

Online Platform for Teaching and Learning in Improving Student Performance (A Case Study of Ghana Technology University College)

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ABSTRACT

The aim of this research is to examine the impact of social network platform for teaching and learning at the Ghana Technology University College. The study sort to find out how social platforms are assisting in knowledge sharing at the university. It was aimed to establish the percent of lecturers and students who are using this platform for teaching and learning. Social Networks have been considered the third revolutionary application of the internet after Search engines and Web 2.0 applications. The study adopted the descriptive study design. A combination of qualitative and quantitative data collection tools were applied in this research and a total of 250 respondents were randomly sampled from the entire population of the school. Questionnaires and interview were the instrument used for gathering data from respondents. The study found out that all respondents admitted to the fact that they are using the social platform to share and receive knowledge. This was as a result of convenient and flexibility in their usage as well as it support to readable files and submission of assignments. It was also found out that interaction between lecturers and students has improved significantly since the platform allow online discussion which students are able to ask questions. Some challenges that were expressed by respondents among them was unreliable internet and expensive. There was also an issue of power fluctuation which makes it difficult for students to 24 hours service on campus.

Keywords: Social Network, Teaching and Learning, Technology, Internet, Online Learning Platforms.

1. Introduction

Social media and instant messaging platforms have since the humble beginnings of the internet and all its wonders come to form quite the integral part of our daily lives. According to Bosch [1], majority of social media platforms allow users to share special and personal moments of their lives and mostly just for generally casual interaction. But social media is not all fun and games at all times and there are loads of platforms that, believe it or not, feed users with very relevant information about what goes on around the world or even setup and manage our own professional profile or portfolio, far from the fun and games [2].

One of the core competencies of social media is its ability to enable users, to share various content of various digital formats with each other [1]. For some years now Ghana Technology University College (GTUC) has employ the use of social platforms like moodle, Sucretive, Padlet, Screencast and the likes for teaching and learning in the school. A unique social platform for a professional portfolio or a platform that provides news feed based on a person's interests, or yet another for sharing and maintaining creative works or a professional portfolio is necessity of any serious academic institution. This segregation provides a lot more than just multiple social profiles to list out when necessary but rather, objectivity of the organization [3].

Mixing serious business with everything else makes it very easy to lose sight of the important things. The current system of interaction and knowledge sharing takes advantage of popular social media platforms the study have today along with all of its distractions and temptations. But what if the study could get rid of all those temptations, tailor the feed and content that come in, to be targeted toward teaching, learning and overall campus buzz.

Due to the lack of less knowledge by most students of a dedicated platforms or media for student-lecturer interaction, the solution for disseminating slides as well as other relevant pieces of information in GTUC, has always been lecturers copying the slides on flash drives for the class representatives and then they disseminating

them via WhatsApp groups. These were typically improvised solutions created by the lecturers and class representatives of each class in an effort to make it easy to disseminate lecture materials or messages the lecturers might have for the whole class. These groups themselves however, lack the presence of faculty lecturers and therefore make it next to impossible for students to interact with their lecturers outside of the classrooms.

This can completely halt the flow of all relevant information between lecturers and classes if the one or two people that serve as the middle-man or class representatives decide to get a little selfish or are simply unavailable: whether unintentionally or otherwise. The introduction of platforms like schoology, Sucretive, moodle and the likes are believed to have a major impact on teaching and learning in the university and that is what this study what to find out the impact they have on lecturer-student interaction and learning

2. Literature Review

Social media has been defined as web-based services that allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection, and view and traverse their list of connections and those made by others within the system [4]. According to the study, having these connections and sharing what the study wish with them is mostly what social media is all about, and it is this among other features that is making social media so popular in education: being able to communicate with many others from a single point of contact makes it quite convenient for sharing and disseminating lecture materials and information [4].

