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, Linkln, 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?

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

MOBILE SERVICES IN HONG KONG

Telecommunications Services	Quantity
Mobile network operators (February 2013)	5
Local fixed network operators (February 2013) (Note 6)	18
External fixed telecommunications services providers (February 2013) (Note 7)	284
- Facility-based external fixed network operators (February 2013) (Note 8)	41
- Services-based external telecommunications services providers (February 2013) (Note 9)	243
Residential fixed line penetration rate (December 2012) (Note10)	100.79%
Mobile subscriber penetration rate (December 2012)	228.5%
Mobile subscribers (December 2012)	16,403,076
2.5G and 3G/4G mobile subscribers (December 2012)	10,073,352

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

- 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)

  - SCHOOLOGY (HTTPS://WWW.SCHOOLOGY.COM/HOME.PHP)

A Profile of the LMS Market (page 18), CampusComputing, 2011 .

"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

PREPRATION 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

- <u>Take more time</u> to prepare myself for the technology

- <u>Take more time</u> to prepare the lessons

- <u>Take more time</u> to prepare the students

- <u>Take more time</u> to teach during the classroom

- <u>Collect more</u> feedbacks from the students during the classroom

- <u>Provide more</u> interactions among students, and between students and teachers

- <u>Bring in more</u> excitement and enjoyment to the classroom

- <u>Motivate more</u> 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!