Case Studies on the Use of Online Social Networking in Formal Education

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ABSTRACT
As the use of online social networking (OSN) sites by young people continues to grow in popularity, researches have been focussing mainly on the benefits and dangers of such sites on the young generation. However, due to privacy and safety concerns, online social networking sites are normally blocked in schools in Mauritius. This article presents two experiments carried out on the use of a social networking site in education. These consisted of mainly a coursework given by the teachers on an OSN platform where students had to respond to the exercises. The two experiments were conducted out in two different schools and were based on two subjects, namely, French and General Paper. Findings from this study highlight the benefits accrued to students using these online tools in an educational setting. Both students and teachers were satisfied with the new method of teaching and learning. This study shows the educational value and benefits that can be obtained from the use of online social networking in the Mauritian education system.

General Terms
Online Social Networks, ICT & Education

Keywords
Online learning, Online Social Networking, Social media, Students, Facebook

1. INTRODUCTION
In this new era of technology, ICT (Information and Communication Technology) has become a fashionable tool in teaching and learning. Recent research, exploring the impact that ICT is having on teaching and the way students learn, has found that ICT is becoming a priority for many educational policymakers. Moreover, lots of emphasis has been laid on the use of ICT in education in Mauritius. Students are embracing these new technologies on a large scale with Google being a primary source of inquiry, Wikipedia replacing the school library and Online Social Networking (OSN) sites have dramatically changed the way the students communicate on the Internet. Due to young people's attraction to them, social networks are emerging as an important tool in to help in education. Students are interacting in such networks with or without their teachers' consent or knowledge through study groups. Discussions between friends are carried out heavily among adolescents and resources are shared through online social networks. These networking sites are also a means for students to communicate school works especially when they are absent from school. However, these services are being used in education in a non-formal way. Recent research has shown that integrating online social networking in formal education can be very beneficial for students. Therefore, in this paper, the use of online social networking in formal education is outlined. The benefits and drawbacks of this approach are discussed.

The paper is organised as follows. Section 2 presents the related works where online social networking sites have been used in formal education. The methodology of this study is addressed in section 3 and subsequently in Section 4, the case studies carried out in two colleges in Mauritius are presented. The discussions of the two case studies are carried out in Section 5 and Section 6 concludes the study..

2. LITTERATURE REVIEW
While online social networks have many positive effects in education, few concerns have been raised. According to a study conducted by Greenhow and Robelia [1] on student use of social media, it is found that students who are already engaging in social networking could benefit from it if it is incorporated into the school curriculum. It was also noted that OSNs facilitated emotional support, helped maintain relationships, and served as a platform for self-presentation. Data was collected by a survey from students aged 16 to 18 and it was observed that students are sharing creative work and making responsible use of information and technology on these networks. Greenhow suggested that educators should know what skills the students are learning on OSNs so that they can be helped to extend those skills and that schools can become more relevant and meaningful to kids.

Delmatoff [2] argued that the educational benefits of OSNs far outweigh the risks involved. An online forum was started where assignments were posted and it was noticed that students were going to school early so as to use the computer for the social media program and the overall quality of their work increased. It was also observed from the study that social media has a collaborative element as a teaching tool. Delmatoff outlined that this new technique of learning had a positive impact on the students' life so that they could critique and comment on others works, work collaboratively and could easily contact each other or even the teacher when they had some questions. An important observation was deduced from the study where it was seen that online discussions provided

an opportunity for shy students to interact more with each other.

English and Duncan-Howell [3] described the use of Facebook to support students undertaking teaching practicum. The experiences and behaviours of a cohort of business education students were examined using a group page. The group was set up by the lecturer. It was a closed group where new members willing to join the group through Facebook had to request permission beforehand. It was found that 64% of the total students who joined the group participated actively by posting more than one messages on the wall. Two discussion forums were created in the group and it was found that students also posted photos and videos so as to share information with their friends. Three discussion topics were started and students shared their problems while others provide solutions to these issues. It was found from this study that the majority of posts were related to communication including encouragement and support. The results also indicated that the habits of students using social networks might be used in developing supportive tools that could be harnessed during practicum periods.

Junco et al. [4] conducted a study to show that Twitter can be used as an educational tool to help students. A total of 125 students participated in this study and they were divided into two groups: 70 in the experimental group and 55 in the control group. Students in the two groups were given assignments and both had access to the same information. However, the experimental group had access to Twitter while the control group did not use Twitter. The results showed that there was twice improvement in the engagement group than the control one. In addition, it was also seen that students who used Twitter achieved an average 0.5 point increase in their overall GPA (Grade Point Average) for the semester.

Cheung et al. [5] stated that despite the importance of online social networks, there is relatively little theory-driven empirical research available to address this new type of communication and interaction phenomena. The authors conducted a study to explore the factors that drive students to use online social networks (e.g., Facebook). They conceptualized the use of online social networks as intentional social action and examined the relative impact of social influence, social presence, and the five key values from the uses and gratification paradigm on We-Intention to use online social networks. The empirical study of Facebook users ($n = 182$) revealed that We-Intention to use online social networks is strongly determined by social presence. Among the five values, social related factors had the most significant impact on the intention to use.