Students nowadays can be described as ‘members of the Internet generation’ or ‘natives of digital era’ globally [5]. Their study was limited to children in the living in cities but not focusing on children in deprive areas. Another study by Ellanti et al [6] claims students today were born in the digital age and interacted with digital technology from their early age. Their student only focused on youth in education and neglecting mature students who were born before this technological age. In the early stages of implementing online learning, students made use of blogs, wikis, and social bookmarking.

It triggered the interest to educators who perceive these technologies as beneficial in higher education [7]. 140 students were required to read about the new technologies, engage with these new technologies as part of an assignment, and demonstrate their knowledge and understanding of the content unit by presenting it in a wiki, a blog, or podcast that they created. The study concluded that 99% of the students were able to present their assignment using these platforms. There are many studies that demonstrate and guide teachers on how to use social media especially Facebook for classroom teaching and learning purposes [7].

A study conducted by Kabilan et al., [8] has proven that learning of English on Facebook is feasible. It is because the features that characterize Facebook are able to engage students in meaningful language-based activities, even though their initial intention of joining Facebook is to socialize. If educators or teachers planned appropriately as part of an educational project, it would be able to facilitate and produce effectual and meaningful learning of English within an online community of English language learners [8]. Similarly, Pasma [9] observed and informally examined his students' creation and participation in an online learning community on Facebook to discuss assignments, ask and answer questions, post information, and support one another for their Reading

Education Methods course. More specifically, some studies have explored the possibility of using social media in the context of curriculum related activities [10], suggesting that they are used as teaching tools in formal contexts of learning [11] and also in pedagogic practice, with particular focus on teacher presence and self-disclosure [12].

Dabner [13] has integrate the Web 2.0 technology PhotoVoice into their course. PhotoVoice is an online social media for participatory photography, digital storytelling, and self-advocacy projects. The findings show that by using this new technology, relationships were fostered, ideas were shared, and social connectedness was formed between classmates as well as with instructors [13]. On the other hand, YouTube provides an opportunity for student-generated media and viral advertising. One study of MBA marketing students required the creation of an Internet video posted on YouTube with the objective of maximizing the number of video views [14].

Sutikno, [15] stated that “spending hours on social media could lead to addiction, reduced motivation to participate in other activities, and perhaps cause physical health problems”. This study only focused on the negative side of social media. Another downside of social media at the individual level is that users need to maintain their social profiles constantly, which may lead to severe stress [16]. More importantly, sharing too much information could allow personal information to be leaked on the Internet [16].

Yet another disadvantage, might increase of cyber-bullying that can terrorize an individual and cause negative effects to his or her psychology. This influence has been identified as an important problem specifically amongst youth over the last decade. Students can post inappropriate pictures of themselves on their profiles [2]. Others wonder whether the students who spend a lot of time on Facebook devote less time to active learning, which then leads to negative effect on their success in colleges.

They also concern that students will become distracted and preoccupied with social media usage [7]. Although these risks are legitimate, evidence of the positive effects of social media use in this and other studies Junco [17] suggest that when the social media is well used, it has the potential to increase student engagement, involvement, satisfaction, and grades as well as to prepare them for employment in marketing world. Social media can undoubtedly be a good way to engage students in experiential learning [6].

3. Methodology

The study adopted the exploratory research study strategy because it seeks an insight into the problem while helping in clarifying understanding of the research problem. Exploratory research is conducted when there are few or no previous studies to refer to in order to predict an outcome [18]. A combination of both qualitative and quantitative data collection tools were used in this research and a total of 250 respondents were randomly sampled from the entire population of the school. Questionnaires and interview were the instrument used for gathering data from respondents. Closed ended questionnaires were distributed to respondents who responded based on their knowledge in the use of these learning platforms.

Interviews were granted with lecturers who uses these platforms in lecturing. The study employed simple random sampling technique for this research. Random sampling is a probability sampling where each subject has an equal changes of been selected.

