

Impact of Social Media on Academic Reading: A Study at Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

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ABSTRACT—*Social media is a nice form of entertainment, great for meeting people with similar interests, and can be a very effective business for entrepreneurs, writers, actors, musicians or artists. Social media tools, such as Facebook, Twitter, Skype, LinkedIn, Classmates, Tagged, myyearbook, Meetup, YouTube, Netlog, MySpace, Hi5, Flickr and Photobucket reveal important information about how adolescents and young adults are interacting with one another in the information age. They can be a great home on the web, can help connect with people or reconnect with long-lost friends, and can even help career by making business contacts. Tools like social networking sites, email, instant messaging, video and photo sharing sites help in communication and socialization. Students in tertiary institutions in Ghana often spend a large amount of their free time using social media. This study therefore sought to find the influence of social media on academic reading of students in tertiary institutions. Designed questionnaire were administered randomly to 1000 students from College of Art and Social Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana. It could be said from the study that social media generally is of great importance to academic reading, because of the various facilities available to students. Its use among some students in tertiary institutions in Ghana, however, does not augur well for their academic performance. This is so because of the preferred entertainment options of social media used by these students.*

Keywords— Academic reading, Social network, Academic performance, Facebook, Skype, Twitter

1. INTRODUCTION

‘Social media’ is a multi-purpose platform with web-based technology which incorporates text, sound, video, and images with the purpose of making communication more interactive, appreciative and enjoyable (Kaplan and Haenlein, 2010). It is a means of interaction among people in which they create, share, exchange and comment on contents among themselves in virtual communities and networks (Ahlqvist et al., 2008). It introduces substantial and pervasive changes to communication between organizations, communities and individuals (Kietzmann et al., 2011).

Social media technologies take on many different forms including magazines, Internet forums, weblogs, social blogs, microblogging, wikis, social networks, podcasts, photographs or pictures, video, rating and social bookmarking. The text components of social media spell out vividly using alphabets to send information across through reading. The images and video components complement the text with more pictorial understanding of the intended information being sent across while the sound components appeal mainly to the ear to send the intended message information across to targeted readers. Social media networking on the internet is a type of online application that has recently developed. It is common and appreciated by a lot of people.(Pempek et al., 2009).

Social networking is a nice form of entertainment, great for meeting people with similar interests, and can be a very effective business for entrepreneurs, writers, actors, musicians or artists. Social media tools, such as Facebook, Twitter, Skype, LinkedIn, Classmates, Tagged, myyearbook, Meetup, YouTube, Netlog, MySpace, Hi5, Flickr and Photobucket reveal important information about how adolescents and young adults are interacting with one another in the information age (Kaplan and Haenlein, 2010). They can be a great home on the web, can help connect with people or reconnect with long-lost friends, and can even help career by making business contacts. Tools like social networking sites, email, instant messaging, video and photo sharing sites help in communication and socialization (Mooney, 2009). Starting from 1997 to 2010 there were some 1.5 billion users of social networking websites (Kreutz, 2009). Baird and Fisher (2005) noted that social networking provides the opportunity to take the social interaction to deeper levels as well as address learning styles rooted in digital technologies. Therefore, the use of social media has implications for learning and teaching within the educational process.

Reading and communication require dissemination of whatever is read precisely and concisely into the brain. When reading is done with only the text components of communication, much of the information required to be sent to/by the brain get lost on the way (Stevenson, 2004; Parkinson, 2012). This is attributed to the fact that all the senses involved in the pictorial imaginations and understanding as well as the ear connections and contributions are not used leaving only the text which the mind can convert into meaningful information for usage. Pictures interacting with text, gives a better understanding of the subject matter than text only. This also enhances memory (Levin, 1989).

