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# "Google It": Towards Virtual Knowledge and the Influence of Social Media on Education in Ghana

# Dennis Moot

Additional information is available at the end of the chapter

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#### Abstract

This chapter attempts to assess the opportunities social media (SM), particularly Facebook, WhatsApp and YouTube, bring to the classroom and how students in Ghana and by extension West Africa use social media to advance learning. Social media continue to influence and reshape teaching and learning in and outside the classroom. In West Africa, just as elsewhere, social media remains a catalyst in developing critical sectors such as health, security and education by eliminating boundaries and providing alternative means of engagement. Research on SM influence in the classroom has received great attention from scholars, what remains is the assessment of proactive use of social media in the classroom. This chapter argued that the youth in Ghana are using SM to improve learning and attaining academic success.

**Keywords:** social media, education, Facebook, WhatsApp, YouTube, Ghana, West Africa, teaching, social learning

# 1. Introduction

"Google it" is fast becoming the catch phrase for verification of facts and information. When said, the challenged is directed to type the question into Google. In turn, Google returns with several thousand sources that provide answers to the question in doubt. Interestingly, Facebook, WhatsApp and YouTube has become comparable to "Google it" due to its ability to generate discourse and information about issues. Social learning was the term introduced by Patricia Kuhl for the first time, a professor at University of Washington. Social learning does not simply refer to the collaboration of the psychical presence of other students. Instead, it transcends boundaries of the physical location of the classroom, to a place of complex interconnections of numerous collaborators existing in the virtual world. These collaborators exit in the virtual world.



© 2017 The Author(s). Licensee InTech. This chapter is distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/3.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. (cc) BY This chapter is concerned with the opportunities that social media (SM), particularly Facebook, WhatsApp and YouTube, brings to the classroom and how students in Ghana use SM to advance learning. It also considers some of the challenges confronting this new turn in knowledge pursuit by looking at the development of the incorporation of SM tools in the classroom and overall development of the youth. In Ref. [1], Ghana's National Communication Authority report indicated that mobile usage penetration reached 127.63% with more than 35 million telecommunication subscription. An indication that mobile phones and devices are fast becoming a household item, and the key players are the telecommunication companies.

Global effort to bridge challenges facing education system has achieved some feat through the use of the Internet and by large social media (SM). In Africa, the entry of Information Technology (IT) in the classroom is replacing blackboards, providing access to libraries on mobile devices, improving poor performances because of absenteeism and encouraging collaboration. SM, appropriately so used, is placing the students from all social class on the same benchmark used for educational progress. SM continues to eliminate the dominance of information previously controlled by few corporate entities. Today, with the likes of Coursera and Edx, one could launch a whole career without having to step into the classroom.

Unlike traditional media, SM has taken the competition to new heights melting binaries of timeliness, eliminating distance by improving communications and presenting and making collaborating and sharing effective. The magic is that SM through collaborative content generation diversified information delivery and consumption.

Following the SM boom around the millennium in West Africa, little knowledge exited as to how a person can manoeuvre around web 2.0 (now web 3.0) platform in relations to learning and sharing information [2]. Today, there is much more depth to reach which is attributed to the in-depth scope of SM. West African youth are not oblivious to the power of SM. From the era of Hi5 which collapsed to the sway of Facebook and twitter as well as YouTube and blogs, -on the one hand, and instant messages from BBM, Yahoo Messenger and now WhatsApp, Tango, Snapchat on the other hand, African youth are at the core of utilizing SM in their educational endeavours by sharing of notes, assignments and debates. What seems to be a major challenge, however, is the concern of students' over-dependence on the Internet in educational settings that has resulted in poor concentration, less critical thinking in solving complex societal issues and over-dependence on virtual knowledge.