4. Data Analysis

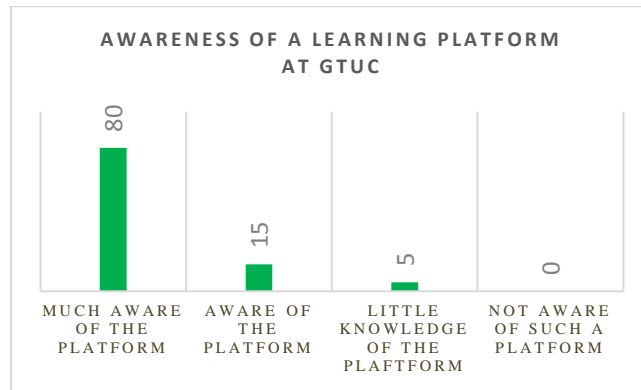


Figure 1. Awareness of the use of online learning platform at GTUC

From the above figure, 80% are much aware of the online learning platforms, 15% are aware of the online learning platforms and 5% are partially aware of the platform. From the above explanations, it is clear that all the respondents claimed they are aware of the online learning platform use in the school.

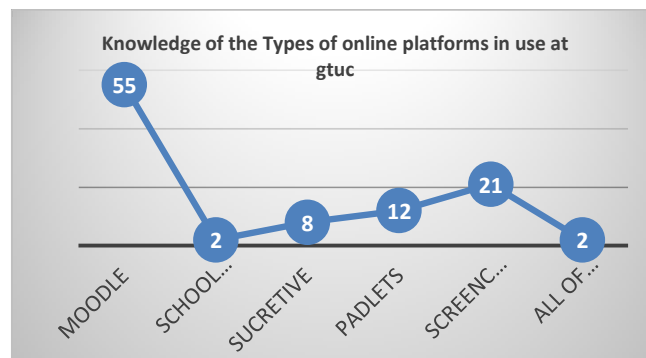


Figure 2. Knowledge of the types of online learning platforms in use at GTUC

From the above figure, 55% of the respondents indicated that they are aware of the moodle online platform, 21% indicated their awareness of screencast, 12% also indicating their knowledge of padlets, 8% indicated that they are aware of secretive whiles 2% of the respondents indicated they are aware of all these online platforms and another 2% indicated they are aware of schoology.

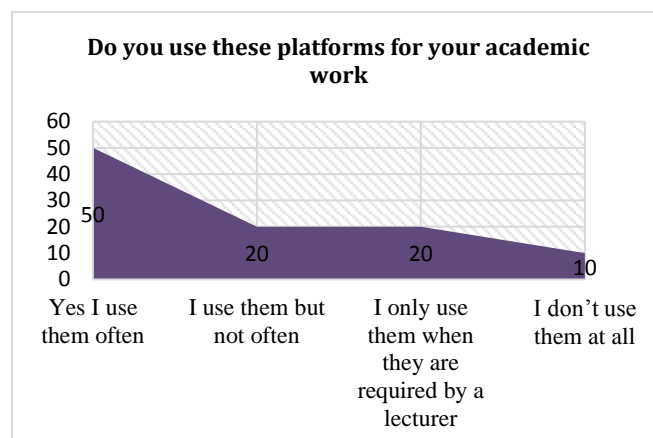


Figure 3. The use of the online learning platforms

The figure above shows whether respondents make use of these online platforms for their academic works. 50% indicated they use these platforms often, 20% indicated they use these platforms but not often, 20% also indicated they only use the platforms when they are required by a lecturer. 10% indicated they don't use the platforms at all for any activities. From the above, majority (90%) of the respondents indicated they make use of these platforms while only 10% indicated they do not use such online learning platforms at all.

