Use of Social Media and its Impact on Academic Performance of Tertiary Institution Students: A Study of Students of Koforidua Polytechnic, Ghana

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Abstract
The study sought to assess students’ use of social media and its effect on academic performance of tertiary institutions students in Ghana with a focus on Koforidua Polytechnic students. Questionnaire was used for collecting data. Out of one thousand five hundred and seventy-eight copies of the questionnaire distributed, one thousand five hundred and eight were retrieved which represented a response rate of 95.5 %. The study revealed that majority of the respondents had mobile phones which also had Internet facility on them and had knowledge of the existence of many media sites. The study further confirmed that most of the respondents visit their social media sites using their phones and spend between thirty minutes to three hours per day. In addition the study revealed that the use of social media sites had affected academic performance of the respondents negatively and that there was direct relationship between the use of social media sites and academic performance. The study recommends among others that, students with mobile phones having internet facility should be encouraged to use it to supplement their research in the library rather than the usual charting with friends all the time. Students should be encouraged to limit the time they spend on their social media sites per day and advise them to rather substitute those hours to read novels to improve their knowledge. Since the use of social media sites had affected the academic work of students negatively there is the urgent need for the introduction of students to the availability of novels and other information resources or materials that can help them academically.

Keywords: Social Networks, Academic Output, Tertiary Students, Internet Use, Ghana

1. Introduction
Social media has exploded as a category of online discourse where people create content, share it, bookmark it and network at a prodigious rate. Because of its ease of use, speed and reach, social media is fast changing the public discourse in society and setting trends and agenda in topics that range from the environment and politics to technology and the entertainment industry (Asur and Huberman, 2010). In the last ten years, the online world has changed dramatically, thanks to the invention of social media, young men and women now exchange ideas, feelings, personal information, pictures and videos at a truly astonishing rate. Seventy-three percent of wired American teens now use social media websites (Oberst, 2010).

Martin, (2008) & Lusk, (2010) share the same concept of social media. To them social media is the use of Facebook, Blogs, Twitter, My Space and LinkedIn for the purpose of communication, sharing photos as well as videos. However for the purpose of this study social media is captured within the use of internet through Facebook, Whatsapp, Twitter, Skype, MySpace as well as Yahoo Messenger for communication sharing of ideas, sharing of photos and videos by users. The increased use of Social Networking Websites has become an international phenomenon in the past several years. What started out as a hobby for some computer literate people has become a social norm and way of life for people from all over the world (Boyd. 2007). Teenagers and young adults have especially embraced these sites as a way to connect with their peers, share information, reinvent their personalities, and showcase their social lives (Boyd, 2007).

In the past years, social media websites have become common; giving young people a new way to interact with each other and communicate with the world. Social networking became popular between 2004 and 2006, after Facebook and MySpace were created. Facebook, for example has over 500 million members and it is still growing and approximately 85% of undergraduate students are Facebook users (Schneider, 2009). These numbers are expected to grow since Facebook users will continue to grow. And this is not only true for Facebook, numbers for YouTube users closely follow as well (University of New Hampshire, 2009).

Social networking websites provide tools by which people can communicate, share information, and create new relationships. With the popularity of social networking websites on the rise, our social interaction is affected in multiple ways as we adapt to our increasingly technological world. The way web users interact and talk to each other has changed and continues to change. These users now socialize through the internet and it takes away from the person socialization that has been around forever. Social networking websites have affected our social interaction by changing the way we interact face-to-face, how we receive information, and the dynamics of our social groups and friendships (Asur and Huberman, 2010).
Communicating through the internet and social networking websites is quite different from communicating in-person to-person situation. When users communicate through these websites, they use things like instant message (IM) and chatting as well as status or Twitter updates to talk to friends and express themselves (Kaitlin, 2010). Kaitlin (2010) further opines that social networking websites also affect the way we receive information and news. The sites open up different portals through which we get information and create more diverse news outlets. Most of the studies, Choney (2010), San Miguel, (2009) Enriquez (2010), Karpinski & Duberstein (2009), Khan, (2009), Kubey et al (2010), conducted on students’ use of the social media sites and its impact on academic performance focused on students in the developed world. It is against this background that it has become necessary to conduct this research aimed at investigating students’ use of social media sites and their impact on academic performance among Polytechnic students in Ghana. This is largely because; no empirical study has been conducted in Ghana to find out the impact of students’ use of social media sites on academic performance of Polytechnic students in Ghana.

