ARE WE READY TO ENGAGE STUDENTS WITH OUR OWN MOBILE DEVICES?

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POWERFUL DEVICES
HOW POWERFUL A MOBILE PHONE IS?

• Wireless connection to the internet

• Various network applications
  • Social networking apps (WhatsApp, Facebook, Twitter, WeChat, QQ, LinkedIn, Skype…)
  • Books (iBooks by Apple, Kindle by Amazon…)
  • Cloud storage (Dropbox, Google Drive, SkyDrive…)
  • Learning (iTunes U, Coursera, TED Talks…)
  • Newspaper, emails, video/photos/voice, database…etc.

• Affordable price for mobile devices, software system, and network services (cellular and WiFi)
### HOW POPULAR OF MOBILE PHONES?

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th># of Mobile Phones (in million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>China</td>
<td>986</td>
</tr>
<tr>
<td>2</td>
<td>India</td>
<td>894</td>
</tr>
<tr>
<td>3</td>
<td>United States</td>
<td>290</td>
</tr>
<tr>
<td>4</td>
<td>Indonesia</td>
<td>250</td>
</tr>
<tr>
<td>7</td>
<td>Japan</td>
<td>133</td>
</tr>
<tr>
<td>17</td>
<td>United Kingdom</td>
<td>82</td>
</tr>
<tr>
<td>27</td>
<td>South Korea</td>
<td>53</td>
</tr>
<tr>
<td>55</td>
<td>Hong Kong</td>
<td>15</td>
</tr>
<tr>
<td>57</td>
<td>Cambodia</td>
<td>14</td>
</tr>
</tbody>
</table>

## MOBILE SERVICES IN HONG KONG

<table>
<thead>
<tr>
<th>Telecommunications Services</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile network operators (February 2013)</td>
<td>5</td>
</tr>
<tr>
<td>Local fixed network operators (February 2013) (Note 6)</td>
<td>18</td>
</tr>
<tr>
<td>External fixed telecommunications services providers (February 2013) (Note 7)</td>
<td>284</td>
</tr>
<tr>
<td>- Facility-based external fixed network operators (February 2013) (Note 8)</td>
<td>41</td>
</tr>
<tr>
<td>- Services-based external telecommunications services providers (February 2013) (Note 9)</td>
<td>243</td>
</tr>
<tr>
<td>Residential fixed line penetration rate (December 2012) (Note 10)</td>
<td>100.79%</td>
</tr>
<tr>
<td>Mobile subscriber penetration rate (December 2012)</td>
<td>228.5%</td>
</tr>
<tr>
<td>Mobile subscribers (December 2012)</td>
<td>16,403,076</td>
</tr>
<tr>
<td>2.5G and 3G/4G mobile subscribers (December 2012)</td>
<td>10,073,352</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Internet Services</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet service providers (February 2013) (Note 11)</td>
<td>191</td>
</tr>
<tr>
<td>Registered customer accounts with dial-up access (estimated) (December 2012)</td>
<td>793,811</td>
</tr>
<tr>
<td>Registered customer accounts with broadband access (estimated) (December 2012)</td>
<td>2,264,545</td>
</tr>
<tr>
<td>Household broadband penetration rate (December 2012)</td>
<td>86.1%</td>
</tr>
<tr>
<td>Public Wi-Fi access points (February 2013)</td>
<td>18,824</td>
</tr>
</tbody>
</table>

- China Mobile Hong Kong Company Limited
- CSL Limited
- Hong Kong Telecommunications (HKT) Limited
- Hutchison Telephone Company Limited
- SmarTone Mobile Communications Limited
CHECKLIST: ARE WE READY FOR MOBILE LEARNING?

- ✓ Systems and Services
  - ✓ Availability
  - ✓ Accessibility
  - ✓ Compatibility
  - ✓ Mobility
  - ✓ Portability
  - ✓ Penetrability

- ✓ Hardware technology
- ✓ Software technology
- ✓ Wireless network Infrastructure
  - ✓ Cellular Coverage (Near 100% in Hong Kong)
  - ✓ Wi-Fi Access Point (Generally good reception in each classroom/lecture hall)
- ✓ Ownership (All students and teachers have access to mobile devices)

How about the IT literacy of our students and teachers?
WHAT ARE SOME AVAILABLE PLATFORMS?

- LEARNING MANAGEMENT SYSTEM (LMS)
  - MOODLE (51%)
  - BLACKBOARD (19%)
  - DESIRE2LEARN (11%)

- INTERACTIVE TEACHING PLATFORM
  - EDMODO (HTTP://WWW.EDMODO.COM)
  - CANVAS (HTTPS://CANVAS.INSTRUCTURE.COM)
  - SCHOOLELOGY (HTTPS://WWW.SCHOOLELOGY.COM/HOME.PHP)
“BRING YOUR OWN DEVICE”

• Bring Your Own Device (BYOD)
  • Literally, students bring their own mobile devices to school
  • Mobile devices: smartphones, tablet computers, laptops
  • Complete their taste during the class period or outside of the classroom

• Interactive classroom teaching with BYOD
  • Ask questions
  • Gather opinions
  • Carry out discussions
  • Provide feedbacks

• Benefits students, then benefit teachers; not vice versa!
DEMO: EDMODO

• Ged1003 Mathematics Across Cultures and Time
  • Lecture topic: Philosophical and Scientific Dimension of Mathematics
  • Number of students: 40
  • Background: varied across different programmes
  • Outcomes: describes scientific phenomenon with mathematical approach

• Teaching & learning activities
  • Real-time Polling
  • Group Discussion
PREPARATION PROCESS

• STAGE 1: PREPARE MYSELF TO USE
  • Be committed to master the skills
  • Read instruction manual
  • Discuss with colleagues who have experience
  • Set aside sufficient time to test and trial
  • Create another account to act as students
  • Plan the lesson and activities to meet the learning outcomes

• STAGE 2: PREPARE STUDENTS TO USE
  • Email and instruct them to install before the next lecture
  • Provide follow-up instructions after observation
  • Give a sample activity to test their understanding and readiness

• STAGE 3: PREPARE THE SYSTEM AND NETWORK
  • Check with the personal mobile devices to be ready
  • Check with the Wi-Fi connection in the classroom
CHALLENGES AND OPPORTUNITIES

- **Take more time** to prepare myself for the technology
- **Take more time** to prepare the lessons
- **Take more time** to prepare the students
- **Take more time** to teach during the classroom

- **Collect more** feedbacks from the students during the classroom
- **Provide more** interactions among students, and between students and teachers
- **Bring in more** excitement and enjoyment to the classroom
- **Motivate more** students to engage
CONCLUSIONS

• BYOD itself cannot bring success; with teacher’s well preparation, it will.

• BYOD model is ready to be implement.

• Teachers must be fully committed to LEARN the skills first before THINK and APPLY.

• Students are ready in general with clear instructions of using e-Learning platforms.

• Teaching with or without technology can be successful.

• But, teaching with technology will make a difference in the classroom.
THANK YOU!