

## Data/Information + Privacy/Security

Jonathan D. Becker, J.D., Ph.D. Associate Professor

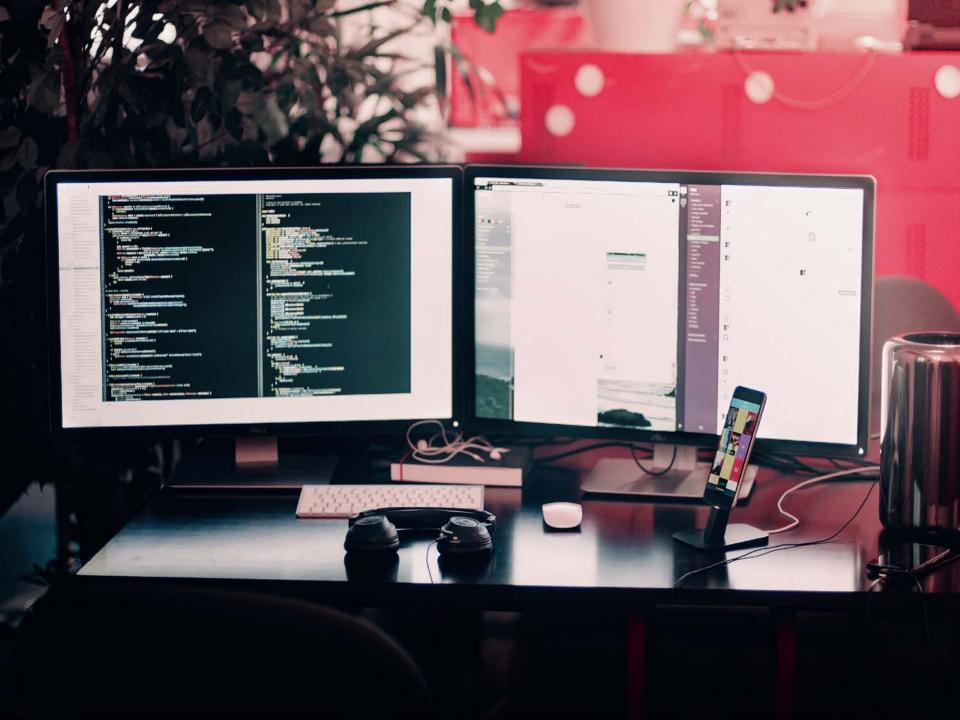


### Disclaimer

I, Jonathan D. Becker, J.D., Ph.D., am an attorney at law, but by education only. That is, I have a law degree and I am admitted to the Bar of the State of New Jersey (not Virginia!). However, I have never practiced law and I am currently officially "retired completely from the practice of law" in every jurisdiction. Therefore, I cannot, among other things, "render advice on the law or legal assistance." As a result, all discussions and communications related to this presentation or beyond should be considered academic in nature; I will answer questions and offer opinions (readily), but they should be considered answers and opinions based on my education and understanding of information, and not legal advice.



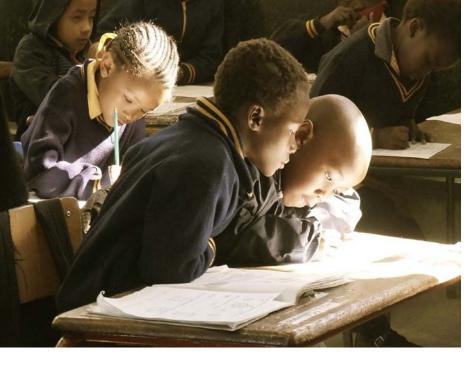


















New digital technologies massively increase our capacity for data collection and information management in ways that create incredible affordances for school safety and for student learning.





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# Just because you can, doesn't mean you should.



