere- Ekiti. There is no significant difference between male and female students' learning outcomes.

**Keywords: Social Networking, Networks, Sites, Learning, Undergraduates**

### **Introduction**

The world is moving at a jet speed as a result of advances in Science and Technology. Uysman and Eulf (2006) assert that Social Network (SN) is a pervasive phenomenon among today's University students and that such network can result in the creation of social capital. Other studies indicate that students' current social structure is habitually linked to the era's communication tools. Our era now highly depends on the internet, and online communication and group knowledge sharing leading to instrumental outcomes.

This kind of outcomes confirms that:

- online communication constitutes a power and innovation in organizations (Ibarra, 1993).
- the internet becomes part of students' daily routine (Jones, 2002)
- trust and privacy are joined with the willingness to share identifying information (Dwyer, Hiltz, and Passerinmi 2007) and
- job satisfaction is connected to better communication (Sparrowe, Liden and Kraimer 2001, Chung, Hossain and Davis 2007).

Likewise Social Networks and web based services allow individuals to: (a) construct a public or semi-public profile within a bounded system, (b) articulate a list of other users with whom they share a connection, and (c) view and transverse their list of connections and those made by others within the system (Kinberly, 2009).

The following are some of the products that emerged from the technology of social networks:

*Facebook*: It is a popular free social networking website that allows registered users to create profiles, upload photos and video, send messages and keep in touch with friends, family and colleagues. The site, which is available in 37 different languages, includes public features such as: Marketplace – allows members to post, read and respond to classified ads; Groups – allows members who have common interests to find each other and interact; Events – allows members to publicize an event, invite guests and track who plans to attend; Pages – allows member to create and promote a public page built around a public page built around a specific topic; Presence technology – allows members to see which contacts are online and chat.

*What Sapp*: What Sapp Inc. was founded in 2009 by Americans Brian Acton and Jan Koum. It is a messenger with a proprietary, cross-platform instant messaging subscription service for smartphones that uses the internet for communication. In addition to text messaging, users can send each other images, video and audio media messages as well as their location using integrated mapping features. *Google Plus*: It is a social networking and identity service that is owned and operated by Google Inc. It is a social layer that enhances many of its online properties, and that it is not simply a social networking website, but also an authorship tool that associates web-content directly with its owner/author. This service is open to 18years and above.

*Twitter*: This is a free social networking micro-blogging service that allows registered members to broadcast short update and posts called tweets. Twitter members can broadcast tweets and follow other users' tweets by using multiple platforms and devices. Tweets and replies to tweets can be sent by cell phone text message, desktop client or by posting at the twitter.com website. The default settings for twitter are public. Unlike Facebook or LinkedIn, where members need to approve social connections, anyone can follow anyone on public twitter.

*2go*: 2go chat enables friends and love ones to stay connected with each other. With 2go chat messenger, you can share and meet different people from almost all countries. 2go chat is a mobile version of Facebook, which makes everything much easier because everything is done with a mobile phone. 2go chat mobile messenger is a mobile application that is used for chatting and connecting with friends and family. With 2go chat, you can get the feel of staying connected and meeting ne friends online, you can even share your thought, pictures, files, software with your friends through 2go chat mobile messenger.

*Blackberry Messenger (BBM)*: This is a proprietary Internet based instant messenger and video telephony application include on blackberry devices that allows messaging and video calls between blackberry, iOS and Android users. *YouTube*: This is the largest video sharing site on the web. It lets anyone upload short videos for private or public viewing. Founded in 2005 by Chad Hurley, Steve Chen and Jawed Karim, it was acquired by Google in 2006 for \$1.65 billion.

YouTube is another amazing Internet phenomenon with meteoric growth. Within a couple of years, more than 25 quadrillion bytes (petabytes) of videos were being streamed from the site each month. YouTube provides a venue for sharing videos among friends and family as well as a showcase for new and experienced videographers.

