



Education & Technology: When Worlds Collide

Ross Teixeira, GS1, 3

CW: coronavirus



Preschool Search

Madelyn recently went searching for preschools, and found issues in:

- Social media prevalence
- Surveillance
- Data sharing



Madelyn Sanfilippo
CITP Postdoc

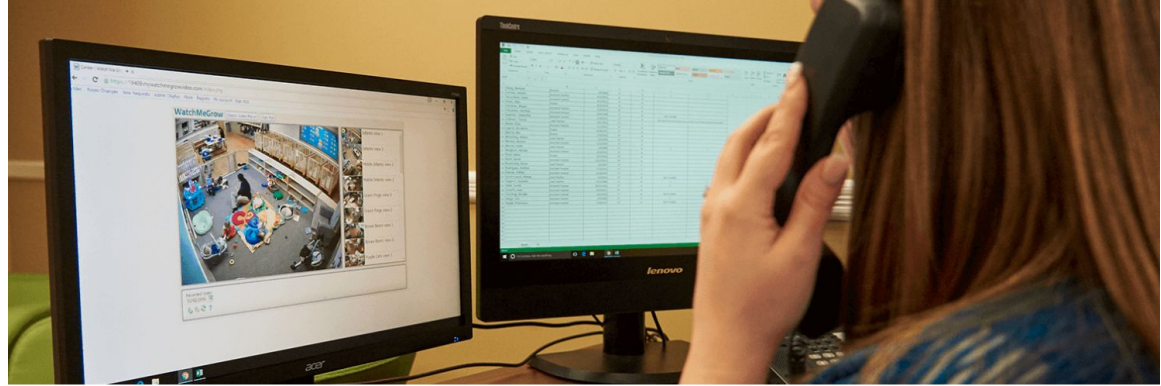
Preschools: Social Media

- Preschools frequently post students and families on social media
- Parents are encouraged to follow and interact with pages when applying
 - Schools view parents, and use as part of admissions process
- Madelyn refused, leading to 2 rejections, and she's an outlier at her current school



Preschools: Surveillance

- You can track your child, not just on social media
- Multiple schools/daycares offer constant video monitoring
 - Secure?



WATCH ME GROW. WATCH ME PLAY. WATCH ME LEARN

Hello moms, dads, and even grandparents too! We know it's hard to be apart and never want you to wonder what your child is doing throughout the day. Welcome to ParentView Internet Monitoring the portal that brings you right into your child's classroom, so you never miss a moment. Stop by anytime and fill your day with smiles, laughter, and watch the wonder of learning. Remember to bookmark this page for faster check-ins with your little one!

ParentView® Internet Monitoring is powered by WatchMeGrow

Preschools: Data Sharing

- Apps provide a deep window into children's days
 - Lessons, Naps, Meals, Bathroom breaks...
- Privacy policy did not describe children's data as "personal information"
 - Until Madelyn complained



HiMama - Daycare Management App & Software

Hi Mama Inc. Education

Everyone

★★★★★ 1,077

⚠ You don't have any devices.



Growing Up, Are Things Better?

A photograph of graduates in purple gowns and black caps, seen from behind, sitting in rows. The image is used as a background for the article title.

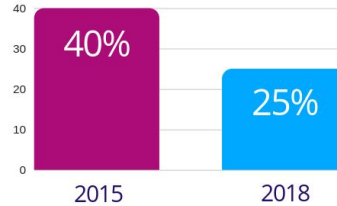
For Sale: SAT-Takers' Names. Colleges Buy Student Data and Boost Exclusivity

For 47 cents, the College Board will sell an individual's information, feeding admissions frenzy

Social Media

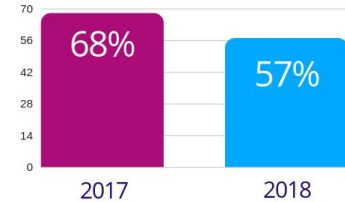
- College admissions officers have viewed applicants' social media
- Admission has been revoked for offensive posts

Have you ever visited an applicant's social media page to learn more about them?



About 85% of teens say they use Instagram and Snapchat, where it's easier to protect their privacy, at least once a month, compared to just 36% who use Facebook once a month.²

Do you agree it's "fair game" to check social media profiles to help make admissions decisions?