1.2 Statement of problem
The rapid advancement of media technology has had a great impact on the way people communicate on a daily basis. The growing dimension of the use of the social media among the youth of today cannot be over emphasized. Over the years, social networking among students has become more and more popular. It is a way to make connections, not only on campus but with friends outside of school. Social networking is a way that helps people feel they belong to a community. Due to the increased popularity of it, economists and professors are questioning whether grades of students will not be affected by how much time is spent on these sites. Choney, (2010), MehMood & Taswir, (2013), Kist (2008), Jacobsen & Forste, (2011), believe that the use of technology such as internet is one of the most important factors that can influence educational performance of students positively or adversely. Many parents and guardians are worried that students are spending too much time on facebook and other social media sites and have not enough time to study. Though parents are worried about students’ constant use of the social media sites, many students continue to utilize these sites on a daily basis. It is against this background that this research is being conducted to ascertain the impact of students’ use of social media sites on their academic work.

1.3 Objectives of the Study
The general objective of the study was to find out the impact of social media on academic performance among students. The specific objectives of the study were as follows:
   i. To examine the impact of social media on academic performance among the students.
   ii. To identify the benefits obtained from using the social media.
   iii. To ascertain what students use social media sites for

1.4 Research Questions
i. Does the use of social media sites have any impact on student’s academic performance?
ii. What are the benefits they derive from using social media?
iii. Why do student visit their social media sites?

1.5 Hypothesis
i. There is a relationship between time spent on social media and academic performance
ii. There is relationship between the use of social media and excellent academic performance

1.6 Literature Review
According to Junco al et (2010), social media are a collection of internet websites, services, and practices that support collaboration, community building, participation, and sharing”. The growing dimension of the use of social media among the youth of today cannot be over emphasized. Over the years, social networking among second cycle students has become more and more popular. It is a way to make connection not only on campus, but with friends outside of school. Social networking is a way that helps many people feels as though they belong to a community. Due to the increased popularity of it, economists and professors are questioning whether grades of students are not being affected by how much time is spend on these sites (Choney, 2010).

According to Lenhart et al., (2010), about 57% of social network users are 18-29 years old and have a personal profile on multiple social media websites. In a study by Pempek, Yermolayeva, and Calvert (2009), the amount of time spent daily on social network sites varied greatly. However, an analysis of the data indicated most participants spent approximately thirty minutes a day socializing, mostly during the evening hours between 9p.m to 12a.m students spent an average of forty seven minutes a day on Facebook. More than 50% of college students go on a social networking sites several times a day (Sheldon, 2008). Quan-Haase and Young (2010), found that 82% of college students reported logging into Facebook several times a day. Younger students tended
to use Facebook more frequently than older students to keep in touch with friends from high school or from their hometown (Pempek et al., 2009)

Many researchers such as Choney (2010), San Miguel (2009) and Enríquez (2010) studies on students’ use of the social media sites revealed a negative effect of the use of social media sites on students’ academic performance. Nielsen Media Research study conducted in June 2010 stated that almost 25% of students’ time on the internet is spent on social networking sites (Jacobsen & Forste 2011). The American Educational Research Association conducted a research and declared at its annual conference in San Diego California (2009), that social media users study less and generate lower grade (Abaleta et al, 2014).

San Miguel (2009), focused on the relationship between time spent on Facebook and the academic performance of students. The overall findings indicated “more time on Facebook equals slightly lower grades”. In his study, the average facebook user had a GPA of 3.0 to 3.5, while the non facebook user had a GPA of 3.5 - 4.0. Also, the average facebook user study for 1 – 5 hours per week, while the non facebook user would study 11 – 15 hours per week Enríquez (2010), revealed that students who multi-task between social networking sites and home work are likely to have 20% lower grades than a student who does not have a social networking site. He believes that even running a social networking site on the background on a student’s PC while studying or doing homework could lower a student’s grade. He believes that “the problem is that most people have Facebook or other social networking sites, their e-mails and may be instant messaging constantly running in the background while they are carrying out their tasks” Choney (2010), in looking at the time spend on facebook and its effect on academic performance said a user of Facebook has an average “GPA of 3.06, while non users have an average GPA of 3.82”.

Furthermore, a study conducted by Karpinski and Duberstein (2009), of Ohio Dominican university on college students who use social network have significantly lower grade point averages (GPAs) than those who do not. They also mentioned that among various unique distractions of every single generation, Facebook remains a major distraction of current generation. According to Khan (2009), facebook users often time experience poor performance academically. Similarly, Englander et al., (2010), posit that social media is negatively associated with academic performance of student and is a lot more momentous than its advantages. Internet addiction consequently gave rise to internet usage within the last couple decades. Nalwa and Anand (2008), recommended that addicted users prefer using internet setting back their personal and responsibilities which ultimately leads to poor academic performance.

