



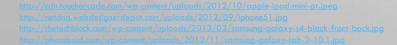
ARE WE READY TO ENGAGE STUDENTS WITH OUR OWN MOBILE DEVICES?

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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

CIA (2011): <u>https://www.cia.gov/library/publications/the-world-factbook/rankorder/2151rank.html</u>, USA

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

<u>China Mobile Hong Kong Company Limited</u>
<u>CSL Limited</u>
<u>Hong Kong Telecommunications (HKT) Limited</u>
<u>Hutchison Telephone Company Limited</u>
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 (<u>HTTP://WWW.EDMODO.COM</u>)
 - CANVAS (<u>HTTPS://CANVAS.INSTRUCTURE.COM</u>)
 - SCHOOLOGY (<u>HTTPS://WWW.SCHOOLOGY.COM/HOME.PHP</u>)

<u>A Profile of the LMS Market (page 18)</u>, 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
- 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 <u>make a difference</u> in the classroom.