*MySpace*: This is a social networking site that allows its users to create webpages to interact with other users. Users of the service are able to create blogs, upload videos and photos, and design profiles to showcase their interests and talents. It has provided a place for users to meet new friends and keep in touch with people across the world. The site has grown tremendously since its inception in 2003 and has even launched the careers of some music artists and actors. The site has received backlash from critics who believe that some users use the service to stalk and prey on other users. To combat this issue, MySpace has developed privacy settings to allow users to specify who they would like to view their profile and personal information. Flickr: This is an image hosting and video hosting website, and web services suite that was created by Ludicorp in 2004 and acquired by Yahoo in 2005. In addition to being a popular website for users to share and embed personal photographs, and effectively an online community, the service is widely used by photo researchers and by bloggers to host images that they embed in blogs and social media. The verge reported in March 2013 that Flickr had a total of 87million registered members and more that 3.5 million new images uploaded daily. Photos and videos can be accessed form Flickr without the need to register an account but an account must be made in order to upload content onto the website. Registering an account also allows users to create a profile page containing photos and videos that the user has uploaded and also grants the ability to add another Flickr user as a contact.

*LinkedIn*: It is a social networking site designed specifically for the business community. The goal of the site is to allow registered members to establish and document networks of people they know and trust professionally. A LinkedIn member's profile page, which emphasizes employment history and education, has professional network news feeds and a limited number of customizable modules. Basic membership for LinkedIn is free. Network members are called connections. With basic membership, a member can only establish connections with someone he has worked with, knows professionally (online or offline) or has gone to school with. Premium subscriptions can be purchased to provide members with better access to contacts in the LinkedIn database.

The observations of the researchers show that social network technology has witnessed tremendous success in innovations and development of user friendly interfaces which has made it simple to operate and cheaper to maintain, users can now share files, music, pictures, read news articles and updates, and perform many more operations on social networks as a result of recent developments and technological advancement.

### **Literature Review**

According to Lewis (2008), many people actively participate in content generation and value creation, and several researches have examined their profiles to determine why and to what extent they are keen on posting their entire, identity, sharing pictures and videos, and indicating their religious affiliations, marital status, and political orientation on the internet. These users interact with others, exchange information about their interests; raise discussions about new topics, follows news about specific topics on different social networks, teenagers now use the internet for the majority of their daily activities and information gathering, as opposed to older generations who used resources like the television or newspaper.

Kist (2008) carried out a recent survey which shared that approximately ninety percent (90%) of teens in the United States have internet access, and about seventy five percent (75%) of these teens use internet more than once per day. This study also showed that approximately half of all teens who have internet access are also members of social networks, and use the internet to make plans and socialize with friends.

According to the survey conducted by marketing charts in September, 2005, out of total adult internet users (18-29years), sixteen percent (16%) were those who were using any social networks and this percentage increased to eighty six percent (86%) on May, 2010 ([www.marketingcharts.com](http://www.marketingcharts.com)).

Therefore, the researchers observed that the usage of SN among undergraduates influences other people to download SN software and likewise belong to at least a SN which has led to regular usage of computer systems and other internet enabled devices such as i-pad, mobile phones etc. and has increased their level of computer literacy over times.

### **SN and Academic Performance**

According to Tuckman (1975), performance is the apparent demonstration of understanding, concepts, skills, ideas and knowledge of a person and proposed that grades clearly depict the performance of a student. Hence their learning outcomes must be managed efficiently keeping in view all the factors that can positively or negatively affect their educational performance. Use of technology such as internet is one of the most important factors that can influence learning outcomes of students positively or adversely.

In Shah (2001), stated that student users are affected by the internet and this impact is determined by the type of internet usage. He further stated that students are positively affected by the informative use of internet while having drastic impact of recreational use of internet on them.

According to Oskovei (2010) who proposed that internet is advantageous to both students and teachers if used as a tool of knowledge creation and dissemination.

In a recent survey carried out by Whitmore School of Business and Economics for over 1,000 students on Social Networking and grades which consist of questions or items like: which Social Networks site were used, how much time they spent on a site, what their grade point average (GPA) was, and what they were to going to school for, shows that there is no correlation between how much time is spent on a Social network and grades (Martin, 2009).