According to Kubey et al., (2010), impairment of educational performance and internet dependency are correlated by utilizing synchronous communication programme including internet sites and forums. Jacobsen and Forste (2011), found a negative relationship between the use of various media, including mobile phones, and self-reported GPA among first year university students in the United States. In Taiwan, Yen at el. (2009), identified an association between mobile phone use and respondents and report that respondents have allowed phone use to interfere with their academic activities. Similarly, Hong et al. (2012), reported that daily use of mobile phones is correlated with self-reported measure of academic difficulty among a sample of Taiwanese university students. In a survey of Spanish high school students Sanchez-Martinez and Otero (2009), found a correlation between “intensive” mobile phone use and school failure.

However, other studies like Ahmed and Qazi (2011), Hanqittai and Hsich (2010), Pasek and Hanqittai (2009), conducted on the same topic revealed no correlation between social media and students’ academic performance. A study conducted at Whittmore school of Business and Economic on one thousand, one hundred and twenty seven students revealed that there is no correlation between how much time is spent on social networking sites and grades (Martin, 2009). Again, University of New Hampshire (2010) study also revealed that students’ use of social media sites do not affect grades.

A recent survey showed that approximately ninety percent of teens in the United States have Internet access, and about seventy-five percent of these teens use the Internet more than once per day (Kist, 2008). This study also showed that approximately half of all teens who have Internet access are also members of social networking sites, and use the Internet to make plans and socialize with friends (Kist, 2008). In September 2005, out of the total adult internet users (18-29 years) 16% were using social networking site but this percentage increased to 86% in May, 2010 (www.marketingcharts.com).

1.7 Methodology
The survey method was used to solicit data and information from a sample of students of Koforidua Polytechnic during lecture hours of the second semester of 2013/14 academic year. A set of questionnaire was designed by the researchers to collect information and data. In the view of Kumeekpor (2002), “social survey may be said to be an objective, quantitative approach to the study of the social processes within a well-defined area at a given time through one or more institutions by means of an interview schedule, a questionnaire, and the data thus obtained related statistically”. Social survey aims at understanding some specific problems at a particular time and so study opinion attitudes towards major social, economic and political problems and issues (Fraenkel &
To improve the reliability and validity of the questionnaire, it was pre-tested in Ho Polytechnic because it is closer to the Koforidua Polytechnic during the latter part of the first semester of 2013/2014 academic year. The results obtained helped design the questionnaire to suit the expected purpose of the study. Out of the total number of five thousand two hundred and sixty-one students of Koforidua Polytechnic, 30% was drawn which yielded one thousand five hundred and seventy-eight, as the sample size from all the three schools of the Polytechnic namely School of Business and Management Students, School of Engineering and School of Applied Science and Technology. Stratified sampling technique was adopted to sample the respondents. This was based on the recommendation of Watson’s (2001), sample size calculation, which proposed that for a total population of 3000 to 15000 and above with 5% margin of error, a sample size of three hundred and eighty and above from each stratum is acceptable.

After the collection of data, the results were analyzed with the use of the Statistical Package for Social Science (SPSS) and the result shown in tables with corresponding frequencies and percentage. After the distribution of the questionnaire, thousand five hundred and eight copies were retrieved. This gave a response rate of 95.5%, which was representative of the sample. The impressive response rate was obtained because the data was collected during lecture hours in the various departments. Respondents were given between 20-30 minutes to complete the questionnaires. Table 1 gives the distribution of students and sample size per school.

### Table 1: Table of Population

<table>
<thead>
<tr>
<th>Schools</th>
<th>Total number</th>
<th>Sample Size</th>
<th>No. of Respondents</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBMS</td>
<td>4284</td>
<td>1285</td>
<td>1245</td>
<td>82.6</td>
</tr>
<tr>
<td>SAST</td>
<td>587</td>
<td>176</td>
<td>160</td>
<td>10.6</td>
</tr>
<tr>
<td>SOE</td>
<td>390</td>
<td>117</td>
<td>103</td>
<td>6.8</td>
</tr>
<tr>
<td>Total</td>
<td>5261</td>
<td>1578</td>
<td>1508</td>
<td>100</td>
</tr>
</tbody>
</table>

