



# Effective Classroom Experience via Social Media: An Experience in UNITEN

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## Abstract

The impact of social media towards many industries mainly business and entertainment is very notable due to the availability of affordable smartphones to the masses. However, in contrast to that, this technology is not utilized extensively to extend the classroom experience for teaching and learning at a university level. While we have tools such as Moodle or other similar Learning Management System (LMS), it does not really provide the sense of presence that the social media tool is providing to its socially active new generation of learners. This paper identifies features in the social media tool (i.e, Facebook) and how it can be used to provide a better after class experience. These features are identified after implementation on different groups of students. The effectiveness is measured based on the students' grades, their participation level in the class and the lecturer's performance evaluation at the end of each semester. The paper also suggested proper guidelines for optimizing the use of social media as a tool to assist in teaching and managing classes with large group of students.

**Keywords:** *online learning; classroom experience, sustainable teaching and learning; social media*

## 1. Introduction

It is a norm these day to be connected via social media. The availability of smart devices and high-speed Internet connection are the contributing factors which makes this possible. Users are utilizing it to be connected, sharing information through shared interest groups and also doing monetary transactions. In this study, we investigate the idea using existing tools in social media application to enhance online learning experience. Our main idea is to provide an ongoing teaching and learning experience for both the students and the instructor which extends the physical classroom. The subject in focus for the study is a subject on Operating Systems Concepts, a core computer science subject which mostly discusses the theory and principles behind modern operating systems. The motivation for the study stems from the fact that there are at least 120 students enrolling for this core subject per semester during the time of the study. Due, to the tight schedule of both students and lecturer, it is often difficult to find a time that could suit both party to constantly meet for consultation and discuss together. Our paper is organized as follows; first, we identify the traditional characteristics classroom interaction. After that, we have a look at established e-learning concepts and implementation of current teaching and learning styles. Next, we extend our study on the subject by exploring this idea of using social media tools to enrich the e-learning experience and share our first-hand experience in implementing those ideas. Lastly, we presented key features available on current social media applications that could assist and enrich the learning process based on the initial study that we have conducted.

## 2. Traditional Classroom Learning

In a traditional classroom, the main requirement is to promote a sense of belonging for the students towards the class they are currently in. This requirement was identified by Poulou [1] where it was found that an optimal learning experience can be obtained by a student if the instructor can establish their students with a healthy classroom community. Within this classroom, a student can feel confident to promote their pro social skills. These skills are attentive listening, having mutual respect and the ability to work creatively together within the environment. These acquired skills are also the characteristics which make each classroom experience a unique and worthwhile experience. Shpancer [2], emphasize that the experience in the classroom environment must be perceived as having more value and distinguishable from other alternatives (such as from independent reading). Since course and educational material are readily and easily available online these days, the ones providing the traditional classroom experience must be able to offer an experience that the student cannot obtained simply by reading or downloading the materials; the human factor is still the deciding factor. Facial gestures, interactive question and answers and the thought and critical process during teaching are factors which make a student feel that the classroom interaction and its environment are worth being into. Having identified these requirement and features, the implementation must be considered in two different environments. The first is the traditional face to face session with the student; the second one is what happens after class, or in the next section discusses how can the real-world interaction be translated into its online counterpart in social media?

### 3. Extending the traditional classroom via Social Media

Through the advent of massive open online courses (MOOCs), the e-learning scenario is common. Among its benefits as mentioned by Nicholas et al in [7] are its scalability, accessibility, openness and self-organization. Other than that, factors as mentioned by Hamid et al [8] such as the user satisfaction, system and information quality needed to be considered. However, one of the main concerns of online learning is the possibility of losing the human aspect of the learning process [3]. As we have presented in the previous section, these aspects are essential because it is to nurture a sense of belonging for the students in the classes they took. Weiss [3] suggested that in order to provide these human aspects through online learning, five key features must be presented which are; Using tones and expressive language to humanize the experience, Create biographies or profiles for better interaction, Having virtual break rooms to relax outside the learning session, Model appropriate interaction just as we do in the real world and lastly Maintain ethical and privacy of communication.