According to Kirschner in Enriquez (2010) revealed that students who multi-task between Social network and homework are likely to have twenty percent (20%) lower grades than a student who does not have a social network in visual range. He believes that even running a social network on the background on a student's PC (Personal Computer) while studying or doing homework could lower a student's grade. He said the problem is that most people have Facebook or other networking sites, their emails and maybe instant messaging constantly running in the background while they are carrying out their tasks (Enriquez, 2010).

### **SN and Gender**

According to Williams and Martin (2008), University students are often found to be obsessed with their Facebook profile or Twitter page. The researchers matched this path of identity exploration and role experimentation to Erik Erikson's development stages (Erikson, 1968). Erikson's theory suggests that adolescents between the ages of 13-18years will experience a period of psychological crisis-identity versus role confusion. While undergoing this development stage, adolescents become conscious about sexual identity, peer relationships and other social

interactions. Williams and Mertne (2008) also suggested that the over-dependency on these media may affect a student’s attendance at school.

According to DeBell and Chapman (2006) pointed out that adolescents and young adults are the heaviest users of computers and the internet. SN becomes the latest online communication tool that allows these users to create a public or private profile to interact with people in their networks (Boyd and Ellison, 2008).

Aghazamani (2010) studied students’ motivations for Facebook usage. A close ended questionnaire was directed to 595 University students who were recognized as users of the site at Karlstad University in Sweden. Their results suggested that male spend more time on Facebook than females. The appraisal showed that undergraduate students log in their Facebook account more times per day than graduate students. Friendship was named the most favorite activity among male undergraduate students.

Despite the generality of the use of SN, the researchers observed that female undergraduates stay longer on SN due to loneliness and curiosity to meet more friends.

**Methodology**

The research design was a descriptive design of survey type. The population of this study comprises of all students of the Faculty of Education in Ekiti State University and the College of Education, Ikere. Stratified random sampling technique was used to select the sample for this study. The entire Faculty of Education, Ekiti State University was first divided into four levels: 100level, 200level, 300level and 400level and College of Education, Ikere Ekiti was secondly divided into 3levels: 100levels, 200level, and 300level. Thereafter 50students was selected from each level. A total number of 350students was selected as sample for this study comprising male and female students, married and single, Christians and Muslims or other religion. The instrument used in this study was questionnaire tagged “Influence of Social Networks on Learning Outcomes.” This instrument was a 5point scale. The reliability of the instrument was ascertained using test-retest method. A reliability Coefficient of 0.837 was obtained. The instrument was administered to the students in the two institutions Data collected were analyzed using percentages, frequency counts and T-test statistics. All the hypotheses were tested at 0.05 level of significance.

**Results**

*Question 1: To what extent do you use the following SNs?*

**Table 1: Descriptive analysis showing the extent of usage of various SNs.**

S/N	ITEMS	ALWAYS		NEVER	
		N	%	N	%
1	Facebook	251	77	75	23
2	Twitter	105	32	221	68
3	2go	210	64	116	36
4	What Sapp	203	62	123	38
5	BBM	141	43	185	57
6	YouTube	70	21	256	79
7	MySpace	43	13	283	87
8	Flickr	38	11	288	88
9	LinkedIn	54	17	272	83
10	Google Plus	195	60	131	40

The findings from Table 1 showed that 77%, 64%, 62% and 60% of the respondents use Facebook, 2go, What Sapp and Google Plus respectively. On the other hand about 32%, 43%, 21%, 13%, 12%, and 17% of the respondents use Twitter, BBM, YouTube, MySpace, Flickr and LinkedIn.