### Field Data, 2013

**1.8 Discussion of Findings**

When respondents were asked whether they have mobile phone, out of the total respondents of 1508, 1408 (93.4%) responded in the affirmative whilst 100 (6.6%) responded in the negative on the same issue. A follow up question as to whether the respondents had internet facility on their phones showed that a majority of the respondents representing 85.0% indicated that they had internet facility on their phones. A further follow up question was to find out whether respondents had knowledge of social media sites. All the respondents representing 100% responded in the affirmative. It can be deduced that most of the respondents have mobile phone with internet facility on it and they also have knowledge of social media sites. The above revelation confirmed Oberst’s (2010) study that 73% of American use social media sites. This is further corroborated by (Kist, 2008) who posits that 90% of teens in the United States have internet access and 75% use the internet to make plans and socialize with friends.

### Table 2: Favourite social media sites

<table>
<thead>
<tr>
<th>Sites</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>1002</td>
<td>66.4</td>
</tr>
<tr>
<td>WhatsApp</td>
<td>301</td>
<td>19.9</td>
</tr>
<tr>
<td>Twitter</td>
<td>94</td>
<td>6.2</td>
</tr>
<tr>
<td>Skype</td>
<td>51</td>
<td>3.3</td>
</tr>
<tr>
<td>My Space</td>
<td>40</td>
<td>2.6</td>
</tr>
<tr>
<td>Yahoo Messenger</td>
<td>20</td>
<td>1.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1508</td>
<td>100</td>
</tr>
</tbody>
</table>

### Field Data, 2013

From Table 2 respondents gave the following as their favourite social media sites. Facebook 1002 represents 66.4%, WhatsApp 301 representing 19.9%, Twitter 94 representing 6.2%, Skype with 51 representing 3.3%, MySpace with 2.9% and Yahoo Messenger having 1.3% respectively. The analysis shows that Facebook is the most favourite social media site. This confirms Schreider’s (2009) assertion that approximately 85% of undergraduate students are Facebook users.

### Table 3: Time spent on social media site per day

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 minutes to 1 hour</td>
<td>1001</td>
<td>66.3</td>
</tr>
<tr>
<td>2 – 3 hours</td>
<td>485</td>
<td>32.2</td>
</tr>
<tr>
<td>4 – 5 hours</td>
<td>22</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1508</td>
<td>100</td>
</tr>
</tbody>
</table>

### Field Data, 2013

When respondents were asked how much time they spent on their social media sites, 1001 of the respondents
representing 66.3% indicated that they spent thirty minutes to one hour, 485 respondents representing 32.2% spent between two to three hours and the last group of 22 respondents representing 1.5% said they spent between four to five hours a day on the social media sites. The deduction is that 1486 of the respondents representing 98.4% spent between thirty minutes to three hours on social media. The study confirms Choney’s (2010), assertion that due to the popularity of social media sites, economists and Professors are questioning whether grades of students would not be affected by how much time they spent on these sites. MehMood & Taswir, (2013), further corroborated this and state that the use of technology such as the internet is one of the most important factors that can influence educational performance of students positively or adversely.

### Table 4: Why Students Use Social Media

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chatting</td>
<td>1308</td>
<td>86.8</td>
</tr>
<tr>
<td>Downloading music and Video</td>
<td>104</td>
<td>6.8</td>
</tr>
<tr>
<td>Academic Work</td>
<td>96</td>
<td>6.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1508</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**Field Data, 2013**

From Table 4, 1,308 respondents representing 86.8% said they use the social media to chat with friends, 104 representing 6.8% use it to download music and video and 96 respondents representing 6.4% use it for academic work. The analysis indicates an overwhelming majority of the respondents 96.6% do not use the social media sites for academic work.

### Table 5 Social Media Affect Student’s Academic Work

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1208</td>
<td>80.1</td>
</tr>
<tr>
<td>No</td>
<td>164</td>
<td>18.6</td>
</tr>
<tr>
<td>Not Certain</td>
<td>36</td>
<td>2.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1508</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**Field Data, 2013**

When respondents were asked whether the use of the social media affects their academic work, 1208 of the respondents representing 80.1% answered in the affirmative whilst 164 representing 18.6% gave a negative responds. 36 of the respondents representing 2.3% were not certain whether the use of social media sites affected their academic or not. It could be deduced from the table that majority of the respondents 80.1% affirmed that the use of social media affect their academic work. This study confirms MehMood & Taswir’s, (2013) study that the use of technology such as the internet is one of the factors that can influence students’ performance positively or adversely. This is further supported by Choney, (2010) and San Miqual (2009) who believe that students’ use of social media will have negative effect on their academic performance.