Students have been generally more accepting of the practice than admissions officers; in a Kaplan survey released earlier this year, 70% of students said it's "fair game" to check social media.³

Harvard Rescinds Acceptances for At Least Ten Students for Obscene Memes

KAPLAN



Google Stops Scanning Student Gmail Accounts for Ads

By *Alistair Barr*

Apr 30, 2014 6:00 am ET

0 RESPONSES

Google said Wednesday that it stopped scanning student Gmail accounts for advertising purposes after the practice was scrutinized during a recent court case.



Close to Home: Piazza

Q&A message board for courses

The screenshot shows the Piazza interface for the course ORF 309-EGR309_F2019. The top navigation bar includes the Piazza logo, the course name, and tabs for Q & A, Resources, and Statistics. Below the navigation bar, there are tabs for different topics: hw1 (4), hw2 (1), exam (1), logistics (5), and other. The main content area is divided into two sections. The left section shows a list of posts, with the most recent one titled "Practice past exams" dated 10:39AM. The right section shows a detailed view of a question titled "How do I switch to COS?" with a "See title" link. The question is tagged with "hw2". At the bottom of the question view, there are buttons for "edit" and "undo good question", along with a count of 7.

piazza ORF 309-EGR309_F2019 Q & A Resources Statistics

hw1 4 hw2 1 exam 1 logistics 5 other

Updated Unresolved Following

New Post Search or add a post...

YESTERDAY

Practice past exams 10:39AM
Is there a place where we can get past exam questions to check how well we're learning the material? The psets are u 1

THIS WEEK

How do I switch to COS? Tue
^See title s

? question ☆

How do I switch to COS?
^See title

hw2

edit undo good question 7

Piazza Careers

- Opt-out (at first) selling of student data with company recruiters
 - Personal profile
 - Name, age, work history (if entered)
 - Courses taken and TA'd
 - Course Q&A stats
 - Top contributing students
 - # of instructor-endorsed contributions

Results breakdown

2,767,313 Students Found

Clear Search | Recent Search

Create your search by using the panel on the left

Show Advanced Filters

Share this search | Subscribe to search results

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

<input type="checkbox"/> Kelsey Doornbos University of Michigan Undergraduate Apr 2019 Major: Computer Science	Interactions	Classes & Connections TS 1 class See all classes	Worked At Ryder Integrated Logistics University of Michigan...	Indicators HS P
<input type="checkbox"/> Cindy King Georgia Institute of Technology Undergraduate May 2019 Major: Computer Engineering	Interactions Viewed by LP	Classes & Connections See all classes	Worked At Keyy Bright Whistle FullStory See all companies	Indicators HS P
<input type="checkbox"/> Richard Stone University of California, Santa Barbara Undergraduate Dec 2018 Major: Computer Science: ...	Interactions	Classes & Connections See all classes	Worked At Amazon iDTech Camps	Indicators HS P
<input type="checkbox"/> Mike Vander University of Illinois at Urbana-Champaign Undergraduate May 2018 Major: Computer Science	Interactions	Classes & Connections TS 13 classes See all classes 1 past hire connection	Worked At Epic Systems Intelligent Medical Objects Microsoft	Indicators HS P