Prior to implementing our classes in the social media, we weighed those features and compare it with the features already available in social media. First and foremost, social media provided communication tools which are very expressive and humanizing. Alongside normal chat functions, most social media application can even provide video and voice chat. Secondly, each social media user's account already contains pictures, information and profiles related to the user. What makes social media engaging is that it actively connects the user with more interaction option. The third suggestion, the virtual break rooms are already there in social media. Aside from communicating, users can do other things in it including reading articles, listening to music, watching videos or just browsing. As for maintaining appropriate interactions and privacy of communication, there are tools such as personal messaging and group moderation to make sure that a certain level of appropriateness can be managed and obtained. Furthermore, through social media, each notification and announcement are quickly noticed by its users through efficient notification facility provided by the application. Active users can promptly be alerted on any news or messages related to them compared to a system on a separate platform. Upon this identified features, the next section documented our attempt to use social media to provide an effective classroom experience to our students.

### 4. Social Media Learning Experience

The implementation of using the social media tool stems from the realization that the course being taught has a constant large number of students. The course which is the base focus for this study is a core subject for all students in the College of Information Technology, UNITEN. On average, each semester will have 60 to 120 students enrolling for the course. These students were then divided into two sections of 30 students. To offer an optimal classroom experience, we find that it is important to empower the classroom experience and extend it through social media to ensure that the student will benefit greatly from the course. Although there are learning tools provided such as the Learning Management System (LMS), it felt disjointed from the students due to its formal look and feel. We appreciate its features and incorporated it for online quiz and assessments, but for maintaining an online presence and active experience, we chose to do it through social media. The first implementation was done in the First semester of 2014/2015 session, followed by the next semester and maintained constantly until the third batch of students which enrolled for the first semester of 2017/2018. We accumulated and categorized the experience in the following sections:

#### 4.1. Focus Group Readiness

The first question we need to ask is "Are our students actively connected to the social media?" A recent 2015 report by the Malaysian Communication and Multimedia Commission [5] indicated that majority of the Internet users are from the 18 to 24 years old age range. This age group is directly related to the age of our students which are socially active and connected on the World Wide Web. As for our implementation, students were asked on their social media involvement through an ice breaking session at the start of the course. Most students readily accept the idea of having a Facebook group since they already have an active account. Our survey throughout the implementation, have found that most students are familiar with application such as Facebook, Whatsapp and Instagram with 100% of them having an account on Facebook, 72 to 78% with Whatsapp connectivity while 54-57% of the same group having an Instagram account.

#### 4.2. Chosen Application

The social media application chosen for the task is Facebook. As we have pointed earlier in the previous section, most students are actively connected on Facebook. Other than the fact that there are currently about 15 million users in Malaysia [6], Facebook also provide a group and discussion tool enough for an active classroom environment. These tools are enough to form the class group, enabling the discussion feature, providing file sharing facility and the poll system. Having those functions easily assisted us in the task of providing an online class experience that enables a good and optimal environment for learning.

#### 4.3. Class Organization

At the start of each semester during the course briefing, one or two student volunteers from the class will be asked to add the lecturer as their connection in Facebook. This initial requirement is needed so that at least one of the students can be added into the course group page. The process of adding up more members into the group can then be delegated to the students since every member of the group can add their friends into the formed group.

As for concerns or personal privacy on the social media, Facebook provide an option to limit accessibility based on the category of the user group's connection. Therefore, a student or a lecturer can do so to protect their privacy. Students were also told beforehand that at any time after they have been added into the group, they can choose to "unfriend" or in other words remove the lecturer from their online circle. This does not nullify their membership into the already established online group created for their class. Based on our experience in setting up the class, most students are open to the idea of being added into the group without much hesitation. Fig. 1, shows an example of group members for one section of the course in the first semester of 2014/2015.