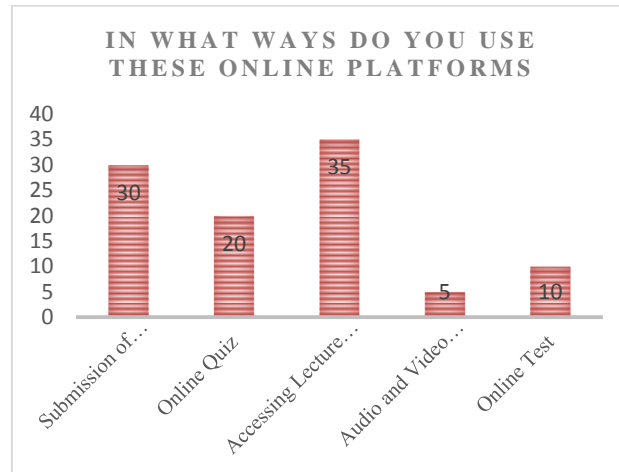


Figure 4. Way by which these platforms are used.

From the figure above, majority of the respondents 35% use the platform to access their lecture notes while 30% use the platform for assignment submission. 20% use the platform for online quizzes while 10% use them for online test.

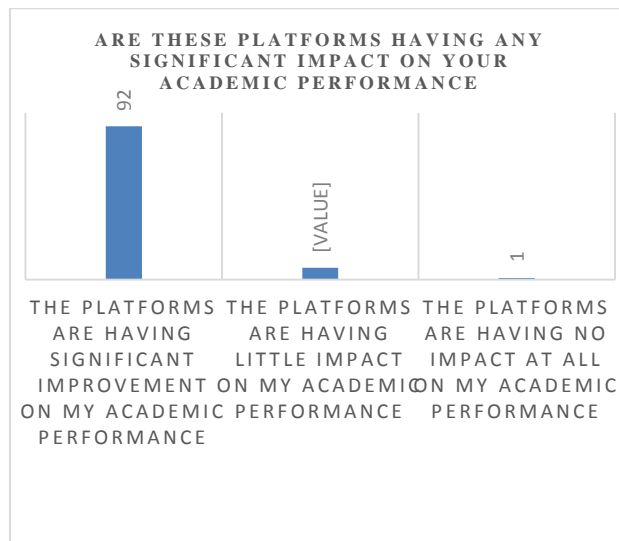


Figure 5. Influence of the online learning platforms on academic platforms.

From the figure above 92% indicated the online learning platforms have significant impact on their academic performance, 7% indicated the platforms have little influence on their academic performance and 1% indicated the platforms have no significant impact on their academic performance. From the above it can be deduce that most of the students are experiencing significant improvement in their academic performance as they came in contact with these platforms.

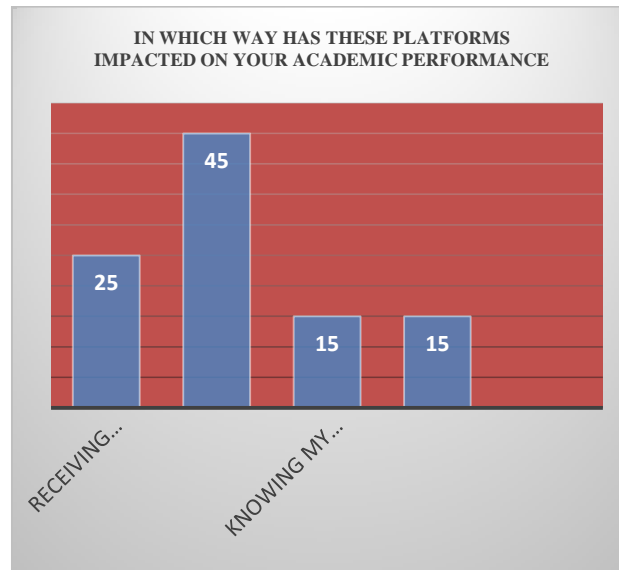


Figure 6. Ways by which the platforms impacting on academic performance

From the above figure 45% believed that through their quick interaction with their lecturers via their platforms has improve their academic performance, 25% indicated because they are able to receive quick information and lecture notes from lecturers via the platform have improved their academic performance, 15% indicated knowing their marks or scores as soon as a quiz is over has help them improve their academic performance and finally 15% indicated that being able to ask relevant questions at any giving point in time has help them improve their academic performance.