The influence of SM amongst students and largely the youth has received a considerable attention from scholars. Most of these scholars argue that SM especially Facebook, WhatsApp and Twitter negatively affect students' performances [3]. In Ref. [4], a study conducted on students who used SM frequently found that students who spent much time on SM had some drop-in grades. In Ref. [5], the author supported this finding as they unveiled that there was a significant negative relationship between Facebook use and academic performance. The study concluded that students who use Facebook spend fewer hours per week studying on an average than Facebook non-users and as a result obtained lower mean Grade Point Averages (GPAs). In Ref. [6], the author examined the relationship among numerous

measures of frequency of Facebook use with time spent preparing for class and overall GPAs. Hierarchical linear regression analysis from the five studies by Junco indicated that time spent on Facebook was strongly and significantly negatively correlated with overall GPA.

Contrary to the above arguments, other scholars were much concerned about the improvement SM has brought to the classroom. In Ref. [7], Ito et al. argue that despite this negative influence of SM, teens use these technologies for several positive activities, including greater participation in interest-driven groups and activates. Likewise, in Ref. [8], it is advanced that SM provides the platform that encourage the youth to learn more about activities, practice classroom lessons and acquire knowledge on diverse fields. Similarly, Ref. [9] indicates that through more light on volume of work students produces because of SM. Generally, he argues that SM encourages the youth to write, a skill needed in most academic fields.

The benefits of SM in the classroom span from in classroom activities (teaching and participation) to out of the classroom collaboration and learning. Teachers can now post and receive assignments from their students without necessarily being physically present. Students equally now have access to enormous information in the form of articles, electronic books, biographies, video presentations and info graphs, all present on the web.

The arguments set forth in this chapter is to provide constructive strategies that could be adopted by stakeholders in the educational sector as well as students to take advantage of the benefits of SM to provide the teaching and learning experience; serve as a working document for educators to design and implement policies; and provide new avenues of providing comprehensive and concise teaching and learning experience for students as well as teachers. It attempts to provide a background information to edupreneurs vested in taking advantage of the commercial prospects of SM to conduct further research of ways to implement and include SM content on educational platforms to encourage student's participation and interest.

# 2. Social media

The numerous benefits of SM in every component of society are undisputable. With its seemingly free cost, (in Africa and elsewhere, there is cost associated with access, hosting and management) its use rests within the discretionary interest of the user. SM has also redefined the aspect of news reporting and information and placed in a more inclusive aspect called "Citizen Reporting." Individuals do not have to wait or a news agency to report on issues of much concern to them but with access to Internet and a few SM sites, news could travel in a matter of clicks.

Defining SM is a difficult task and quite impossible to provide a working scope in a single chapter. Primarily because of its dynamism of fast changing pace and characteristics. Dichotomizing its component: the media aspect of SM provides a channel for communications whiles the social elements evoke the idea of inclusiveness of the masses. Social networking sites are web-based services that provide the public a service that encourages connections, collaborations and engagement through improvement communication, shared interest and messages (see Refs. [10–13]). This is most exemplified through friend requests and acceptances, posting messages, sharing information (news, articles, or photographs), likes, comments and emoji reactions. The intermediaries that facilitate these connections at the user level are mobile devices and computers and at the macro level, social networking sites that use user-generated information to smoothen user experiences on the web. Convincingly, SM can be understood to be a convergence of multiple channels of communication that includes characteristics of the community where distance, availability and time are seamlessly interconnected. Technically, in terms of web 3.0 that is the latest internet facility, then SM "would be a web-based application that does not just give you information, but interacts with you while giving you that information [14]." It is this interaction that does not exist in the traditional media setting and perfect for networking. Even though the Internet is the medium, SM makes it simple as asking for participation in terms of comments or letting you vote on an article, or it can be as complex, recommendation and liking a page or posting in a collective means mostly of people with similar interest.

SM has opened a wide range of avenues where people conduct activities that are deemed of great importance in today's society. Through SM, people can conduct business swiftly in a short time that defeats the physical realities of owning a shop, possessing selling acumen and seeking of financial support for business sustainability. Today, information is shared across continents in seconds that might take days and sometimes months to do.

