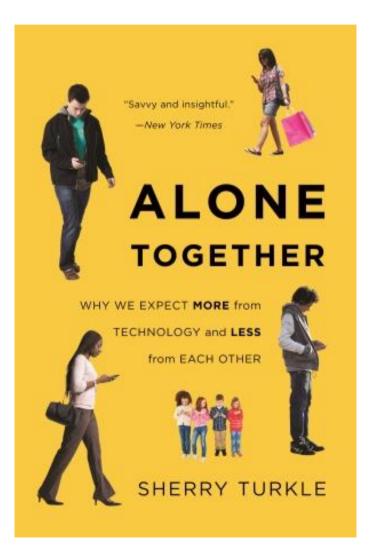
### SMARTPHONES, LAPTOPS AND THE CLASSROOM

Robert Payne and Russell Williams October 5th, 2016 AUP – Teaching and Learning Center



#### Personal tech is already in the classroom

- Digital natives
- Laptops, tablets and smartphones
- Bernard R. McCoy, 'Digital Distractions in the Classroom', (2013)
- 777 students surveyed; 6 US universities
- « The average respondent used a digital device for nonclass purposes 10.93 times during a typical school day for activities including texting, social networking and emailing »
- « More than 80% of the respondents indicated such behavior caused them to pay less attention in the classroom and miss instruction »

#### Personal tech is already in the classroom

- James M. Lang, 'No, Banning Laptops is Not the Answer', *The Chronicle of Higher Educa*tion, September 11, 2016
- « Devices have backed their way into high-school and elementary classrooms, and students in college will continue to want access to tools that have been present since their earliest school experiences »
- « The classroom should serve as an active laboratory of learning, a place where students engage with the course material through multiple cognitive streams »

- Pam A. Mueller & Daniel M. Oppenheimer, 'The Pen is Mightier Than the Keyboard', *Psychological Science*, 2014
- « When laptops are used [...] to take notes, they may [...] be impairing learning because their use results in shallower processing »
- « Students who took notes on laptops performed worse on conceptual questions than students who took notes longhand »

- Helene Hembrooke and Geri Gay, 'The Laptop and the Lecture: The Effects of Multitasking in Learning Environments', *Journal of Computing in Higher Education*, Fall 2003
- « Students [using laptops during lectures] suffered decrements on tradtional measures of memory for lecture content »
- While students think they can multitask they actually can't do so effectively

- Louis-Philippe Beland & Richard Murphy, 'III Communication: Technology, Distraction & Student Performance', CEP Discussion Paper No. 1350, 2015
- Relationship between student achievement and banning mobile phones (four English schools)
- « increases in performance are driven by the lowest achieving students »
- Higher achieving students weren't really impacted
- « restricting mobile phone use can be a low-cost policy to reduce educational inequalities »

# Sections ≡ The Washington post Sign In Subscription Answer Sheet Why a leading professor of new media just banned technology use in class Subscription

Clay Shirkey, New York University, 2014

« Allowing laptop use in class is like allowing boombox use in class – it lets each person choose whether to degrade the experience of those around them »

#### Productive uses for smartphones

- 1. Notifications, eg. Remind.com
- 2. Quick answers or Googling
- 3. Audience feedback, eg. PollEverywhere
- 4. Peer assessment, eg. GoogleForms, TodaysMeet, Twitter
- 5. Editing/commenting on group text, eg. GoogleDocs, Office 365, Twitter hashtag.
- 6. GPS/Geotagging

#### Productive uses for laptops

Collective mapping and diagramming

Coggle

Creately

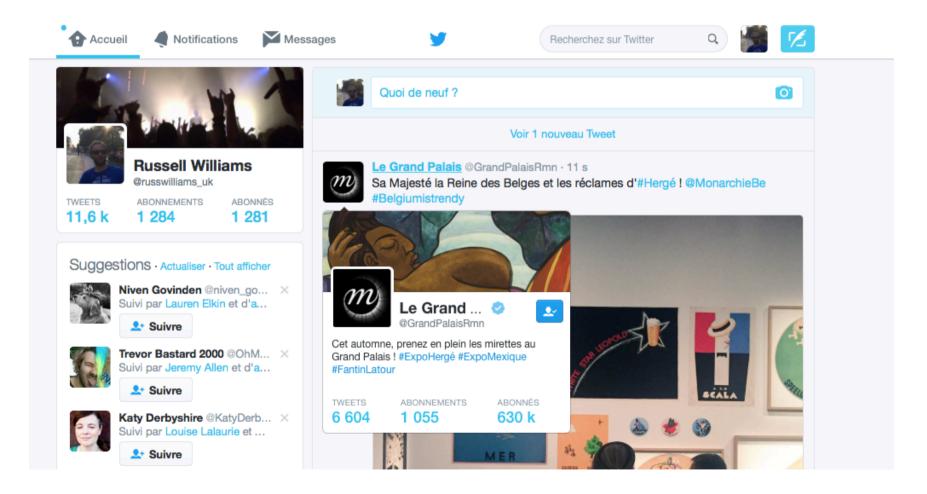
XMind





Enhance classrooms. Enable discussions. Empower students. TodaysMeet gives everyone a voice

#### Twitter #hashtags





## Google Drive