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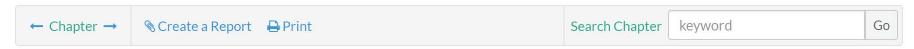
(unless it involves chocolate ice cream)





#### Code of Virginia

Table of Contents » Title 22.1. Education » Chapter 14. Pupils



#### Article 5. Pupil Records Read all>

-	
§ 22.1-287	Limitations on access to records
§ 22.1-287.01	Student information; release to federal government agencies
§ 22.1-287.02	Students' personally identifiable information
§ 22.1-287.03	Unique student identification numbers
§ 22.1-287.04	Uniformed services-connected students
§ 22.1-287.1	Directory information
§ 22.1-288	Furnishing information to public or private school or institution of higher education or
	private business or professional school or institution of higher education or military force
§ 22.1-288.1	Notation in school records of missing children; local law-enforcement cooperation
§ 22.1-288.2	Receipt, dissemination and maintenance of records of certain law-enforcement information
§ 22.1-289	Transfer and management of scholastic records; disclosure of information in court notices;
	penalty
§ 22.1-289.01	School service providers; school-affiliated entities; student personal information



#### Code of Virginia

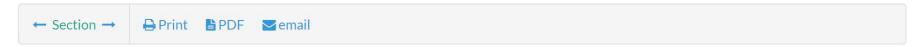
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§ 22.1-289.01. School service providers; school-affiliated entities; student personal information.

#### Code of Virginia

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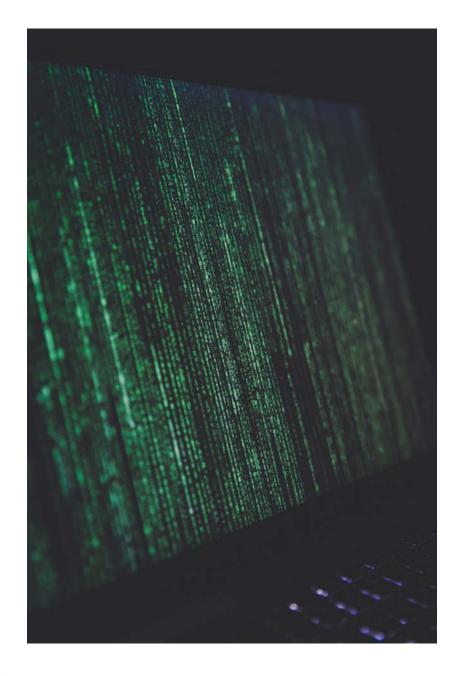


§ 22.1-287. Limitations on access to records.



## **DATA**

- Collection
- Use
- Sharing



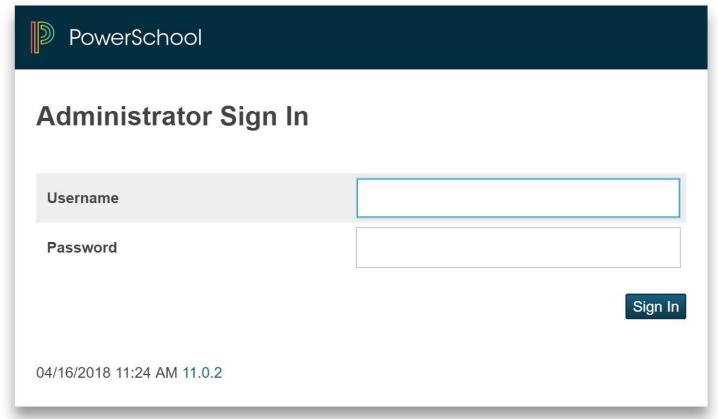




# DATA COLLECTION







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#### 4<sup>th</sup> Amendment Framework

- Right of people to be secure and protected from unreasonable searches.
- Schools are unique.
- Therefore, no warrant; only reasonable suspicion.
- REASONABLENESS TEST
  - Search must be justified at its inception, AND
  - Search must be "reasonably related in scope to the circumstances which justified the interference in the first place."



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Photo: iStockphoto/Getty Image

# FACE RECOGNITION IS NOW BEING USED IN SCHOOLS, BUT IT WON'T STOP MASS SHOOTINGS



Ava Kofman

May 30 2018, 12:36 p.m.



