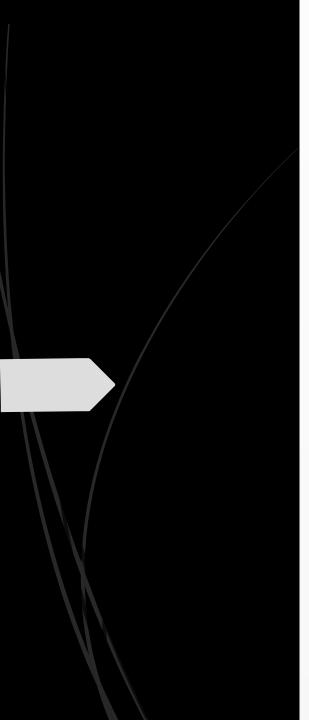
## Engineered Inequality & Rethinking Our Relationship To CS

Jared O'Leary BootUp PD

## How to reach the resources

- www.JaredOLeary.com
  - Presentations
    - Engineered Inequality & Rethinking our Relationship To CS



#### What's the plan?

- Who am I?
- Beyond a digital divide
- What is engineered inequality?
- Rethinking our relationship to technology
- Exploring resources and examples
- Let's talk and continue to reflect



bronteremsik bronte remsik · 6-9

Hopefully this analogy can help some of y'all

□ original sound - bronte remsik





174.8K



9189



13.9K

#### Who am I?

- ☐ All grades K-20+
- Experience in both music education and computer science education
- Director of Education & Research at <u>BootUp PD</u>
- Link to my CV is on my website

## Beyond a digital divide

#### K-8 Technology -> Coding

### Is this equitable?

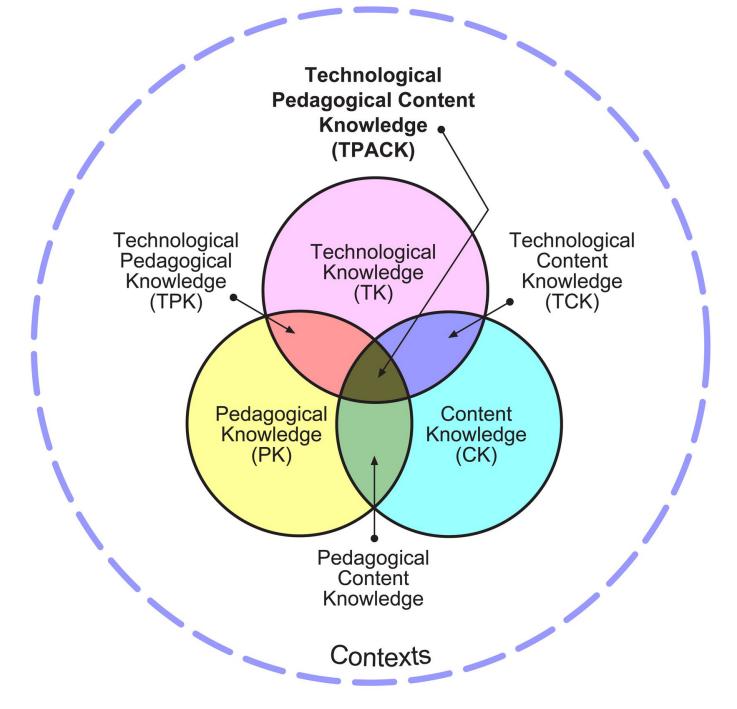
#### Does this close the digital divide?

### Maybe

# What is engineered inequality?

### Some examples

- Short video: Why left-handers can't use right-handed scissors
- Short video: This 'Racist soap dispenser' at Facebook office does not work for black people
- Short article: <u>'The Computer Got It Wrong': How Facial Recognition Led To False Arrest Of Black Man</u>
- Longer article: Racist in the machine: The disturbing implications of algorithmic bias
- Book: <u>Algorithms of Oppression: How Search Engines</u>
  <u>Reinforce Racism</u>













Blue Devils Drumline - DCI Semi Finals ... youtube.com



Breaking the glass drumhead



DCI in the lot: Blue Knights Drum Line ... youtube.com



DCI in the lot: Bluecoats Drum Line ... youtube.com



Home - DrumLine Battle™DrumLine Battle ... drumlinebattle.com



Fred Sanford percussion caption award ...