In the academia, participation, collaboration and academic integrity are given a true meaning. For instance, in referencing an academic work, one may stumble over a variety of information, mostly complex in nature. This information may either be difficult to understand, accept or its facts wrongly presented. In a traditional classroom setting, it would be difficult to have external perspective on the material obtained. Students will have no other choices than to accept and digest the perspective of the instructor. Through SM, a simple post will generate variety of interpretations, affording the students an insight into carefully comprehend and build their own perspective. The multiplicity of the knowledge shared will inform the students in a variety of conditions to take into consideration and its context.

In Ref. [15], a study to access the role of SM in education submitted that "Web-based discussions can contribute to the development of students' reflective ability and critical thinking skills. Also, compared to face-to-face (F2F) interaction, students are more willing to voice their views or even disagreement and are more attuned to others' opinions in online discussions."

As stated earlier that SM is used for a wide range of different purposes and may serve society in different ways. Nonetheless, the vehicle of SM websites is built for such specific purposes. While some SM sites are built for the purpose of networking, sharing of more personal information with others may have the aspect of providing information by professionals on academic, history and society or perhaps empowering citizen reporting.

However, it must be recognized that SM comes with some disadvantages for its users aside those that are much concerned about their privacy. Over reliance on the virtual world

could lead to a monolithic consumption of information. This is where every information is consumed as a fact without verification. It is for this reason fraud, hoax and spin information continues to gain popularity and cause damage often beyond repair. Aside this, for those that are concerned about privacy, there is easy access to a person's information which can later be used for criminal activities. An individual is at a higher risk of being implicated or duped. The other aspect of dangers associated with SM is the spread of viruses. It is much easier to transfer viruses from one end user to the other; the reason being that users of these SM are always intrigued to explore packages on the SM which is mostly presented in attractive design and appeal. For instance, recently, viruses hit users of Facebook with a presentation of a supposed sex video leak. Users who by chance clicked on the video had their accounts hacked and infiltrated. In such an instance, a person's personal detail sometimes financial could fall in the hands of unauthorised users.

#### 2.1. Ways student can use SM effectively

According to *Andrew Marcinek*, an Instructional Technology Specialist at Boston University, the SM has become a factory of thoughts. People are capable of publishing their thoughts to a vast audience. Comments, tweets and status updates are ubiquitous and constant. He believes that the focus to a larger extent has been shifted from quality of content to quantity (see Ref. [16]).

In his approach of guiding students to use SM in the educational endeavour goes beyond simply instructing students to acquire a blogger ID, Facebook and twitter. These are essential part of using SM, but beyond boastfully claiming ownership among peers, inability to use it to develop the skills necessary to effectively convey messages to a receptive audience, then the value of the message is diluted. If that same student stood at a podium with a microphone, yet has not prepared a speech and has trouble using proper grammar, this student's message could be lost to his or her audience. In Ref. [16], Marcinek points to these few steps to students as a way to effectively use SM for their benefits and others.

First and foremost, instructors and educators must keep the standards high. Students should be enabled to find and share their voice with the world (see Ref. [17]). The need to be equipped with a powerful skill that is timeless: writing effectively. He added that "Students must realize that there is a BIG difference between "your" and "you're" no matter what forum they are using to communicate a message. Consider this how much effort does it take to edit 140 characters? Not much. It is heartening to find students publications with common errors such as "then" vs. "than", "it's" vs. "its," and knowing when to use an apostrophe to denote possession. These students learn from feedback that their message is diluted. If students are allowed to move on without correcting his or her errors, this trend would continue and possibly diminish their capacity of reaching their full potential. The same principles must apply in all forms of SM [18]."

Marcinek and some scholars (see Refs. [17, 19–23]) argue that the incorporation of SM in the classroom must be consciously implemented by educators. Specifically, in the areas of

writing and editing as exemplified above, the use of social platform like twitter encourages students to master the English language as well as effective communication. The use and cap of 140-characters overtime shapes the writing skills of students.