17

June 20, 2018

### EDUCATION WEEK

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#### How (and Why) Ed-Tech Companies Are Tracking Students' Feelings





**EDUCATION WEEK EVENTS** 

Quality Counts: Follow the Money—School

Finance and Funding

#### LIVESCI=NCE

Health

### Your Brain Waves May Show Whether You're Paying Attention in Class

by Sara G. Miller, Staff Writer | April 27, 2017 05:40pm ET







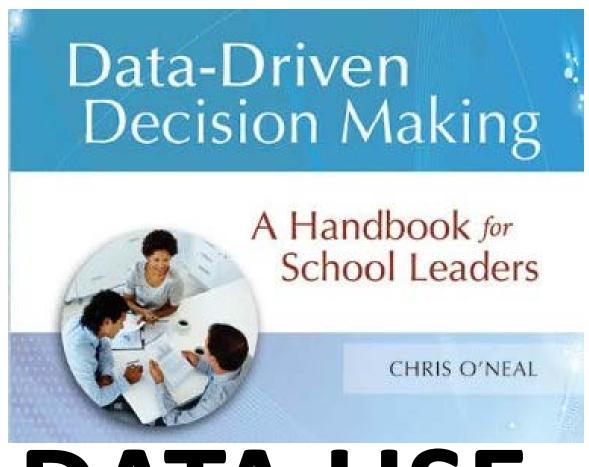






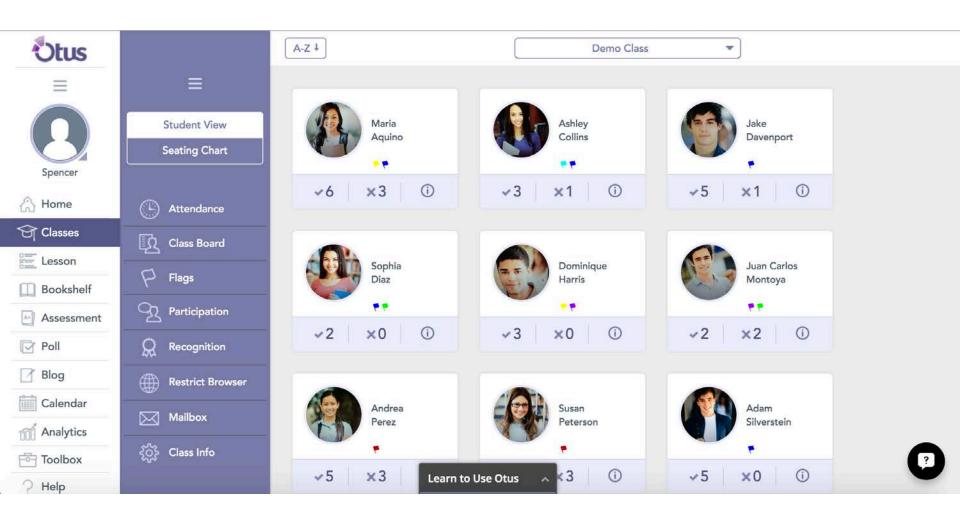


A student wearing a portable electroencephalogram (EEG), a device that measures brain activity, during class. Original Image



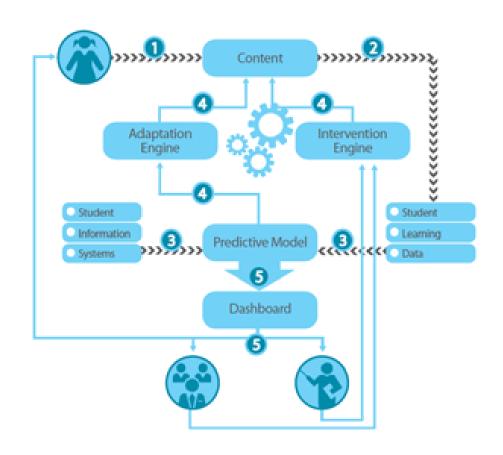
# DATA USE







## Adaptive learning





### Personalized learning

Descriptive **Analytics** 



What went wrong? What went well?