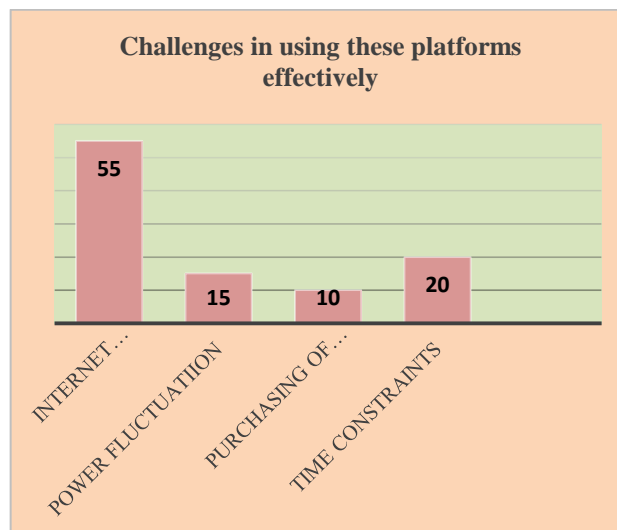


Figure 7. Challenges with the use of the online platforms

From the figure above, 55% indicated the challenge they encounter with the use of these online platforms is internet connectivity, 20% indicated the time that most lecturers set for them to either submit assignment or conduct an exams is a major challenge for them, 15% indicated power fluctuation and finally 10% indicated they purchasing internet bundles is a major issue for them since they need to connect to the internet.

5. Interpretation

The first research question sought to find out the awareness of students when it comes to these online learning platforms. Institutions that combines online learning and face-to-face teaching and learning will excel than schools that only focus on face to face teaching and learning [2]. Many researchers have stated that online learning platforms has a long term benefits which they believe are very crucial in education today [8]. All respondents (100%) indicated of their awareness of these online learning platforms used by lecturers in the school which is a good sign for the school. 55% which represent majority of respondents indicated of their awareness and use of the Moodle platform which seems to be the most used platform in the school. The other platforms are not too much known to the students which could be as a result of lecturers not making use of them in their lecture delivery. Most respondents (50%) often make use of these platforms and they often use these platforms to access lectures slides posted by their lecturers. According to Ellanti et al [6], making use of social network like WhatsApp can increase up students learning behavior.

The impact of these social platforms have both positive and negative impact on students learning behavior [7]. The study continues to state they have positive impact when they are used for educational purposes by receiving information or watching educational videos. It becomes negative influence when students spend much time on these social platforms just for fun. 92 % of the respondents believed the online platforms have significant impact on their academic performance. This means the platforms are assisting in improving student performance which is a positive impact.

Internet connectivity has always remained a major challenge in Africa when it comes to the use of the web and its accessibility in Africa. Though a lot of people are registered with most social networks in Africa, the rate of accessing these platforms is insignificant as compare to Europe [10]. One major challenge encountered with the use of these online learning platforms is internet connectivity which received (55%) majority of what seems to be the hindrance in the use of the platforms.

From the Lecturers' perspective when interviewed was clear that students who make use of these online platforms are improving in their academic performance as compare to students who do not make use of these platforms. They have improve they rate at which they get feedback from students when questions are asked and when discussions are taking place on any of these platforms. It became obvious that some lecturers do not use these online teaching and learning platforms because they don't believe in the use of such tools in the lecture delivery. According to Bosch [1] there are people who believes the use of these social network for teaching and learning distract the process of face to face interaction and need not to be encourage in academic.

The implication of the above discussion is that majority of students are much aware of the online teaching and learning platforms used in the school and these platforms have significant impact on their academic performance.