Finally, students must be taught the basic rudiments of writing before posting, examine motives. Every educator tries to find ways to present authentic assessment and give their students an audience for feedback and reflection. However, it must be conveyed to our learners that a lot more eyes are watching than ever before. The attention should be shifted from just instructing students to blog, connect and, communicate but to making sure students are putting out polished, substantive information. The same goes for Facebook and any other form of SM. The best educators must model this skill daily and practice what is preached. Students should be made to think about what information being put out there and the reason for the publication.

## 3. Methodology: empirical data collected

Primary data were collected to determine the use of SM amongst students. The target population for the research was made up of heavy internet users from different educational and ethnic background. A simple random sampling technique was used to determine the population size. This was because the population was heterogeneous and possessed complex attributes.

The population was divided into three subgroups: lecturers, internet users group and the students. In determining an appropriate figure as a fair representation of the targeted group, a sample of 50 was considered appropriate for a population size of more than 1000. The target population was grouped as lecturers (N) = 15, internet users (N) = 15 and students (N) = 20.

The confidence level of the research was placed at 95% which meant that the outcome of the research factual is well conducted. However, the error or tolerance level of the research was pegged at 5% to take care of human errors that went unspotted.

Each participant received a set of questionnaire with open questions backed by close-ended answers. While the questions were mostly qualitative in nature, responses were regarded as quantitative. The questionnaire was made up of 20 questions segmented in three separate parts—biographical information, internet usage and benefit of SM in teaching and learning. It was, however, ever administered to all the three spectrum identified as target population for the research. The distribution and administration of the questionnaire were strictly based on the principle of stakeholder analysis. Thus, students and internet users were considered first given much priority followed by lecturers. Observations of activities on new media platform especially Facebook, WhatsApp, YouTube and Twitter were taken into account. Since the data were collected from a small sample size, no analytical software was used. Responses were tallied and tabulated for easy analysis. Also, confident generalisation could not be made. Rather inferences were made into the data collected by way of analysis.

The study reviewed scholarly works and publications from articles, reports, websites, group discussions and blogs in relation to the objectives of the research as a result of the research being a descriptive one.

#### 3.1. Data presentation

The perception of SM in the classroom was rated among participants. Data were collected on respondents' biographic information (age, education and social media usage). Moreover, perceived challenges of the use of SM in the classroom and strategies for the effective use of SM were collected.

#### 3.2. Biodata of respondents

The biodata collected from respondents included age, educational background and a prioritised response on the most used SM (**Table 1**).

The research established that 20% of respondents were below 25 years. In addition, 70% of the respondents between the ages of 25 and 30 whilst 10% of the respondents were above 30 years. It was therefore made known that majority of the target population were between the ages of 25 and 30 (**Table 2**).

From the information, above, it was gathered that out of the 50 respondents, 20 respondents representing 40% have had Senior Secondary education, whilst 30 respondents representing 60% have had education at the tertiary level. From the data, it was evident that most of the respondents were literate and understood not only the scope of the research but could speak to it (**Table 3**).

From the data above it showed that out of the 50 population size, 50% of the respondents prioritised the use of Facebook; whilst 30% used WhatsApp, followed my Twitter and YouTube both receiving 10% of respondent's feedback. There is a probability that respondents used a variety of SM platforms at a given time. However, respondents were asked to prioritised their usage so as to gain an idea of the SM students spend most of their time in terms of usage.

No.	Variables	Frequency	(%)
1	Below 25 years	10	20
2	Between 25 and 30 years	35	70
3	Above 30 years	5	10
	Total	50	100

 Table 1. Age groupings of respondents.

No.	Variables	Frequency	(%)
1	Senior Secondary Education	20	40
2	Tertiary Education	30	60
	Total	50	100
Source: Field Wo	ork Data (2016).		
	onal background of respondents. Variables	Frequency	
No.	onal background of respondents. Variables Facebook	Frequency 25	(%) 50
No. 1	Variables		
Table 2. Educati No. 1 2 3	Variables       Facebook	25	50
No. 1 2	Variables Facebook WhatsApp	25 15	50 30

Table 3. Prioritised SM usage among respondents.

