Privacy Implications in the Networked Classroom



Valerie Steeves

Priscilla Regan

Leslie Regan Shade



Overview

- Dissolving Boundaries in the Public/Private Classroom
- Commercialization of the Networked Classroom
 - Teachers' perspectives
 - Educational software that uses algorithms to personalize education
 - Corporate services that monitor student social media accounts for schools to help them identify students at risk
- Privacy Concerns



Connected to Learn:

Teachers' Experiences with Networked Technologies in the Classroom





Canadian Teachers' Federation Fédération canadienne des enseignantes et des enseignants

Best Experiences with Networked Technology

- 54% (959) incorporating technology (e.g. smart boards and YouTube videos) into lesson plans
- 14% (245) access to online information
- 13% (235) presentation of project results
- 10% (175) communicating with others outside the classroom
- 5% (86) student collaboration
- 3% (44) assisted learning technologies to help students with disabilities communicate and learn
- 1% (24) educational games, especially in math

Learning as a focused activity that requires privacy

Distraction

- "Students see [cell phones and other devices] as social tools, not learning tools"
- "do not appear to be interested in using social networking [or devices like iPads] to communicate for education purposes"
- "passent plus de temps à communiquer avec leurs amis"
- "become distracted from the task"

Worst Experiences with Technology

- students "abus[ing] time"
- "watching irrelevant youtube clips, texting, taking photos, etc."
- playing online games
- "being off task"
- "Students tend to go crazy on the internet if not monitored"
- "all access of networked technology is fraught with the danger of students being off-task and distracted by the non-educational aspects. This makes maintaining discipline and engagement difficult."

Too much information "out there"

- "Some students seem to stray, lose focus and eventually are not able to achice (*sic*) much. Handling the huge supply of information from networked technology becomes overwhelming for many students"
- Too much distraction "in here"

"BYOD is a disaster for crowd control"

Teachable Privacy Moments

- "Usually the first time I introduce a collaborate (sic) site like Padlet, students post inappropriate or silly items. This becomes a teachable moment though..."
- "The initial reaction from the students was very resistant to the Blogger activity; after a discussion, this problem was alleviated."

Relaxing Boundaries

- "I had found a fantastic video clip of a robin life cycle in the nest laying eggs, hatching, feeding, flying off. It was blocked at school."
- "Trying to use the school network as every available site I WANTED to use was blocked by our 'security'"
- "Government Education Ministries push to create 21st century learning experience, but equips students and teachers with out-dated equipment that is firewalled to death that you can't be productive with it."
- "Board took over control of our iPads and app content and this greatly limited our ability to use the apps we had previously been using – everyone was frustrated"
- "The Board has to loosen up/remove access restrictions esp by teachers"

Affirming Boundaries

- Google Docs too "public"
- "it was hard to engage the full class"
- "students rarely read other students' entries therefore rarely commented"

"The digital medium contributes to the creation of leaky, porous institutional contexts, bringing the outside in and vice versa...both educational actors and young people have to adapt their pedagogical practices to deal with a collapsing of spatial and temporal boundaries" (McGillivray et al., 2016).

Commercialization

How Google Took Over the Classroom

The tech giant is transforming public education with low-cost laptops and free apps. But schools may be giving Google more than they are getting.

By NATASHA SINGER MAY 13, 2017

© Natasha Singer, the New York Times, May 13, 2017

Advertising

- "When things pop up that students don't like. For example a beach add (*sic*) and a girl is in a bikini."
- "There are math games, etc., on youtube that I would like my students to play independently but the ads that precede them are sometimes inappropriate so I don't bother."
- "When I try to stream a news item from CBC and nothing would play but ads which were not at all school appropriate (alcohol)."

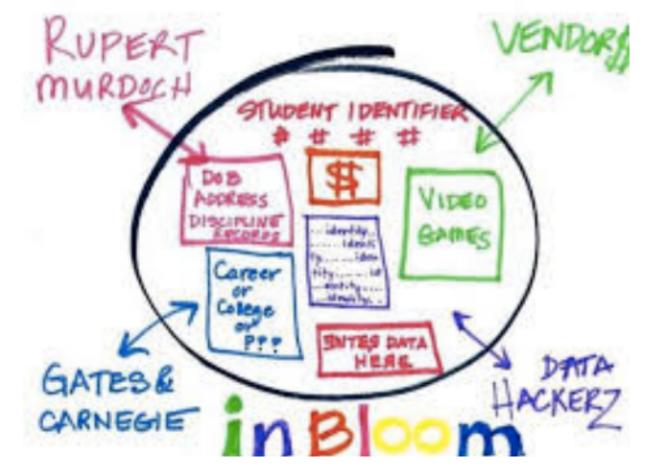
Poor Quality

- "Searching for links takes time. No resource listing good links to curriculum..."
- "So many new sites and programs that teachers do not have enough time... Must pick and choose one thing at a time."
- "too complex for kids and not natural enough," "weren't too fabulous" and "have no educational value!!"

Poor Quality

- "Having students do a game for learning and realizing how little understanding they had to demonstrate to be successful in the game"
- "Math game sites which appear educational but just involve repetitive action"
- "Many educational "experts" interject suggested content into my teaching that has no practical use to me"

Big Data 1: Algorithmic Education



© NYC Public School Parents https://nycpublicschoolparents.blogspot.ca/2013/05/ video-of-mayoral-forum-moderated-by.html

• "The intensity of keeping the learners on track, focused, and on task

was clear in the continual recourse to the smart board and the use of the tracker, the electronic 'writing down system' so that a history of progress, of meeting targets, falling behind targets or exceeding targets could be instantly seen by any member of staff – as well as the particular pupil tracking their own development, or indeed parent – who accessed the tracker" (Schostak, 2014).

"To discern and to 'own' appropriate connections and justifications

requires a certain kind of 'privacy' from the teacher. That is, the teacher, as authoritative source of knowledge, needs to be distanced in some measure from the processes through which this discernment and ownership is acquired. In some measure the teacher must lack detailed access to the child's thinking processes, at least for some of the time, and the child must be aware that the teacher lacks this access" (Davis, 2004).

Big Data 2: Safer Schools Together

🗲 🛈 🎽 saferschoolstogether.com C Q Search ☆自↓ 俞 📷 Most Visited 🛩 SD Start Page 🚍 Movati 📓 UO Library 💟 CC ल S&R 🕃 eQuality 🔿 FAST 🐨 Wikipedia 🎂 CBC 🕎 @rogers.com 🛷 WiFi Login Safer Schools Together Ensuring a safe caring school climate and culture SERVICES EVENT REGISTRATION PSSTWorld ALERTS ABOUT US Cart HOME





Privacy Concerns

- Appropriate Notice and Consent
- Data Access and Retention
- Data Transparency and Analytics
- Importance of Privacy to Other Rights
- Inequality of Bargaining Power

Interesting Developments

- EPIC Student Privacy Bill of Rights
- California Assembly Bill No. 1442
- Algorithmic Transparency and Accountability

Privacy in the Networked Classroom

- Privacy is a social value enables/promotes learning
- Networked technology in the classroom can interfere with this kind of privacy and reshape the social interactions and relationships that are at the heart of learning
- This interference is exacerbated in a big data environment, when commercial algorithms replace student-teacher interactions
- Algorithms also automate certain kinds of discrimination, especially for members of marginalized communities

vsteeves@uottawa.ca