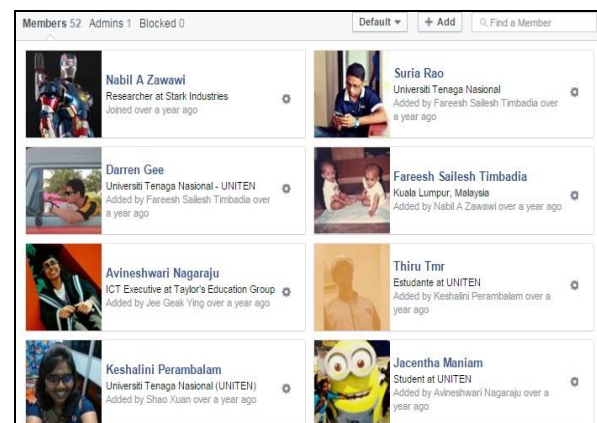


Figure 1: Class Member for the 2014/2015 Class

#### 4.4. Socializing the Class

Based on Weiss suggestion for maintaining human touch in an online environment [3], the formed group is constantly feed with active information regarding the course. Language used are kept formal but with a friendly tone of writing. At certain occasions, the lecturer will tone down the response to be more friendly and casual to promote student participation in the page. One of the useful features to add participation is the use of the tagging option whereby certain member of the group can be tagged to give opinions or join a conversation. This proves to be beneficial for a healthy conversation and participation where student can be engaged in a friendly and voluntary basis.

News related to information technology, student extra-curricular activities and even songs were shared into the group to promote a break between study. Prominent features in Facebook such as the “LIKE” and “SEEN” feature provide an instant feedback to the lecturer. The feature showed the penetration of information aside from which content are preferred by the students in the group. Adjustment can be made to future contents based on these feedbacks to ensure that active participation is obtained from the students. Fig. 2, shows an example of the type of posting that is posted inside the group where the lecturer attempted to be casual and informal with the group. This act of socializing and communicating with the class humanize the experience and provide the students with a sense of presence of the lecturer. Students are also encouraged to share their own content with the group to make the experience more participative in nature.



Figure 2: Socializing the class

Fig. 3 shows an instance where the student themselves show initiative to share material to the group related to the topics being studied. The “likes” and “seen” features here provide as a monitoring and instant feedback mechanism to encourage sharing. As for our study, this feature provides an indicator for the student’s presence and their approval of the topic presented in the page. Students can also provide feedback if the material is proven to be useful or otherwise. Students will participate and contribute to a class if they feel that they are a part of the class and being appreciated. This sense of belonging is provided by the Facebook mechanism that was mentioned earlier.



Figure 3: Shared material in the group

#### 4.5. Maintaining Presence

Active discussion and sometimes questions are raised via the group discussion. Each query made by the students in the group must be addressed in a timely manner. It was discovered that students easily discourse their concerns through the personal message option provided by Facebook as opposed to using e-mails. After the group was formed, communication for appointments, inquiries and problems are 75% made through Facebook personal messaging via Facebook and WhatsApp while only a remaining 18% use e-mail while the remaining are calling to the office phone. Perhaps the real-time interaction provided by Facebook messaging is the factor why this method is the method of choice for most students.

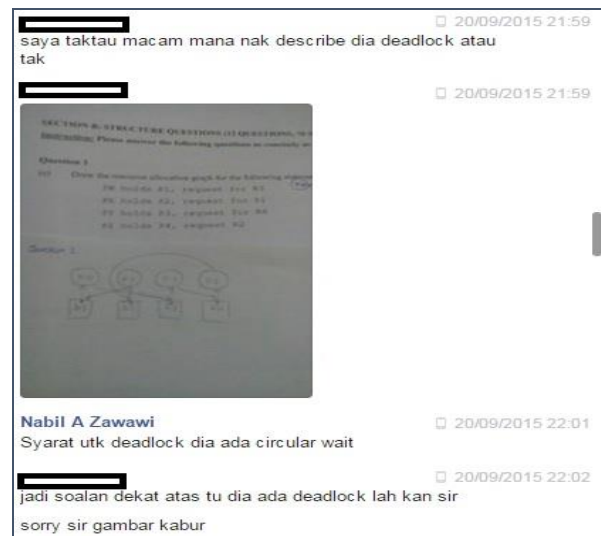


Figure 4: 1 to 1 Study Related Discourse

Fig. 4 shows an example of such discourse where a student asks the lecturer a question regarding a problem on one of the topics regarding deadlocks. Students could freely share their problems with the lecturer that is related with the course materials if the lecturer are willing to accommodate their questions either through group discussion or a 1 to 1 basis.