## 4. Challenges of social media usage in the classroom

The larger population submitted that SM in the classroom was a distraction. Mostly lecturers believed that SM does more harm than good. It was known that laziness in conducting research, limited zeal to learn and lack of cross-checking information gathered on SM were the most contributing factors of the grieve dangers of SM in the classroom.

#### 4.1. Laziness among students in conducting research

*Laziness among students in conducting research* is known to be the lack of interest and aptitude of students to engage in data gathering to enhance their academic work. At any academic level, basic research is required to gather required information to enrich an individual submission. As it enriches the understanding of the students, it equally enhances the student to make credible debate or argument and present works in a professional manner.

SM has removed borders and brought people closer to each other. On daily basis, high volumes of information are uploaded and downloaded. This has made it possible for a user to gather data on diverse issues. For this reason, students are able to copy exact documents on topics taught in class without reading, editing and referencing. As information is readily available on SM, students tend to be lazy in conducting basic research.

#### 4.2. Limited zeal among students to learn

*Limited zeal among students to learn* as far as the research is concerned is the inability of students to spend ample time to learn throughout their academic program. Students mostly do not spend time to participate in class discussions, group studies and individual studying periods. Owing to this, most students lack understanding on subjects taught and therefore resort to SM for already discussed essays and articles. It can be said that high level of exam malpractice is a result of limited zeal among students to learn.

The research gathered that a high rate of tiredness, focused attention to meet family needs and over reliance on others were the effects of limited zeal among students to learn, which contributed to the negative effect of students over reliance on SM.

#### 4.3. Student's inability to cross-check information gathered on SM

*Student's inability to cross-check information gathered on SM* can be said to be the instance where students use every information accessed on SM without dully verifying such information. For information to be relevant, the student must verify the answerability of the information to the question the student seeks to answer, timeliness and author. These indications give students the inclination that the information sourced is credible and can be used to back any argument made.

It is known that high dependency on information gathered on SM, over believe of the accuracy of SM and ability to meet deadline was the effects of student's inability to cross-check information gathered on SM.

In an interview with Gertrude Tetteh, a final year student in one of Ghana's public universities said as a student she believed that information she sourced from the Internet is certified and accurate. However, she mentioned that she has been notified of the non-regulatory nature of SM platforms, which require that information gathered from the platform is carefully scrutinised. Yet, she said sourcing information from the Internet without carefully scrutinising it has been a long life behaviour that needs to be built.

#### 4.4. Effects of gathering diverse views on Facebook

The research revealed that there were several adverse effects of students gathering diverse views from Facebook, as views and opinions solicited could not be certified. It is known that the high rate of confusion on views to adopt, inability of students to analysis views and take a stand and high rate of adopting wrong views were the immediate effects identified.

Benedictus Amudzi, a student, view on the effect of student use of Facebook to gather views and opinions on academic issues coincided with the research findings. In his view, Facebook is not a regularised environment with any ability to users to certify information solicited from the platform. Because of this students stand a high tendency of becoming confused due to students' limited ability to evaluate information solicited.

# 5. Strategies for the effective use of SM in the classroom

This segment sought to look at the best ways of tackling the effects of students over reliance on SM (Facebook) and how students could take advantage of the platforms to advance their educational development.

The study has proposed several ways of addressing the negative effects of SM on education. It was revealed that integration of SM in education tutorials, comprehensive training of students to use SM for learning and conducting an in-depth research were ways of utilising the tool in classrooms.

According to the data collected, it showed that among the respondents, 50% of respondents said that *"integrating SM in educational tutorials"* was the best way of addressing the negative effects of SM on education among students. Again, 30% of the respondents said that *"comprehensive training of students to use SM for learning"* was another possible solution to address the negative effects of SM on education among students. While 20% said that *"conducting an in-depth research should be conducted in the subject areas"* was the way forward.