Diagnostic **Analytics** 



Why did it happen? What are my weak areas?

**Prescriptive Analytics** 



What is happening now? What is my next best action?

**Predictive Analytics** 



What to expect in the future? How can I plan for the future? and Predictions

**Applied Learning Analytics** 



Precursor for Personalized and Adaptive Learning

How can the content adapt to suit the student?







Bernard Parker, left, was rated high risk; Dylan Fugett was rated low risk. (Josh Ritchie for ProPubli

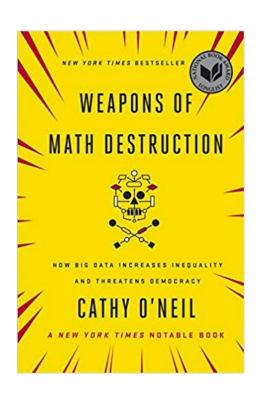
## **Machine Bias**

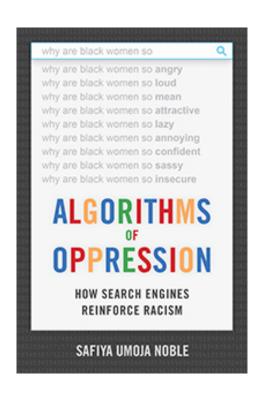
There's software used across the country to predict future criminals. And it's biased against blacks.

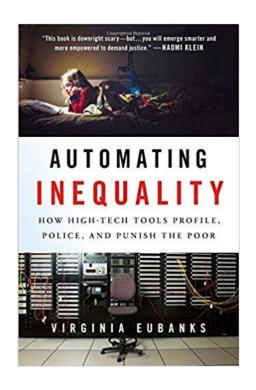
by Julia Angwin, Jeff Larson, Surva Mattu and Lauren Kirchner, ProPublica



## Algorithmic Discrimination









## The 14<sup>th</sup> Amendment

 All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside. No State shall make or enforce any law which shall abridge the **privileges or immunities** of citizens of the United States; nor shall any State deprive any person of life, liberty or property without due process of the law; nor deny to any person within its jurisdiction the equal protection of the laws.



## **Equal Protection Clause**

- State action requires strict judicial scrutiny if it:
  - impacts a "fundamental interest", and/or
  - discriminates on the basis of a "suspect classification"



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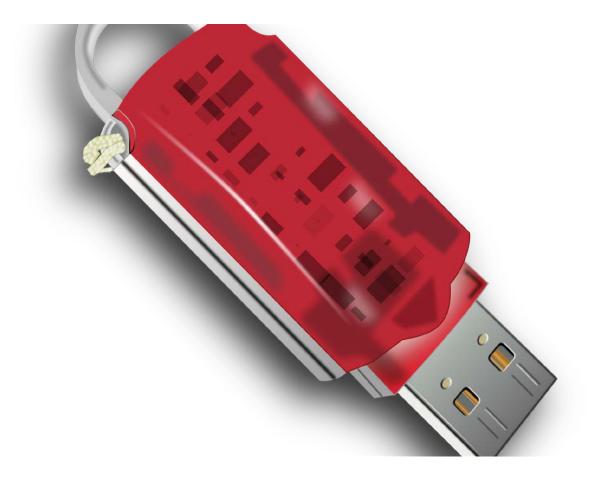
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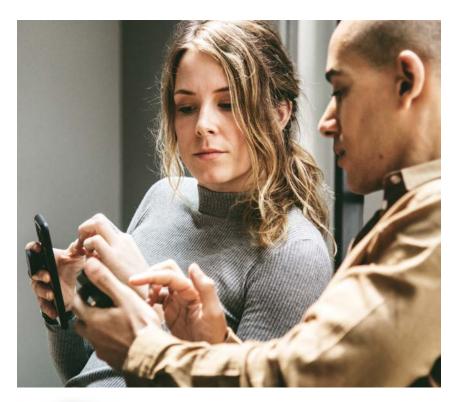
## DATA SHARING