#### 4.6. Student’s Performance

Based on the result obtained by the student of the course throughout 6 consecutive semesters of implementation, student performance is considered good and satisfactory with 70-75% of the students enrolled for the course manage to score between grade B to A for the course. In most cases, students who were actively involved in the group will show initiative in class and after class discussions. Although this performance indicator might

not directly come as a direct result from implementing this method, the active participation of students in relaying their concerns and problems are assisting the lecturer in identifying problems in certain content of the course. Other than that, students who refuse or simply didn't join the group are those who also did not participate or absent from class altogether. This indicator also assists the lecturer in identifying the struggling or problematic students. Classmates can be involved in contacting these problematic students online.

Fig. 5 shows an example of one semester's result in the Operating Systems Concept class. As seen from the figure, majority of the class managed to obtain A to B- grades in the subject. The student performance on this subject have been maintained for different batches of semester from 2014-2017 ever since social media interaction have been introduced as part of the class tool to discuss and share material.

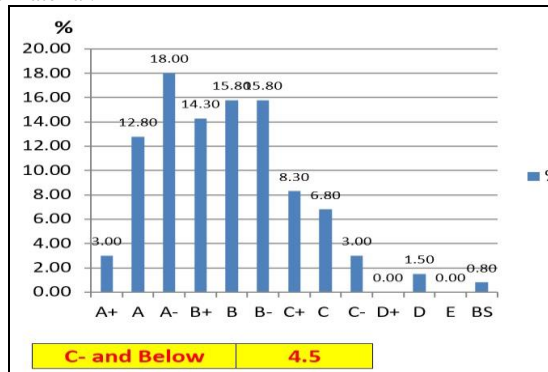


Figure 5: One sample result for the Operating System Concepts class

#### 4.7. Lecturer's Performance

Throughout its implementation from 2014-2017, the lecturer managed to obtain an average of 80-85% on student feedback score in the Uniten lecturer's performance evaluation. Throughout, this time frame, 120 students were taught each semester in the Operating Systems class totaling approximately 720 students over the course of six semesters. Based on the feedback provided by the students in the evaluation system, they regard the lecturer as accommodating, knowledgeable and have a fine grasp of the course material that the lecturer is teaching. Even though the course capacity is large, the lecturer could accommodate and manage his time to entertain the student's needs outside of lecture hours. Traditional face to face discourse, although minimal, is used to discuss identified questions that was requested from the students before each revision session.

Based on all the category, we find that by carefully planning and maintaining the use of social media, namely Facebook, a big capacity course with 120 students such as the case study above can be carried out successfully as an after class teaching tool while maintaining a healthy balance between the student's performance and good communication between all involved with the course. An optimal classroom experience as was suggested by [1],[2] and [3] are achievable through the help of Facebook.

### 5. Useful Features of Facebook for online learning

Based on the study, the following are the most useful features available on Facebook that must be utilized by lecturer in order to extend and optimize their online classroom presence and experience. We recommend these tools based on our experience in section 4 and requirements we identified for an optimal class room experience as described in section 2 and 3. We listed out these features that could benefit and enrich the classroom experience for new generation of learners.

#### 5.1. Dedicated Online Consultation Hours

Treat online consultation hours the same as we treat physical face to face consultation hours. Inform the students beforehand when are we available online to discuss any problem that they might have or address issues related to the study. If the student should post something that requires feedback, inform them that there might be delays of response outside the provided dedicated time slot.

#### 5.2. Active Monitoring

Be constant in communicating through the channel. Student will trust and use the system if it is constantly updated and responded to. Monitor post that could be out of topic and provide constant praise and encouragement for positive and relevant posts or responses.

#### 5.3. Be Approachable and Professional

Always keep in mind that we are the lecturer and educator. Provide the students with casual yet proper code of conduct in conversation and discourse. Write in friendly and attentive tone of writing.

### 6. Conclusion

We have discovered that by using social media, we can assist in extending and even enhance the classroom experience for our classes. Optimized and personalized online experience as described in [1], [2], [3] and [4] can be achievable. Students are more involved, open to discussion, asking questions and share concerns with the lecturer involved. Although our focus for the study is for a computer science subject, we believe that by following the guidelines based on the features, it could also benefit all other courses that wish to have extended classroom experience.

### Acknowledgements

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