In an interview with Mr. Ogochukwu Nweke, a former Director of Student Affairs and New Media lecturer at AUCC stated the best way student could avoid the negative effects of SM on education was for academic institutions and lecturers to blend courses with SM tools. He said that it streamlines what information students should use and provide administrators the opportunity to detect plagiarised works. He said that creating a community on SM platforms encourages students to develop the skills of debating, presentation and development of ideas.

#### 5.1. Taking full advantage of SM in education

The research equally probed areas that would empower students to take full advantage of SM in their educational pursuit. It was agreed that setting up groups with same interest on Facebook, ability to rate effectiveness of SM in education and utilising services and application on SM to the fullest were some of the proactive ways students could adopt to take full advantage of SM (Facebook) in their educational pursuit.

According to the data, 14% of respondents said "setting up groups with same interest on Facebook" was one of the ways students take full advantage of SM for their educational purposes. Again, 30% said that "ability to rate effectiveness of SM in education" was another way students could take full advantage of SM for their educational purposes. Lastly, 56% said that "utilising services and application on SM to the fullest" the way forward.

It was unequivocal that the best way students could take full advantage of SM for their educational purposes was to utilise services and applications on SM to the fullest despite the fact that other ways proposed included setting up groups with same interest on Facebook and ability to rate effectiveness of SM in education.

Mr. Ogochukwu Nweke said that students can take full advantage of SM by utilising tools of SM platforms. He cited that Facebook allows users to create groups of interest and pages. Students could use this feature to set groups among colleague and professionals in the media field to gather expert views and opinions on academic issues.

# 6. Conclusion

The study was conducted to examine the impact of students using SM in the classroom and how it affects the academic performance of students. The study has revealed that despite its negative impact most scholars recorded on the use of social media in the classroom, if effectively managed can greatly improve the performance of students. Prime of the numerous benefits associated with the use of SM in the classroom included sharing information and ideas, improving reading skills, effective collaboration, and enhancing the experience of teaching and learning. Participation of students on Facebook, WhatsApp and YouTube encourages collaborations of the students even after class hours. This instils the act of continuous learning amongst the students (see Ref. [3]). However, the threat to academic performance remains. Most scholars argue that it leads to divided attention and reduced concentration in the class. Likewise, the issue of plagiarism increases as students often rely on SM for answers to assignments (see Refs. [3, 9, 15, 19]). The research could not cover in detail of the aspects of SM that best fit the operations and processes of education. The research could not rate the aspect of Facebook, such as chats, status updates and group conversations that negatively affected the educational goals of students. How effective SM was in contributing positively to the improving knowledge and understanding of students academically was not covered. Further research is required to contribute to this pool of knowledge. That way a convergence of these research works would provide a clear road map and ubiquitous means of integrating SM in the class to ensure peak performances and great teaching and learning experience.

## 7. Recommendations

Based on the findings in reference to the influence of SM in the classroom, its effects on education and its possible solutions, the following recommendations were made:

- **1.** Integrating SM in educational tutorials would empower students to gather skills and knowledge to properly utilise the tools of SM to improve their educational goal.
- **2.** Teaching students about time management is necessary to equip students especially workers to appropriately manage their time and skilfully blend their work with schooling and eliminate the overabundance on SM.
- **3.** Educating students on research methods is necessary to advance the research skills available to students and eliminate the issue of plagiarism, over-dependence on SM and lack of analysis of issues before adopting ideas.
- **4.** Setting up groups with same interest among students and colleagues on Facebook is important to bring scholars together to debate and contribute effectively to discussions and subjects therefore broadening the knowledge base of students.
- **5.** Rating effectiveness in education on annual basis by management of educational institutions is important to enhance the management's ability to spot loop holes in the educational system and make amendments necessary to make seeking education credible.

- **6.** Teaching students not to trust the accuracy of information on SM is important to make students critical thinkers, enhance their abilities to analysis arguments and make meaningful conclusions.
- **7.** Encouraging students to source and make use of information from libraries is necessary to take the focus of students from SM and build credible research attitude among students.

# Author details Dennis Moot

Address all correspondence to: dm167412@ohio.edu

Ohio University, Athens, Ohio, USA

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