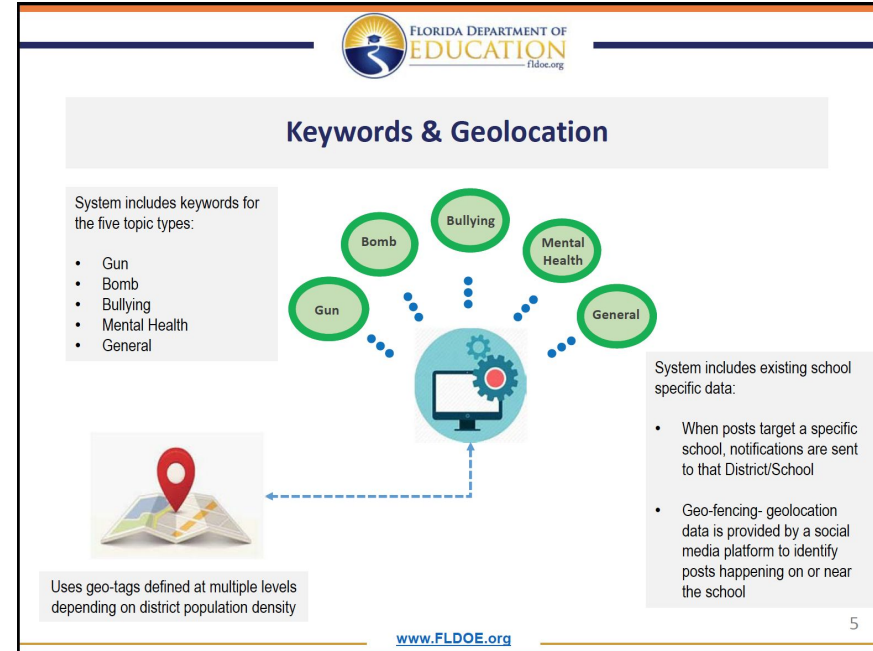


Piazza Careers

- FERPA Complaint:
 - Student data cannot be shared without explicit consent
- After complaints (Dec 2016):
 - Changed to opt-in data sharing
 - Institutions can add further restrictions for all students

School Threat Monitoring

- Aug 2019: Creation of the **Florida Schools Safety Portal**
 - Response to Parkland shooting
- Data Sources:
 - Department of Education
 - Department of Children and Families
 - Department of Law Enforcement
 - Department of Juvenile Justice
 - Local law enforcement
 - **Social Media**





Florida Schools Safety Portal: More Data Collected

- Experiences of bullying;
- Foster care records;
- Immunization records;
- Homelessness status;
- Social media posts;
- Involuntary psychiatric exams;
- History of mental illness;
- Criminal records (including unverified reports of suspicious activity);
- History of substance abuse;
- Disciplinary records;
- Feelings of anger and persecution [paranoia]



Florida Schools Safety Portal: Problems

1. Database does not store race, religion, disability, sexual orientation *directly*...
 - But other data can serve as proxies (correlated):
 - Foster care, disciplinary history, reasons for bullying, etc.
2. Makes students less likely to:
 - Attend therapy
 - Report instances of bullying
3. No provisions for deleting data



Silver Lining?

K-12

Florida 'student safety' database fell short, commission says



That makes the portal near-useless, Gualtieri said, because any given user will likely have access to only one or two of the data sources, which they already have access to in separate databases. For police officers, already, he said.

That limitation, like the others that the commission described in the database, are features that officials said they are looking to improve. Slides from department presentations say the state is also considering new data sources to add to the portal.





Technology in the Classroom- Evidence That:

- Pros:
 - Course material/apps cheaper than buying textbooks
 - Interactive lessons can be more effective/engaging than textbooks
 - Leading to improved test scores, from kindergartners to college students
 - Technology aids students with disabilities
 - Closed captions, alternate mediums
- Cons:
 - Students perform worse when cell phones are freely allowed in a classroom
 - “Myth of multitasking”
 - Taking notes on laptop during class is less effective than on paper
 - Laptops can distract other students as well
 - Pervasive technology reduces students’ attention spans



Is Tech Being Used?

>140,000 20-minute classroom observations across the U.S. and international

“Uses digital tools/technology to gather, evaluate and/or use information for learning?”

Rating	Frequency/Number*	Percent
1 = NOT OBSERVED	75,088	52.7
2 = SOMEWHAT EVIDENT	16,140	11.3
3 = EVIDENT	22,614	15.9
4 = VERY EVIDENT	28,743	20.2
TOTAL	142,606	100.0

Technology Problems and Student Achievement Gaps: A Validation and Extension of the Technology Maintenance Construct

Amy L. Gonzales, Jessica McCrory Calarco, Teresa Lynch

First Published August 31, 2018 | Research Article



<https://doi.org/10.1177/0093650218796366>

[Article information](#) ▾



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Abstract

How do physical digital inequalities persist as technology becomes commonplace? We consider this question using surveys and focus groups with U.S. college students, a group that has better than average connectivity. Findings from a 748-person nonrepresentative survey revealed that ownership and use of cellphones and laptops were nearly universal. However, roughly 20% of respondents had difficulty maintaining access to technology (e.g., broken hardware, data limits, connectivity problems, etc.). Students of lower socioeconomic status and students of color disproportionately experienced hardships, and reliance on poorly functioning laptops was associated with lower grade point averages. Focus group and open-ended data elaborate these findings. Findings quantitatively validate the *technology maintenance* construct, which proposes that as access to information and communication technology peaks, the digital divide is increasingly characterized by the (in)ability to maintain access. Data highlight overlooked nuances in digital access that may inform social disparities and the policies that may mitigate them.