*Questions 2: Why do undergraduates use SNSs?*

**Table 2: Descriptive analysis showing purposes of SNS usage among undergraduates**

S/N	ITEMS	AGREE		DISAGREE	
		N	%	N	%
1	I use SNS for friendship and communication network	296	91	30	9
2	I surf for useful information via SNS	258	79	68	21
3	I'm used to having group discussion on SNS	227	70	99	30
4	I like reading news update on SNS	267	82	59	18
5	I feel encouraged via chatting, emailing and sending instant messages to friends	262	80	64	20
6	SNS video games are well developed, so I like playing them	152	47	174	53
7	Most times, I post inspirational links and likewise blogging on SNS	218	67	108	33
8	I like the fascinating aspect of SNS like pornography	115	35	211	65
9	I shares files, music, videos, pictures, software with friends on SNS	237	73	89	27
10	I get solutions to most of my class works, projects, group work and the likes on SNS	255	78	71	22

From Table 2 above, the findings showed that 91% of the respondents use SNS for friendship and communication network, 79% surf for useful information via SNS, 70% use SNS for group discussion, 82% read news update using SNS, 80% chats, mail and sends instant messages via SNS, 47% use SNS for exciting games, 67% engage in posting inspirational links and blogging, 35% watches pornography, 73% share files, music, videos, pictures, software with friends on SNS while 78.2% find solution to classwork, projects and group work.

*Hypothesis 1:*

There is no significant difference between undergraduates using SNS in Ekiti State University, Ado-Ekiti and College of Education, Ikere- Ekiti.

**Table 3: t-test showing the use of SNS by University and College students**

Group	N	Mean	SD	Df	t-cal	t-table
College of Education	150	22.27	6.04	324	0.210	1.960
Ekiti State University	176	22.14	5.71			

**P > 0.05**

Table 3 showed that t-cal (0.210) is less than t-table (1.960) at 0.05 level of significance. The null hypothesis is accepted. This implies that there is no significant difference between undergraduates using SNs in Ekiti State.

*Hypothesis 2:*

There is no significant difference between male and female students' learning outcomes.

Table 4: t-test of students' learning outcomes by gender.

Group	N	Mean	SD	Df	t-cal	t-table
Male	156	22.61	4.11	324	1.891	1.960
Female	170	21.77	3.89			

$P > 0.05$

Table 4 showed that t-cal (1.891) is less than t-table (1.960) at 0.05 level of significance. The null hypothesis is accepted. This implies that there is no significant difference between male and female students' learning outcomes.

**Discussion**

The findings showed that Facebook had the highest number of users compared with other SNs such as 2go, WhatSapp, and Goggle plus as opposed Ellison (2007) who ranked Facebook as the seventh most popular site on the World Wide Web with respect to total page views.

The findings showed that SNs were used for friendship and communication, source of useful information, discussion, chatting, mailing of messages, reading news updates, source of inspirational links and blogging, sharing files, proffering solution to academic problems. This finding is in relation to the research conducted by the University of New Hampshire (2009) that revealed that majority of students use social networking for social connections and entertainment, but are also using it for education and professional reasons. These findings conforms with the recent investigation of University of New Hampshire (2009), which revealed that current college students grew up in the technology era and social networking is now just a part of a student's daily routine. The proposal of Oskovei (2010) also agreed with this finding that internet is advantageous to both students and teachers if used as a tool of knowledge creation and dissemination i.e. if not used for knowledge creation; it will hinder them of paying adequate attention to their academic pursuit.

From the findings of this research, it was disclosed that students were able to read news articles that keeps them updated about the new developments in their field of study, get solutions to difficult class works, assignments and practical works which has influenced a rise in their GPA since they started using SNs. This finding is in contrast to Kirschner in Enriquez (2010) who revealed that students who multi-task between social network and homework are likely to have twenty percent (20%) lower grades than a student who does not have a social network in visual range. He believes that even running a social network on the background on a student's personal computer while studying or doing homework could lower a student's grade.

**Conclusion and Recommendations**

This study has been able to establish the fact that social network sites are learning spaces that are utilized by undergraduates in both colleges of education and university. It was also established that the both male and female undergraduates use these networks for communication and information exchanges, assignments and other academic purposes. Finally, it was affirmed that the most frequently used social network is face book. Based on these, it is recommended that since undergraduates seem to be the greatest users of these social networks, it is necessary they

cautiously use these networks for academics more than any other purpose so that it can enhance their performance.

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