Improving Faculty and Students Communication using Social Network System

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INTRODUCTION

• **Context** – Facebook in *seven different courses* covering Science, Engineering and Technology subjects, across *two* semesters

• **Objective** – to *communicate with the students more effectively*, as communication through learn management system had not been successful.

• **Expectation** – *students would be more engaged with the course content*, due to active communication between lecturers and students
PROBLEM STATEMENT

Not communicating effectively with students
• No two way communication with the students - out of classroom time
• Lack of engagement due to delay in dissemination of information to students
• Enhance engagement of students which will eventually reduce attrition rate

How to communicate with students effectively?
Facebook usage, significantly negatively influence the student engagement in term of class preparation, but positively influence the time spent in co-curricular activities (Junco, 2012).

80% of tertiary students in Malaysia have a Facebook account (Abd Jalil, 2010).

Grading and participation in Facebook has adverse effect on students’ preparation time (Judele et al, 2014).

Usage of Facebook has no impact on academic grades and should be further investigated for the communication aspects (Jamil et al, 2013).

Mobile Learning in its simplest form is sending short messages service (SMS) or text messages via hand phones to the students (Vosloo 2012, Motiwalla 2007, etc).

Methods implemented to encourage students to learn outside the classroom context includes blended learning (Maleko et al, 2012).

Students participating in the Facebook discussion group are more active than the Blackboard discussion group (Maleko et al, 2013).

With the development of smart phones and tablets, comes along a list of third party application that can be used for mobile learning (C. N. Quinn, 2012, T. Y. Sim, 2014, etc).
RELATED WORK

• **Mobile learning** — Motiwalla, 2007; C. N. Quinn, 2012; Vosloo, 2012; T. Y. Sim, 2014; etc

• **Social Network System for communication** — Facebook as the selected option — Abd. Jalil, 2010; Maleko et al, 2013

• **Facebook activities correlate negatively to academic performance** — Judele et al, 2014; Junco, 2012

• **Facebook activities has no impact to academic performance** — Jamil et al, 2013

Will communication increase engagement?
# APPLICATIONS CONSIDERATION

Facebook was selected as the application for communication

<table>
<thead>
<tr>
<th></th>
<th>SMS</th>
<th>Whatsapp</th>
<th>Twitter</th>
<th>Facebook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Privacy of Number</td>
<td>✗</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Familiarity of Application</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
<td>✓</td>
</tr>
</tbody>
</table>
PROCEDURE

STEP 1
Create Official Facebook account

STEP 2
Add Students
Create Courses Group

STEP 3
Lecturer & Students post
DATA COLLECTION

Student Survey
- Engagement
- Criteria of Tool

FB Postings
- Activities Category
- Correlation to Grades

Lecturers’ Feedback
- Engagement
- Ease of Use
DATA COLLECTION

- Student Survey
- Posting on Facebook
- Lecturer’s Feedback
FINDINGS & DISCUSSION
Student Survey - Demographic

Participant by Course

<table>
<thead>
<tr>
<th>Course</th>
<th>No of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1033</td>
<td>62</td>
</tr>
<tr>
<td>CHEM 1053</td>
<td>24</td>
</tr>
<tr>
<td>CSCI 1013</td>
<td>39</td>
</tr>
<tr>
<td>CSCP 1014</td>
<td>22</td>
</tr>
<tr>
<td>ENGR 2013</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 2023</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 2033</td>
<td>13</td>
</tr>
</tbody>
</table>

Participant By Gender

- Female: 28%
- Male: 72%
FINDINGS & DISCUSSION
Student Survey – Impact of Engagement

Class Discussion

Raising Questions

Out of Class Engagement

Interactive Class

Course Content
FINDINGS & DISCUSSION

Student Survey - Features Influencing Engagement

Factors ranked according to its importance:
• **push notifications** when there are new updates
• the **ease of posting** comments, documents or photos
• push notification while using the application
• my “friends” can see my postings
• **login cached** – do not have to re-key in user name and password
# FINDINGS & DISCUSSION

**Student Survey - Features Influencing Engagement**

<table>
<thead>
<tr>
<th>Facebook</th>
<th>eLearn</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Login to eLearn</td>
</tr>
<tr>
<td>Click on the group</td>
<td>Click on Discussion</td>
</tr>
<tr>
<td></td>
<td>Select the suitable forum</td>
</tr>
<tr>
<td></td>
<td>Select the suitable thread</td>
</tr>
<tr>
<td>Write the post content</td>
<td>Write the content</td>
</tr>
<tr>
<td>Post the message</td>
<td>Submit the content</td>
</tr>
</tbody>
</table>

Fewer steps to post on Facebook group

Devandran
# FINDINGS & DISCUSSION

## Postings on Facebook

<table>
<thead>
<tr>
<th></th>
<th>Start</th>
<th>Reply</th>
<th>Like</th>
<th>Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start</td>
<td>1</td>
<td>.737**</td>
<td>.453**</td>
<td>0.148</td>
</tr>
<tr>
<td>Reply</td>
<td>.737**</td>
<td>1</td>
<td>.571**</td>
<td>0.082</td>
</tr>
<tr>
<td>Like</td>
<td>.453**</td>
<td>.571**</td>
<td>1</td>
<td>0.01</td>
</tr>
<tr>
<td>Marks</td>
<td>0.148</td>
<td>0.082</td>
<td>0.01</td>
<td>1</td>
</tr>
</tbody>
</table>

No Correlation between activities and grades
FINDINGS & DISCUSSION
Lecturer’s Feedback

- Introductory Experience
- Effectiveness of Communication
- Impact on Students’ Engagement

Experience was positive
CONCLUSION

Not communicating effectively with students

- *Implementation of Facebook encourages the class engagement*
- *Facebook helps disseminate information faster and students are more engaged*
- *Facebook engagement does not influence the grades*

Facebook group is a suitable tool for engagement but not grades improvement
CONCLUSION

• Conclusion 1. Implementation of Facebook encourages the class engagement

• Conclusion 2. The “automatic notifications of updates” and “ease of posting comments, documents or photos” are the most important features that positively influenced the students’ engagement in Facebook

• Conclusion 3. There is no correlation between the activities with
THANK YOU