Academic reading is the kind of reading done when learning or studying in an educational institution. It is active reading with clear thinking whilst reading (Pritchard, 2008). Reading an academic text differs in many ways from reading comics, novels and magazines. Academic texts deal with concepts and ideas related to subjects that are studied at college or university. The idea is that one should challenge what they read as well as keep record of what is read. Simply put, one needs to be 'critical'. A critical reader will question issues and opinions in text presented by authors. By critically engaging with the text, the reader will realize which part of the message is useful and can be used to support or oppose their ideas in a convincing and powerful fashion, rather than merely reading and not reflecting upon the text. In academia, reading is strongly connected to writing. Thus what is written will always have a link with what is read (Lines et al., 2012; Gillett, 2013).

The purpose of this study therefore was to find out the influence of social media on academic reading of students in tertiary institutions in Ghana. The study was conducted at the Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana. It is the second established public University in the country. The population of students was 37,147 in the 2012/13 academic year. Various academic disciplines pursued at KNUST are grouped under six main colleges namely: College of Agriculture and Natural Resources, College of Architecture and Planning, College of Art and Social Sciences, College of Engineering, College of Health Sciences, and College of Science. These Colleges are composed of Faculties and Departments. The vision of KNUST is to be globally recognized as the premier center of excellence in Africa for teaching and research in Science and Technology for development; producing high caliber graduates with knowledge and expertise to support the industrial and socio-economic development of Ghana and Africa.

2. METHODOLOGY

2.1 Study Population

The target population was students of College of Art and Social Sciences (CASS) of the Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana. The College is the largest in the University, an amalgamation of four academic Faculties (Art, Law, School of Business and Social Sciences) and a Research Centre (the Centre for Cultural and African Studies). In all, the college has twenty two Departments with a student population of 11,950.

2.2 Sampling Technique and Data Collection

Out of the population of 11,950 students in CASS, 1000 (constituting 8.4%) were randomly sampled. The study used a survey method to collect data between April and May 2012. Designed questionnaire with self-explanatory close and open-ended questions on the subject (social media and the impact on academic reading) were administered. A total of 956 questionnaires being 95.6% of the 1000 questionnaires administered, were retrieved by the researcher within ten days.

2.3 Ethical consideration

Each participant's consent was sought. They were alerted that participation in the study was voluntary and that results will be used solely for academic purposes. They were therefore obliged to withdraw from participation, if they wished so.

2.4 Data analysis

All data obtained was analyzed using the Statistical Packages for Social Sciences (SPSS) version 17 (SPSS Inc., Chicago, IL, 2008). Presentation was made using frequency tables. Significant differences in measured parameters were assessed with Yates' correction of Pearson's Chi-square test (two-sided) using GraphPad Prism version 5.00 for Windows (GraphPad Software, San Diego, CA, USA). $P \leq 0.05$ was considered significant.

3. RESULTS AND DISCUSSION

3.1 Characteristics of Students

Out of the 956 students involved in the study, 656 (68.6%) were male and 300 (31.4%) female. Students aged 18-25 were 767 (80.2%), those aged 26-35 years were 145 (15.2%), while those 36 years and above were 44 (4.6%). A total of 881 (92.2%) were offering various courses in the undergraduate level while 75 (7.8%) were graduate students. This portrays the use of social media among the youth and undergraduate students as being more prominent than the older and graduate students. According to Roberts, Foehr and Rideout (2005), social media is very instrumental to the development of social, emotional and cognitive development of the youth. Although this fact has been established, a positive correlation between being youthful and the use of social media cannot be established from this particular study even though 80.2% of respondents were youth because this category of individuals are the most found in tertiary institutions.

3.2 Social Media Platforms and Technologies Used

The majority of students, 650 (68%) used social media as a platform for sharing social ideas or for watching photographs and videos (723; 75.6%) which to them was desirable, with only 221 (23.1%) using it to exchange academic reading materials and course work (Table 1). This revealed that most of the students do not see social media and its components as a tool for enhancing reading for education. Brien (2012) however, has given six ways to use social media in education i.e. aggregating images and information to share with classmates or with interest groups that cut across courses and institutions; gathering and sharing data collected with mobile devices during field work or travel abroad; creating a public profile to showcase personal research interests and to connect with a broad audience; using Twitter in class to keep students engaged and to get a sense of what students are thinking about during lectures; forming student study groups with the use of Google+ Hangouts and other social tools; and adding social tools to e-textbooks. These uses make social media a very good academic reading tool.