### Table 6: Improvement in Academic Work by Social Media

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>1120</td>
<td>74.2</td>
</tr>
<tr>
<td>Yes</td>
<td>301</td>
<td>19.9</td>
</tr>
<tr>
<td>Not Sure</td>
<td>87</td>
<td>5.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1508</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**Field Data, 2013**

From Table 6, out of the total respondents of 1508, 1120 representing 74.2% responded in the negative when asked if the use of social media had improved their academic work, 301 representing 19.9% responded in the affirmative, whilst 87 5.7% were not sure. The idea was that most of the respondents were aware that social media use affects their academic performance. This was because it was confirmed in the study that most of the respondents use the social media sites for other purposes rather than academic work. The implication is that the use of social media may likely not bring any improvement in the academic work of respondents.

**Testing of hypothesis**

H1: There is a relationship between time spent on social media and academic performance
Table 7 Correlations

<table>
<thead>
<tr>
<th>Variables</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>time spent</td>
<td>1</td>
<td>.922**</td>
<td>1508</td>
<td>1508</td>
</tr>
<tr>
<td>academic performance</td>
<td>.922**</td>
<td>.028</td>
<td>1508</td>
<td>1508</td>
</tr>
</tbody>
</table>

Field Data, 2013**. Correlation is significant at the 0.01 level (2-tailed).

From Table 8, there is a strong positive relationship between the dependent variable (academic performance) and the independent variable (time spent) at a significant of 0.01 level. This indicates that more time spent on social media affects excellent academic performance. Therefore spending much time on social media contributes to low academic performance. Choney (2010), in looking at the time spend on Facebook and its effect on academic performance said a user of Facebook has an average “GPA of 3.06, while non users have an average GPA of 3.82”.

H2: There is relationship between the use of social media and academic performance

Table 8 Correlations

<table>
<thead>
<tr>
<th>Variables</th>
<th>academic performance</th>
<th>use of social media</th>
</tr>
</thead>
<tbody>
<tr>
<td>academic performance</td>
<td>1</td>
<td>.752**</td>
</tr>
<tr>
<td>N</td>
<td>1508</td>
<td>1508</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.752**</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.003</td>
<td>1</td>
</tr>
<tr>
<td>use of social media</td>
<td>.001</td>
<td>1</td>
</tr>
<tr>
<td>N</td>
<td>1508</td>
<td>1508</td>
</tr>
</tbody>
</table>

Field Data, 2013**. Correlation is significant at the 0.01 level (2-tailed).

In respect to Table 9, there a strong and positive relationship between academic performance and the use of social media to 0.01 level. In other words, the more use of social media, the less academic performance students will record. This implies students who use the social media sites frequently turn to perform poorly academically. San Miguel (2009), focused on the relationship between the use of Facebook and the academic performance of students. The findings indicated that more use of Facebook result in lower grades. In his study, the average Facebook user had a GPA of 3.0 to 3.5, while the non Facebook user had a GPA of 3.5 - 4.0. Also, the average Facebook user study for 1 – 5 hours per week, while the non Facebook user would study 11 – 15 hours per week.

1.9 Conclusion

The study was conducted to examine the impact of students’ use of social media sites on their academic performance. The study revealed that majority of the respondents had mobile phones with internet facility and had knowledge of the existence of social media sites. As a result they visit their social media sites and spend between thirty minutes to three hours every day. In addition, the study revealed that the use of social media had affected academic performance of the respondents negatively and further confirmed that there was a strong positive relationship between the use of social media and academic performance. The hypothesis H1 and H2 tested on time spent on the use of social media sites and relationship between use of social media and academic performance revealed a strong positive relationship at significant level of 0.01. The study further revealed that most respondents use the social media sites to chat than for academic purpose.

1.10 Recommendations

Based on the findings, the researchers made some recommendations as follows;

Students with phones having internet facility should be encouraged to either use it to supplement their research in the library rather than the usual chatting with friends all the time. Students should be advised to limit the time they spend on social media sites per day and encourage them to rather substitute those hours to read novels and relevant academic books to improve their knowledge. Since the study confirmed that the use of social media sites had affected the academic performance of students negatively, there is the urgent need for the introduction...
of students to the availability of novels and other information resource or materials in the library that can help them academically. It is further recommended that students be advised during orientation of the dangers of addiction to social networking sites. They should be introduced to sites that can add values to their academic work and research.

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