Real-cases of classroom mLearning – BYOD for mobile student response system

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Characteristics of the new learning environment slowly taking shape

- Active learning
- Peer learning
- Case study
- Group work
Bring Your Own Device (BYOD)

- How the University is coping with the trend, in both out-of-classroom and inside-classroom situations?
uReply as a campus-wide BYOD classroom solution

- uReply is a *classroom communication system for use with mobile devices.*

uReply benefits students' learning if it can be used in a way that facilitates interactions and dialogues in a class.
Teachers’ acceptance of using the mobile technology in classroom,

- Teachers’ voice about BYOD/ uReply in classroom
  “After using the short question function of uReply, I discovered that it is really useful for sharing of ideas between students, and most of them love this feature a lot!” – Dr. Lee Rebecca K. Y. (Biomedical Sciences)

- “When class size is large, getting every student to participate has always been challenging; uReply is a handy tool for getting every student to participate.” – Dr. CHOI Chiu-Wo (Computer Science and Engineering)

- “uReply is a handy tool to check students' understanding and kick off class discussion.” – Prof. WONG Edmund K. L. (School of Accountancy)

We invited 12 teachers to participate in this survey. 8 completed questionnaires were collected (Dec 2012)
Opinions collected from 20 teacher uReply users

- How many of the students (or a rough percentage) had their own device and used uReply?
  - Range from 40% - 95%

- How did you solve the problem that some students did not have the device to do the uReply tasks?
  - “Not a problem”, “Very Rare”, “Never”, “No”, “I haven’t heard of such complaints”

We emailed 30 teachers on the concept of BYOD. 20 replied (April 2013)
• Recorded around 1000 student-visits per week during the teaching periods
• Number of sessions in the last two semesters
• Increased 19.4%
Students’ acceptance of the mobile technology in classroom

- Survey collection period: 29–11–12 to 22–12–12
- 5 classes that used uReply in class
- Responses rate: $\frac{201}{750} = 26.80\%$
<table>
<thead>
<tr>
<th>Teacher name</th>
<th>Department</th>
<th>Completed questionnaires/potential respondents</th>
<th>Response rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Choi Chiu-wo</td>
<td>Computer Science and Engineering</td>
<td>46/191</td>
<td>24.08%</td>
</tr>
<tr>
<td>Dr. Lau K., William</td>
<td>Department of Decision Sciences and Managerial Economics</td>
<td>41/244</td>
<td>16.80%</td>
</tr>
<tr>
<td>Dr. Lee K. Y., Rebecca</td>
<td>School of Biomedical Sciences</td>
<td>39/65</td>
<td>60.00%</td>
</tr>
<tr>
<td>Prof. Wong K. L., Edmund</td>
<td>School of Accountancy</td>
<td>68/128</td>
<td>53.13%</td>
</tr>
<tr>
<td>Prof. Wong Yu-cheung</td>
<td>Department of Social Work</td>
<td>7/122</td>
<td>5.74%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>201/750</strong></td>
<td><strong>26.80%</strong></td>
</tr>
<tr>
<td></td>
<td>Strongly agree</td>
<td>Agree</td>
<td>Neutral</td>
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</tr>
<tr>
<td>1.</td>
<td>18.41% (37)</td>
<td>62.69% (126)</td>
<td>14.43% (29)</td>
</tr>
<tr>
<td>2.</td>
<td>17.41% (35)</td>
<td>63.18% (127)</td>
<td>14.93% (30)</td>
</tr>
<tr>
<td>3.</td>
<td>19.40% (39)</td>
<td>57.71% (116)</td>
<td>16.92% (34)</td>
</tr>
</tbody>
</table>
Benefits

- it enhances interactions and it complies with new pedagogical beliefs
  - e.g. needs analysis/ what’s learnt/evaluation of teaching/comments and questions/ exam preparation/group discussion/ promotion of further discussion

In-class competition
“helped me to stay engaged during class and improved my attendance to class”

“helps me remember better and pay more attention to the notes.”

“better understanding of course contents.”

“I saw many classmates( including me ) increases their participation in class under using ureply.”

“more willing to answer question”

Comments from Dec 2012 student survey
Concerns

- Student: “some students just sit there and do nothing i think the ureply can send the report to the lecturer and improve the participation rate of the whole class”
- Student: “Should be used to ask other non-academic question concerning preference of course outline, syllabus, format and syllabus of mid-terms and finals.”
- Teacher: “Allow pre-loading of questions onto uReply to save time in lecture. “

Comments from Dec 2012 student and teacher surveys
Insights for the future

- mobile devices can be good teaching and learning tools in the classroom
  - BYOD becoming popular
  - Variety of uses
  - Variety of benefits

- a few setbacks and limitations
  - Importance of cross platform tools
  - Importance of connectivity
  - Importance of pedagogy