Although there was significant ($p \leq 0.0001$) patronage of several social media technologies by students, 868 (90.8%) patronized very significantly ($p < 0.0001$) social networking technologies. The least social media technology patronized was photo sharing which was used by only 99 (10.4%) students (Table 2). A high number of students, 723, (75.6%) had chosen Facebook as their favorite social media tool and 901 (94.2%) had created personal profiles for this tool. Other favorites for which more personal profiles had been created were Twitter and Skype (Table 3). Although social media has an array of components, Facebook, and Skype, were the most significantly patronized by the students. These two components of social media play significant roles when it comes to entertainment although they could also be very useful tools for academic reading. Under normal circumstance, Facebook has the user base in order to make academic conversations useful. In Ghana, however, Facebook use is mostly not in relation to academic work. Students use it mainly as a quick and fun way to communicate social messages and news asynchronously across the network.

Table 1: The uses of social media to students

Uses	Frequency (% Distribution)
A network for social contact	650 (68.0)
Multi-purpose network for getting in touch with loved ones	581 (61.0)
A platform for searching photographs and videos	723 (75.6)
A platform for sharing academic reading materials e.g. ebooks, and course work	221 (23.1)

Table 2: Social media technologies employed by 956 students studying in tertiary institutions to gain access to social media

Social Media Technologies	Frequency (% Distribution)	P value	Chi-square, df
Social networking (e.g. Facebook)	868 (90.8) ***	> 0.0001	645.5, 1
Community Q & A (e.g. Yahoo Answers)	467 (48.8) ***	> 0.0001	176.9, 1
Wiki (e.g. Wikipedia)	440 (46) ***	> 0.0001	156.5, 1
Live casting (e.g. Skype)	388 (40.6) ***	> 0.0001	120.0, 1

Video sharing (e.g. YouTube)	386 (40.4) ***	> 0.0001	118.7, 1
Photo sharing (e.g. Flickr)	365 (38.2)***	> 0.0001	105.0, 1
Micro blogging (e.g. Twitter)	99 (10.4)		

Significant differences in the use of other social media technologies compared to photo sharing (the least patronized technology) were established using Pearson’s Chi-square test (two-sided) with Yates’ correction. *** implies $p \leq 0.0001$.

Live casting, a popular form of social media application refers to any kind of audio or visual sharing that is done over the internet. Skype is one recognized platform for multimedia live casting which enables users to have a live voice conversation utilizing voice over IP technology (VOIP) or projecting live video and audio streams in real time. Web cameras and teleconferencing by this method has become a preferred method of communication for businesses and has increasingly become daily use technology for the mainstream technology user (O’Malley, 2012). If these social media technology are the most patronized by students, would the use of social media therefore enhance their academic reading and performance?

Table 3: Favorite social media tools for which personal profiles you have created by students

Social Media Tools	Favorites	Personal Profiles Created
Facebook	723 (75.6%)	901 (94.2%)
Skype	201 (21%)	545 (57.0%)
Twitter	170 (17.8%)	489 (51.2%)
YouTube	105 (11%)	310 (32.4%)
Netlog	31 (3.2%)	145 (15.2%)
Photobucket	17 (1.8%)	50 (5.2%)
LinkedIn	17 (1.8%)	55 (5.8%)
Hi5	17 (1.8%)	176 (18.4%)
MySpace	15 (1.6%)	155 (16.2%)
Flickr	13 (1.4%)	69 (7.2%)
Wikipedia	8 (0.8%)	
Yahoo Messenger	4 (0.4%)	
None	15 (1.6%)	