Digital Divide is everywhere. Not just having technology, but working technology.



- In Silicon Valley, technology-free schools are becoming a privilege

The Digital Gap Between Rich and Poor Kids Is Not What We Expected

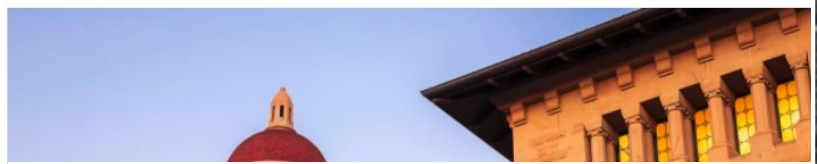
America's public schools are still promoting devices with screens — even offering digital-only preschools. The rich are banning screens from class altogether.

<https://www.nytimes.com/2018/10/26/style/digital-divide-screens-schools.html>

Stanford cancels in-person classes to coronavirus

A faculty member has tested positive for the virus

By Kim Lyons | Mar 7, 2020, 1:30pm EST



CALIFORNIA

Amid coronavirus concerns, USC will test on week



Princeton will move to virtual instruction following spring break and decrease the number of gatherings on campus.

University of Washington, other area colleges suspend on-site classes in response to coronavirus

March 6, 2020 at 9:01 am | Updated March 6, 2020 at 8:09 pm



Italy closes schools



Columbia, Hofstra University cancel classes over coronavirus concerns

By Joe Marino and Kenneth Garger

March 8, 2020 | 9:35pm | Updated



Forced online by virus, China's schools run into censorship

By YANAN WANG March 4, 2020



- Lecture transcripts must be typed and pre-approved
- Biology courses censored for “pornographic content”
- History & politics frequently censored

<https://apnews.com/cbde0ac8f6b52a37206a6f374e1f0398>

Digital Divide




Technical issues:

- Many students without internet connection
 - Some universities are subsidizing 4G plans for students
- Xuexitong online education platform crashed from too many connections

<https://www.abacusnews.com/culture/online-classes-coronavirus-hit-china-leave-kids-without-wi-fi-struggling/article/3064755>

Tsinghua University Livestreaming Setups





Children were presumably glad to be off school – until, that is, an app called DingTalk was introduced. Students are meant to sign in and join their class for online lessons; teachers use the app to set homework. Somehow the little brats worked out that if enough users gave the app a one-star review it would get booted off the App Store. Tens of thousands of reviews flooded in, and DingTalk's rating plummeted overnight from 4.9 to 1.4. The app has had to beg for mercy on social media: 'I'm only five years old myself, please don't kill me.'

How to Adapt?



Naomi Rendina
@NaomiRendina

Okay [#twitterstorians](#), I'm trying to convince my chair that online teaching methods have changed. What is your favorite component of online teaching? What is your favorite assignment/activity that is NOT a forum or essay? TIA



John Stewart @JohnStewartPhD · Mar 4

Replying to [@NaomiRendina](#)

Still sort of an essay but I've worked with [@WikiEducation](#) to have my students edit Wikipedia entries.

Also, assignment banks that give each student choices in what kinds of subject matter and assignments are most interesting/applicable to them.



2



1



7



Alyssa Smith @alyssacsmith · Mar 4

Replying to [@NaomiRendina](#)

This doesn't have to be an online assignment, but in our history of the present class, [@kathleen_belew](#) [@trishkahle](#) [@RDerekBlack](#) [@Aseberr](#) & I had students write a tweet thread instead of a paper; had to address a current issue historically & make a concise argument. Rad responses!



1



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Gina Bennett @GinaGBennett · Mar 5

Replying to [@NaomiRendina](#)

Storymaps! storymaps.arcgis.com So useful as a tool! I've used them several semesters now. Students find them engaging and marking them is more enjoyable 🌍🌍🌍🌍📖❤️



Eric Hundman | 何諳銳 @ehundman · Mar 6

Zoom for me has worked best for small-group synchronous discussions and one-on-one meetings. This trick for having a separate whiteboard in a Zoom meeting by calling in from an iPad w/Apple Pencil has been very helpful in virtual office hours: yangfeng.hosting.nyu.edu/post/teaching-... 3/x

Have a nice vacation!