DCI in the Lot: Music City Drum Line ... youtube.com



Top DCI Drum Lines michaelmerrett.com



DrumLine Battle in 360: Top Secret vs ...



Cavaliers 2013 Drumline . youtube.com



DCI's DrumLine Battle (@DrumlineBattle ... mobile.twitter.com



2019 DrumLine Battle Indianapolis Photo ...



Schack: DCI Perc Judge Rule Change .. flomarching.com



DrumLine Battle: Shadow vs. 7th Regiment



Blue Devils Drum line (: | Drum corps ..



DCI Drumlines in the Lot - Great Path Music greatpathmusic.com



Cavaliers Announce 2021 Percussion and ... cavaliers.org



2019 SCV Percussion Leadership . scvanguard.org



2018 DCI World Championships remo.com



Zombie drum line takes it home again at ..



Crossmen Drumline @ DCI in Little Rock ...



DCI 2017 | Blue Devils - Drumline - YouTube



The Academy Drum an...



2021 Carolina Crown Drumline Exclusive ..



drum line cast

blue devils drumline



drum line shark







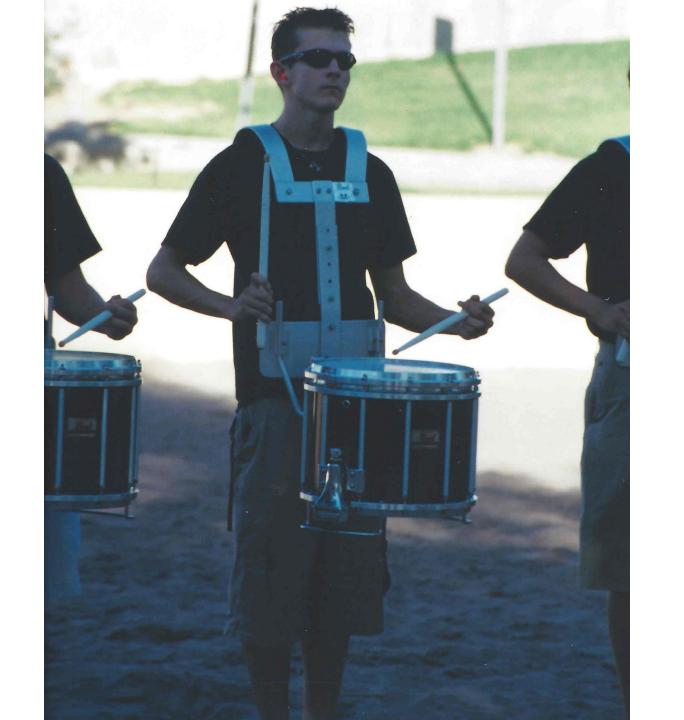






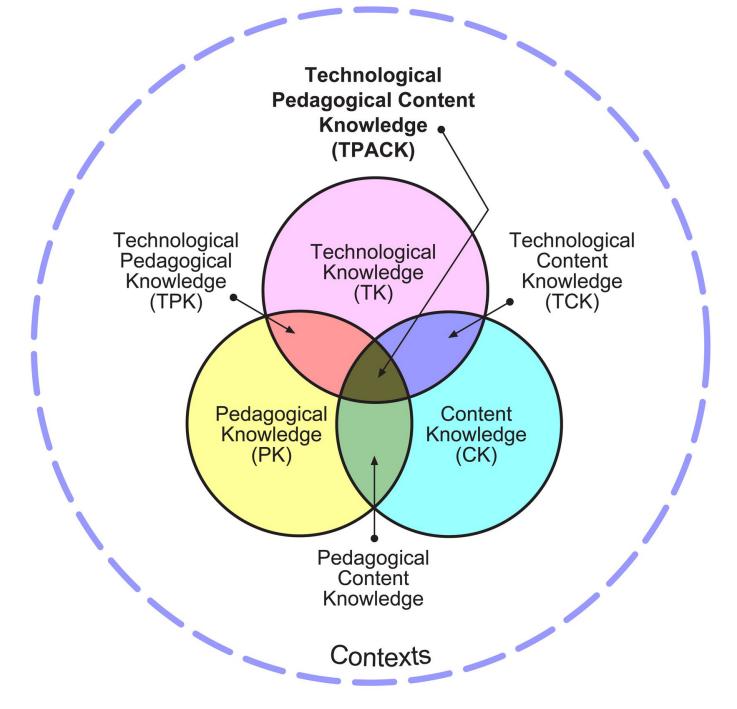






lallo Fromerona Callegus Mr. Mr. Mrs. Mrs. Rubel O'Leary Nelson Moore















Blue Devils Drumline - DCI Semi Finals ... youtube.com



Breaking the glass drumhead



DCI in the lot: Blue Knights Drum Line ... youtube.com



DCI in the lot: Bluecoats Drum Line ... youtube.com



Home - DrumLine Battle™DrumLine Battle ... drumlinebattle.com



Fred Sanford percussion caption award ...