## **Data Sharing**

#### **Intentional**

















#### Code of Virginia

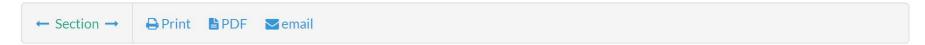
Table of Contents » Title 22.1. Education » Chapter 14. Pupils » § 22.1-289.01. School service providers; school-affiliated entities; student personal information



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#### Code of Virginia

Table of Contents » Title 22.1. Education » Chapter 14. Pupils » § 22.1-287. Limitations on access to records



§ 22.1-287. Limitations on access to records.



## School service providers may not...

- Collect, use, share and retain student personal information only for purposes for which they are authorized;
- Maintain a comprehensive security program focused on protecting student data against risks, such as unauthorized access or use, or unintended or inappropriate disclosure;
- Require that vendors with whom student data is shared are obliged to implement the same commitments outlined in the pledge;
- Allow a successor entity to maintain the student personal information, subject to the commitments outlined in the pledge;
- Not collect, maintain, use or share student personal information for non-educational purposes;
- Not sell student personal information;



## Pupil Records

- Directory information
- However, no school shall disclose the address, telephone number, or email address of a student pursuant to 34 C.F.R. § 99.31(a)(11) or the Virginia Freedom of Information Act (§ 2.2-3700 et seq.) unless the parent or eligible student has affirmatively consented in writing to such disclosure.



## **Unintentional Data Sharing**





## K-12 Cyber Incident Map





## K-12 Cyber Incidents

- Phishing attacks resulting in the disclosure of personal data;
- Other unauthorized disclosures, breaches or hacks resulting in the disclosure of personal data
- Ransomware attacks;
- Denial-of-service attacks; and
- Other cyber incidents resulting in school disruptions and unauthorized disclosures.





NEWS

PROBLEM SOLVERS

COMMUNITY

VENTS

HEALTH

ROES

N-AIR (

TRAFFIC

WEATHER औ 81°

## Hundreds of Powhatan school employees compromised in data breach

POSTED 5:13 PM, MARCH 20, 2017, BY VERNON FREEMAN JR., *UPDATED AT 08:09PM, MARCH 20, 2017* 











REDDIT

This is an archived article and the information in the article may be outdated. Please look at the time stamp on the story to see when it was last updated.

POWHATAN COUNTY, Va. – Employees of Powhatan County Public Schools have been notified of a data breach that occurred Monday that has exposed their person information to a scammer.

Superintendent Dr. Eric Jones said the data breach happened when a payroll employee responded to an Email Phishing Scam requesting employees' W-2 forms.

#### POPULAR



Governor orders Va. National Guard home from U.S.-Mexico border



Person in custody after window broken at Omni Richmond Hotel



#### Tracking: EDU

#### **Education Agency Website Security and Privacy Practices**





https://www.edtechstrategies.com/tracking-edu/

## Tracking: EDU

Based on automated and manual reviews conducted over 4 months (between October 2017 and January 2018) of <u>every state department of education website</u> and a nationwide sample of 159 school district websites, *Tracking: EDU* found that:

- Most state and local education agency websites do not support secure browsing, putting both schools and website visitors at risk;
- <u>Virtually every state and local education agency has partnered with online</u>
  <u>advertising companies</u> to deploy sophisticated user tracking and surveillance on
  their websites, quite extensively in some cases; and
- Many state and the vast majority of local education agency websites do not disclose the presence and nature of this ad tracking and user surveillance, or the mechanisms for how users can opt out of these data collections. Those few that do make such disclosures often do so in misleading ways, including by making demonstrably false statements about their privacy practices.

In sum, this analysis of education agency websites suggest a widespread lack of attention to issues of online security and privacy, and should spur prompt action at the highest levels of education leadership to remediate the many (and sometimes significant) deficiencies and lack of compliance brought to light.