3. METHODOLOGY

A large scale survey was carried out among the secondary level students of Mauritius in 2011, aging from 13 to 18 years old. It was observed from the study that the majority of students are using social networking sites on a large basis and furthermore, a large number of those students are using OSN sites for educational purposes. Therefore, based on these results, an experiment was conducted in two classes of two different schools. The experiment was implemented to test OSNs as a learning tool in the secondary educational system in Mauritius. The experiments consisted mainly of a series of courseworks set by the teachers on an OSN platform. The students were informed just after the exercises were posted and they were required to work on the OSN platform. A specific time limit was given to the students to complete the coursework and a follow-up survey was conducted them. This was necessary to gather their experiences in using OSN as a tool for learning and teaching.

4. CASE STUDIES

For this study, two experiments were carried out, each in a different school and for a different subject. Both teachers chose Facebook as the OSN platform to set the exercises. The main reason behind this choice was that both students and teachers have an account on Facebook. The two experiments are further explained in the following sections:

4.1 Case Study 1: French Exercise

A discussion topic was posted by the teacher on her Facebook profile as shown in Figure 1.The feature Facebook Questions was used. This allowed students to view the responses of others and also voting of answers was possible. The students were given guidelines by the teacher in advance on how to reply the post and they were requested to provide at least three opinions on the theme given. The coursework lasted for about a week period and about 67% of the students participated in the experiment.

A set of observations were recorded from this experiment. It was found that most students accessed the exercised from home, mostly in the afternoon and late at night. They easily located the exercise since they were already connected with the teacher concerned on the OSN platform. Some students, however, did face some difficulties in understanding how to reply to the post. They were most likely to vote the answers of their friends than giving their own views. After further guidelines from the teacher, the experiment was quite successful. Some students did not participate in the experiment and the main reasons behind this were that they did not have a Facebook account or no internet facilities at home. On the other hand, one student stated that he was not keen in using Facebook for educational purposes.

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Figure 1: French discussion topic posted by teacher

The teacher was interviewed according to her experience in using OSN as a tool for teaching. She was quite satisfied with her first attempt of integrating OSN in education stating that 55% of her students were really interested to use Facebook as a new method to study. She outlined that some benefits of using social networking sites for educational purposes stating that students who are not too keen to do homeworks can be further motivated by this new method of learning. Secondly, she mentioned that notes could be sent for reading and then further discussions can be carried out in class. However, she argued that class explanations were important for interaction and comprehension purposes.

4.2 Case Study 2: General Paper & English Literature Exercise

For the second experiment, a closed group on Facebook was created by the teacher (see Figure 2) who invited students to join the group.

For students who were not invited, permissions had to be requested to join the group which were then approved by the teacher. However, only students in that class were allowed to join the group. The teacher mentioned that one student from another class wanted to join the group but he was not given permission.
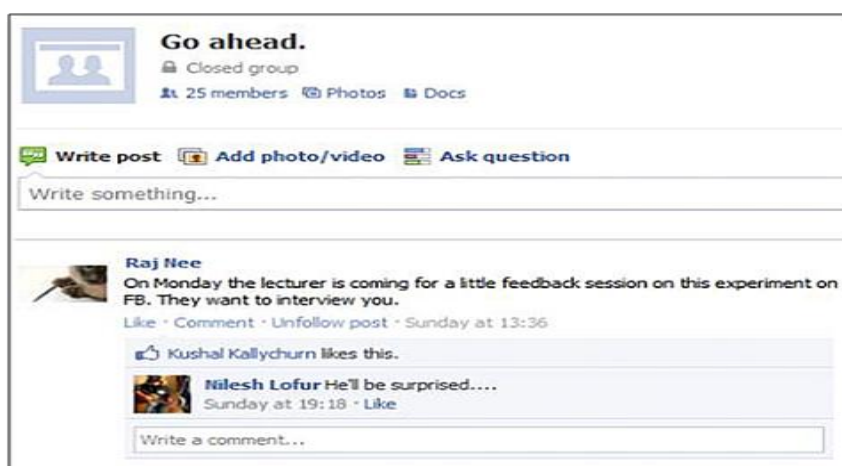

Figure: 1. Closed group created on Facebook

The teacher used the group mainly for posting discussion topics and to share resources with the students. An example is shown in Figure 3.

Figure: 2. Example of Teacher sharing an online resource

Some debatable topics were posted on the wall of the group and there was a good response from the students giving a total of 13 comments for one post and 17 comments for another. One such example of discussion is shown in Figure 4.

Figure 3: Debatable topic being discussed through comments.