Data is presented as frequency with percentage distribution in brackets. N=956

3.3 Social Media Usage and Academic Reading

Students of today often spend a large amount of their free time using social media, so if this tool could be used effectively for academic purposes it would be a great resource for teachers in higher education (Wright et al., 2013). A greater number, 608, (63.6%) of students defined reading as a means of extracting meaning from a text. It was also defined by 562 (58.8%) as a means of acquiring, communicating and sharing information. Only 706 (73.8%) agree in totality that the goal of reading is to gain meaning from the text, not just pronouncing words correctly, with 73 (7.6%) disagreeing totally (Table 4). From the meaning of academic reading, one is expected to be critical, to select which part of information needed for course work.

The objectives for academic reading as given by the majority of students as: enhancing understanding of the subject and theoretical concepts; expanding applied knowledge on a subject; and finding out about possible alternative viewpoints in order to consolidate views (Table 5), would not be achieved by using Facebook. Facebook is used by the

majority of people in Ghana, as a purely social and/or business and marketing facility. Instead, Community Questions and Answers like Yahoo Answers and Yahoo Messenger which aim at providing a safe environment where one can ask questions and receive advice, is the best to help them achieve the objectives for academic reading.

Again, the advantages of academic reading which is to increase vocabulary, improve analytical thinking, memory, and writing skills (Table 5) are not likely to be achieved with how social media is used by students. A lot of text sent via social networks are truncated, over summarized, abbreviated, or not grammatically well composed. Social media has several effects on academic work — some more positive than others.

Table 4: The student’s definition and understanding of reading

Definition	Frequency (% Distribution)
A means of extracting meaning from a text	600 (63.6%)
A means of acquiring, communicating and sharing information	562 (58.8%)
A process to understand information	468 (49.0%)
A means to decode symbols to derive meaning	388 (40.6%)

Table 5: The objectives and advantages of academic reading

Objectives	Frequency (% Distribution)	Advantage	Frequency (% Distribution)
To enhance understanding of the subject	818 (85.6)	Increases vocabulary	901 (94.2)
To understand a theoretical concept	805 (84.2)	Improves analytical thinking	828 (86.6)
To expand applied knowledge on a subject	771 (80.6)	Improves memory	654 (68.4)
To find out about possible alternative viewpoints in order to consolidate views	572 (59.8)	Improve writing skills	595 (62.2)
		Reduces stress	348 (36.4)
		Helps prioritize goal	306 (32.0)

According to data gathered from several sources by OnlineEducation.net, Facebook and Twitter are sometimes used to great benefit. Students welcome online engagement and resources, as around 75% of student respondents said they would, in fact, like to do some online collaboration for class. However, negative effects abound. Students who use Facebook and hit the books simultaneously found their multitasking led to 20% lower grades than those of their more focused peers (O’Dell, 2011).

Social media tools that have a lot of information for academic purposes were the least patronized by students. Wikipedia for example, which is a composition system; a discussion medium; a repository; a mail system; and a tool for collaboration had only 46% patronage and Microblogs, e.g. twitter, which allow users to exchange small elements of content such as short sentences, individual images, or video links had 38.2% patronage. As stated by Karpinski and Grabmeier (in a study to finds link between Facebook use and lower grades in college at Ohio State University), College students who use Facebook spend less time studying and have lower grade point averages than students who have not signed up for the social networking website (Kirschner and Karpinski, 2010). Typically, to her, Facebook users in the study had Grade Point Averages (GPAs) between 3.0 and 3.5, while non-users had GPAs between 3.5 and 4.0. However, more than three-quarters of Facebook users claimed that their use of the social networking site did not interfere with their studies (Research News OSU, 2009).