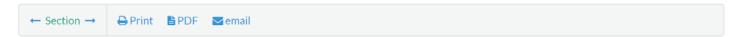




## Data breach protocol

#### Code of Virginia

Table of Contents » Title 18.2. Crimes and Offenses Generally » Chapter 6. Crimes Involving Fraud » § 18.2-186.6. Breach of personal information notification



#### § 18.2-186.6. Breach of personal information notification.

#### A. As used in this section:

"Breach of the security of the system" means the unauthorized access and acquisition of unencrypted and unredacted computerized data that compromises the security or confidentiality of personal information maintained by an individual or entity as part of a database of personal information regarding multiple individuals and that causes, or the individual or entity reasonably believes has caused, or will cause, identity theft or other fraud to any resident of the Commonwealth. Good faith acquisition of personal information by an employee or agent of an individual or entity for the purposes of the individual or entity is not a breach of the security of the system, provided that the personal information is not used for a purpose other than a lawful purpose of the individual or entity or subject to further unauthorized disclosure.

"Encrypted" means the transformation of data through the use of an algorithmic process into a form in which there is a low probability of assigning meaning without the use of a confidential process or key, or the securing of the information by another method that renders the data elements unreadable or unusable.

"Entity" includes corporations, business trusts, estates, partnerships, limited partnerships, limited liability partnerships, limited liability companies, associations, organizations, joint ventures, governments



Search



RESOURCES

**TRAINING** 

Family Policy Compliance Office

**BROWSE BY AUDIENCE** 

A Service of the Privacy Technical Assistance Center and the

FAQs

ABOUT US

CONTACT

**FILE A COMPLAINT** 

## Data Breach Response Training Kit

**LAST UPDATED: JUNE 2017** 

**DOWNLOAD DOCUMENT** 



Integrated Data Systems and Student Privacy

FEATURED RESOURCES

This guidance document provides background information on what an Integrated Data System (IDS) is and why educational authorities

Any organization with electronic records is vulnerable to security breaches, and education agencies are no exception. The PTAC Data Breach Scenario is one of a series of exercises intended to assist schools, districts, and other educational organizations with internal data security training.

The *Password* Data Breach interactive exercise is aimed at district management and provides a simulated response to a district-level data breach. Over the course of 1-2 hours, this customizable exercise leads participants through a scenario involving a breach of student information and other personally identifiable information. The exercise focuses on the processes, procedures, and skills needed to respond. The package includes three parts: Facilitator's Guide, PowerPoint Slides, and Exercise Handouts.



## Negligence?

#### William & Mary Business Law Review

Volume 4 | Issue 1 Article 7

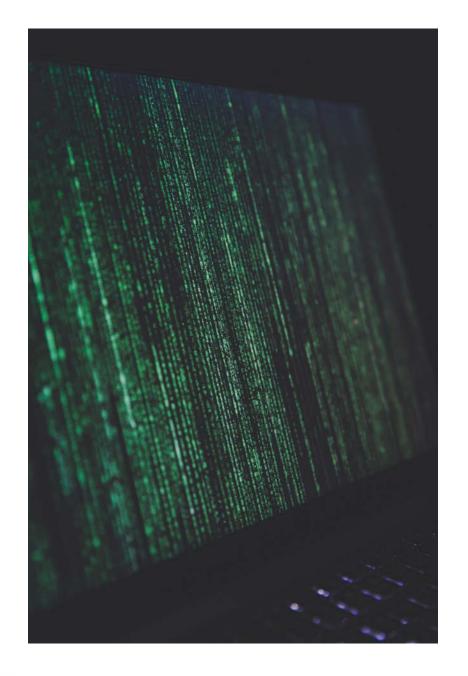
Secure My Data or Pay the Price: Consumer Remedy for the Negligent Enablement of Data Breach

John A. Fisher



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- Sharing





### RECOMMENDATIONS

- Cybersecurity
- Model good privacy practices
- Training/PD
- Planning/Auditing
- Trust your instincts



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## Questions





## RESOURCES

http://bit.ly/VASSPLAW