6. Conclusion

The study found out that all respondents admitted to the fact that they are using the online learning platform to share and receive knowledge. This was as a result of convenient and flexibility in their usage as well as it support to

readable files and submission of assignments. It was also found out that interaction between lecturers and students has improved significantly since the platform allow online discussion which students are able to ask questions. It was also found out from the lecturers' perspective that using the online learning platforms have reduced their stress of also going to meet the students face-to-face which sometimes becomes boring to the students.

Some challenges that were expressed by respondents among them was unreliable internet and expensive. There was also an issue of power fluctuation which makes it difficult for students to have 24 hours service on campus. The study recommended that the management of the university should develop good internet service with Wireless Fidelity (Wi-Fi) on the campus to enhance internet connectivity to improve the use of social platform in teaching and learning. It was also recommended that management should provide standby power supply so as to support power supply in the school.

REFERENCES

- [1] B. T.E, "Using online social networking for teaching and learning: Facebook use at the university of Cape Town.," *Journal of South Africa for Higher Education*, 2009.
- [2] H. & H. R. Ajjan, " Investigating faculty decisions to adopt Web 2.0 technologies: Theory and Empirical tests," *Internet and Higher Education*, 71-80, pp. 71-80, 2008.
- [3] T. Sutikno, "WhatsApp, Viber and Telegram: which is the Best for Instant.," *International Journal of Electrical and Computer Engineering (IJECE)*, , pp. 909-914., 2016.
- [4] D. M. Boyd, "Social Network Sites: Definition, History, and Scholarship.," *Journal of Computer-Mediated Communication*, pp. 210-230, 2007.
- [5] R. Sanchez, V. Cortijo and U. Javed, " Students perceptions of Facebook for acadamic purposes.," *Jouirnal of Computer Education*, pp. 138-149, 2012.
- [6] P. Ellanti, A. Moariaty, F. Coughlan and T. McCarthy, "The Use of WhatsApp Smartphone Messaging Improves Communication Efficiency within an Orthopaedic Surgery Team" *Journal of Computer in Education*, 2017.
- [7] S. Kumar, " The next generation as pre-service teachers: Transferring.," *Journal of Digital Learning in Teaching Education.*, pp. 144-153, 2011.
- [8] M. Kabilan, N. Ahmad and M. Abidin, "Facebook: An online environment for Learning of English in institutions of higher education?," *The journal of Internet of higher education*, pp. 179-187, 2010.
- [9] M. Pasma, " FACEBOOK MARKETING STRATEGY. Oulu University of Applied Science.," *Journal of Applied Science*, 2017.
- [10] C. Greenhow, " Online social networks and learning. *On the Horizon*, 19, 1,," *On the Horizon*, pp. 4-12, 2011.
- [11] Mazman, S. and Usluel,Y, " Modeling educational usage of Facebook.," *Computers & Education*, pp. 44-53, 2010.
- [12] M. M. S. & F. A. Raneri, "Why (and how) do teachers engage in social Why (and how) do teachers engage in social An exploratory study of professional use of Facebook and its implications," *British Journal of Educational Technology*, pp. 754-762, 2012.
- [13] N. Dabner, "Breaking Ground' in the use of social media: A case study of a University earthquake response to inform education design with facebook.," *Internet and Higher Education*, pp. 68-78, 2012.
- [14] N. J. C. C. B. A. S. & P. N. Payne, "Placing a hand in the fire.," *Journal of Marketing Education*, pp. 204-216, 2011.
- [15] T. Sutikno, " WhatsApp, Viber and Telegram: which is the Best for Instant.," *International Journal of Electrical and Computer Engineering (IJECE)*, pp. 909-914, 2016.

[16] D. A. & S. M. A. Annie, "Convenience or Nuisance?: The 'WhatsApp' Dilemma," The International Conference on Communication and Media. Malaysia, pp. 189-196, 2014.

[17] R. Junco, "The relationship between frequency of Facebook use, participation in. Computers and Education," Journal of computers in education, pp. 162-172, 2012.

[18] M. T., "The Oxford Library Guide to Library Research.," New York: Oxford University Press., pp. pp. 39-43, 2015.