DCI in the Lot: Music City Drum Line ... youtube.com



Top DCI Drum Lines michaelmerrett.com



DrumLine Battle in 360: Top Secret vs ...



Cavaliers 2013 Drumline . youtube.com



DCI's DrumLine Battle (@DrumlineBattle ... mobile.twitter.com



2019 DrumLine Battle Indianapolis Photo ...



Schack: DCI Perc Judge Rule Change .. flomarching.com



DrumLine Battle: Shadow vs. 7th Regiment



Blue Devils Drum line (: | Drum corps ..



DCI Drumlines in the Lot - Great Path Music greatpathmusic.com



Cavaliers Announce 2021 Percussion and ... cavaliers.org



2019 SCV Percussion Leadership . scvanguard.org



2018 DCI World Championships remo.com



Zombie drum line takes it home again at ..



Crossmen Drumline @ DCI in Little Rock ...



DCI 2017 | Blue Devils - Drumline - YouTube



The Academy Drum an...



2021 Carolina Crown Drumline Exclusive ..



drum line cast

blue devils drumline



drum line shark







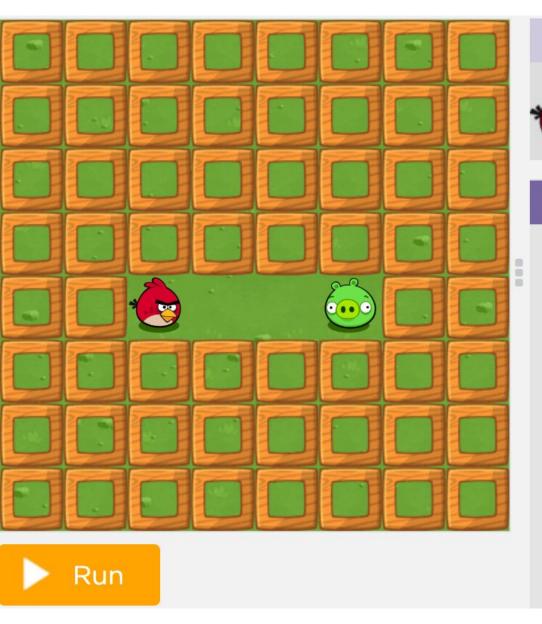












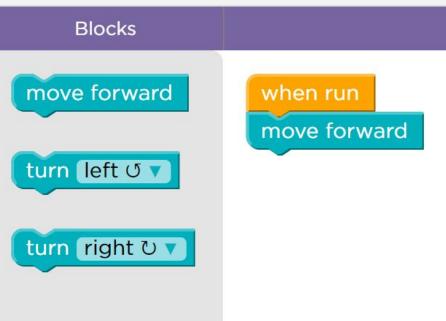
#### Instructions



This pig is ruffling my feathers. Help me to find him!

...