In a group interview session, the students of the class were questioned on their experiences in using online social networks for educational purposes. It was observed that most of those who participated in the exercises found this method interesting and useful way of learning since they could have fun while working. However, two students stated that OSN sites are a waste of time and they were not interested to use such sites for their studies. One major problem observed in this case study was that some of the students in the class were not aware of the group on Facebook, therefore they did not join the group and could not access the exercises.

Yet, most of the students outlined the benefits of using Facebook for educational purposes in the future. They stated that problems encountered when doing homeworks can be posted online. There can also be discussions on past exam papers and homeworks online. Group works and revision can also be done. Classworks can be submitted online and if students miss a class, they can catch up on these online communities. Educational videos can also be uploaded on social networks sites, for example to demonstrate science experimentations.

The English teacher was also interviewed on the interaction of students concerning the exercises that were posted on the closed group. She observed that this new method of teaching and learning was quite successful but stated that it could be further improved. However, some issues were noted by the teacher. These are listed in Table 1 below.

Table 1. Observations made by the English teacher

1.	There were no responses from the students at the beginning and the teacher had to remind them of the exercises posted.
2.	Most students were shy and reluctant to post their opinions since their posts would be viewable by everyone.

3.	The teacher wanted the students to respond to the exercises and then a follow-up would be continued in class. This was not possible since only a few students participated in the exercises.
4.	Students mostly used the SMS language and they were reminded to use proper English language.

The teacher outlined two important Facebook features that can be used for educational purposes:

    a.   Groups to post exercises.
    b.   Facebook questions for polling purposes.

In spite of their popularity on Facebook, Groups are not too relevant to be used for studies, as mentioned by the teacher, since only a few students are familiar with this feature. She stated that a better feature to be used for school works would be Facebook Questions. Moreover, she expressed the concern that private tuitions take most of the time of the secondary level students who finally have very limited time to explore new technologies for learning on their own. She stated that if the students were taking less tuition, then the use of online social networking in education would have been more successful. Therefore, it would be more appropriate to integrate online social networking sites at school so that students can take advantage of such technologies to improve their learning. For this to be possible, proper resources such as computers and Internet access would be necessary in schools.

5. DISCUSSIONS

From the two case studies, it was observed that students appreciated the use of online social networking in classroom as a tool for learning. Through the group interview, it was also found that students demonstrated added interest in learning the subject using the new tool. Even the teachers were willing to change their teaching styles by integrating online social networks in their classrooms for the added benefits. However, it was found that students had to be guided to respond to the exercises. Since this was a first-time experience for the students and the teachers, it was normal that guidance had to be given. Such issues will be mitigated if the use OSNs become a routine and is properly integrated into the curriculum. Due to time constraint, some students could not participate in the experiments. Therefore, to have better results, more time should be allocated to complete the exercises posted on OSNs. Communications to students will have to be clear to increase students' participation in the exercises.

The students outlined a number of benefits of using OSNs in their studies such as the latter providing them with the opportunity to work collaboratively on project works with friends including the sharing of information and ideas. They mentioned about obtaining help from their peers and the teacher with the homeworks on such sites. OSNs are also be used as platforms for the students to build good relationships or at least enhance existing ones with their teachers.

A summary of the experiments can be viewed in Table 2.

Table 2. Summary of the two experiments

		Case Study 1: French Exercise	Case Study 2: English Exercise
Age		16-18	17-19
Class		Lower 6	Upper 6
No of students in the class		15	25
Students who participated in the OSN exercise	**Percentage:**	67%	80%
	Where students access exercise posted on OSN	Home	Home
	At what time they responded to the exercise	Late in the afternoon and at night	Late in the afternoon and at night
	Amount of time taken to respond to the exercise	5-10mins	10-15mins
	Percentage of students connected to the teacher on OSN	100%	100%
	Percentage of students who checked the answers of other	100%	100%
	Percentage of students who had some difficulties in answering the exercise	20%	0%
Percentage of students who did not participate in the exercise		33%	20%

	Reasons why they did not participate	No Facebook account / No internet at home	Not aware of the exercise / Not active on Facebook
Percentage of students who have access to OSN at school		0%	0%

6. CONCLUSION

So far, the Mauritian Educational Authorities have been reluctant to adopt online tools such as online social networking sites into the school curriculum. Due to privacy and safety concerns for students, these networking sites are being currently blocked in secondary schools. Teachers are not encouraged to make use of OSN sites since the latter are seen as incompatible and improper for student learning. However, observations from this study show that use of such sites can be very beneficial in teaching and learning. Students have shown interest in using OSNs for educational purposes. From the experiments carried out, it was found that students were motivated to work out the exercises online as shown as by the participation rate. It was clear from this study that participants were able to support and assess their peers using OSNs which enhanced learning. In addition to the benefits, some students and teachers also outlined a few drawbacks and limitations of using OSNs in education. These results can give insights to the educational community on how to use OSNs to enhance learning.

8. REFERENCES

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