3.4 Impact of Social Media on Academic Reading

Six hundred and ninety-seven students (72.9%) stated that social media had an overall negative impact on academic reading with only 259 (27.1%) thinking otherwise. Eight hundred and twenty-seven (86.5%) of students affirm the reliance on social media/networking for reading and writing short non-academic text messages with only 129 (13.5%) saying otherwise. Again, only 223 (23.3%) stated that they access educational materials from their interaction with social media while 733 (76.7%) stated that they occasionally receive educational material via social media. Only 150 (15.7%) students affirmed the fact that social media improves analytical thinking while less than 30% of the students have used it to access academic information to enhance reading and research or had broadened their knowledge in their particular fields of study. Less than 20% think that social media keeps one informed about current issues in their course of study and allows them to share information and ideas (Table 6).

With regards to the negative impact of academic reading with the use of social media, over 60% think it encourages writing and speaking of Pidgin English and shortening of words when writing. One may encounter a lot of chaff of misinformation as well as uncertified academic information. Also there is time wasting associated with some of the social media as far as academic work is concerned (Table 7). The negative impact significantly outweighs the positive. According to a Performancing Guest Blogger, (2012) students mostly use slang words or shortened forms of words on social networking sites. They start relying on the computer grammar and spelling check features. This reduces their command over the language and their creative writing skills. Students, while searching and studying online, get attracted to using social media sites and sometimes they forget why they are using internet. This wastes their time and sometimes students are not able to deliver their work in the specified time frame.

Table 6: The view of 956 students on the positive impact of social media on academic reading

Positive Impact	Frequency (% Distribution)
Keeps one informed about current issues in their course of study	161 (16.8)
Sharing academic information and idea	146 (15.3)
Access to academic information is very fast and reliable	187 (19.5)
Access to academic information to enhance academic reading and research	155 (16.2)
Helps broaden one's knowledge in particular fields of study	276 (28.9)
Improves analytical thinking	150 (15.7)

Table 7: The view of 956 students on the negative impact of social media on academic reading

Negative Impact	Frequency (% Distribution)
Writing and speaking of Pidgin English	606 (63.4)
Time wasting	604 (63.2)
Shortening of words when writing	604 (63.2)
May contain a lot of chaff of misinformation	602 (63.0)
Easy spread of uncertified academic information	574 (60.0)
Infringement of copyright, patent and or intellectual rights	457 (47.8)
Potential addiction	375 (39.2)

The results of the study show an outstanding disadvantage with social media use in academic reading, as affirmed by the vast majority of students as perceived to be negative. Analytical thinking is required during studies. Academic texts deal with concepts and ideas related to subjects that are studied at college or university. If the contribution of social media to analytical thinking and information for research, and broadening of knowledge is not experienced by the majority of students, then it does not have a good impact on their academic reading among the students in the institution.

Since the disadvantages of social media use is overwhelm, social media use in enhancing academic reading and academic work is not encouraging. It therefore seems that the perception of the majority of students on the use of social media in academic reading as negative is a reality. For a positive impact to be obtained however, students need to be guided on the use of social media by social media experts on how to get good and reliable academic information with well composed English grammar.

4. CONCLUSION

It could be said from the study that social media generally is of great importance to academic reading, because of the various facilities available to students. Its use among some students in tertiary institutions in Ghana, however, does not augur well for their academic performance. This is so because of the preferred entertainment options of social media used by these students

5. RECOMMENDATION

Tertiary institutions should employ social media experts to guide students to use components of social media that will enhance academic reading for better academic performance. Academic librarians have to use these tools to interact with their patrons on real time. They can use social media to provide current and up to date information to clients; provide links to other open source library resources; give information about new arrivals through the link to the library world cat and through the updated list of journals. It is vital for librarians to remain up-to-date not only in their practical field but also with new technologies to provide services in the most effective and accessible way possible. There is an ever growing need for library professionals to be proactive in adding value to information and promoting their services amongst current and potential clients.

Faculties should integrate social networking particularly Facebook in educational settings to increase its educational relevance; set up Facebook groups and use the group to continue class discussions, allow students to ask questions, and encourage students to post and comment on class-related links. When these are done then social media will in reality support College of Art and Social Sciences of the Kwame Nkrumah University of Science and Technology, to further improve academic performance and ultimately the vision of the University.

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