Workspace: 2 / 4 blocks



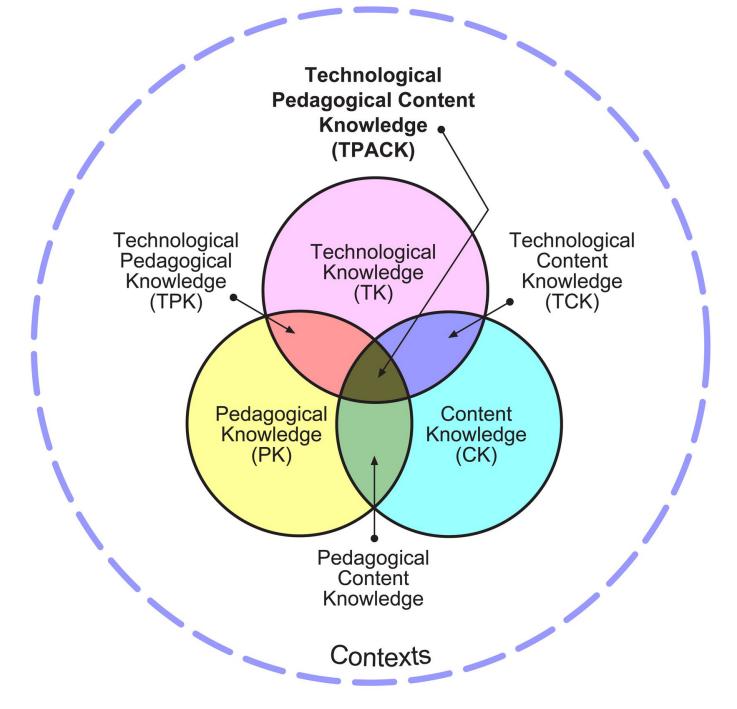
## Some podcasts on integration

#### Integration miniseries (I'd listen in the following order)

- The Subservient, Co-equal, Affective, and Social Integration Styles and Their Implications for [Computer Science]
- Images of Curriculum
- Contemporary Venues of Curriculum Inquiry

#### Music integration episodes

- Intersections of Popular Musicianship and Computer Science Practices
- Reconceptualizing "Music Making:" Music Technology and Freedom in the Age of Neoliberalism



01

02

Acknowledge Racism in CS and Enact Anti-Racist Practices

Create Inclusive
and Equitable
Classroom Cultures

Pedagogy and Curriculum are Rigorous, Relevant, and Encourage Sociopolitical Critiques

03

04

Student Voice, Agency, and Self-Determination are Prioritized in CS Classrooms Family and Community
Cultural Assets are
Incorporated into
CS Classrooms

05



06

# Rethinking our relationship to technology







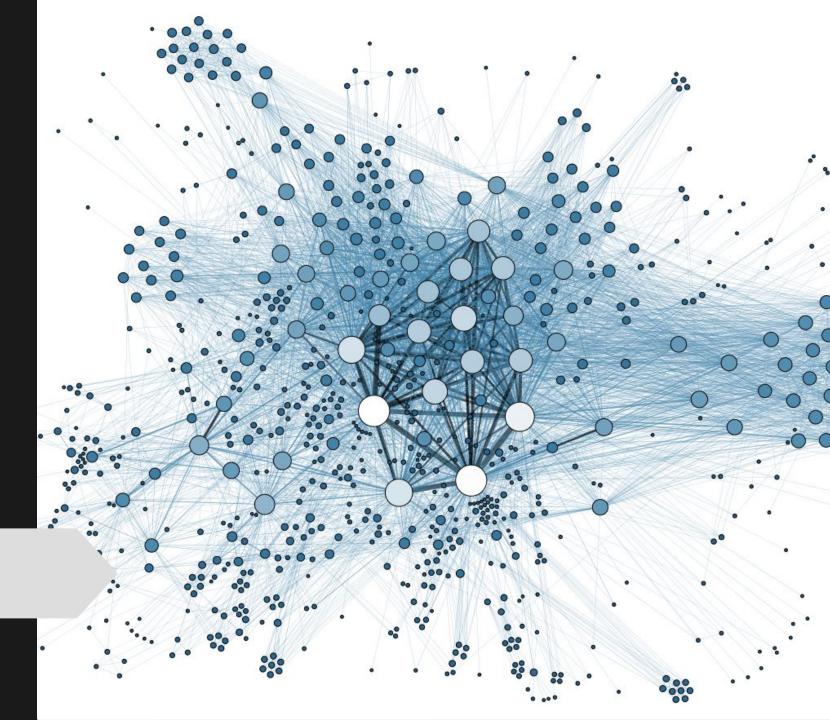
## Sequential Design

Step 1

Step 2

Step 3

#### Rhizomatic Design



Interconnected practices from my dissertation

- Composition practices
- Performance practices
- Maker practices
- Coding practices
- Entrepreneurial practices
- Visual art practices
- Community practices

Affinity spaces

- Affinity spaces podcast episode
  - Affinity spaces chapter

Music-related hardware practices

Video: <u>I Turned a 1920's Typewriter into an EDM Drum Machine</u>

- Video: Music Machines at Scratch Day MIT
- Video: BEAT JAZZ by ONYX ASHANTI

- Images: <u>Hardware modifications shared</u> within my dissertation
- Playlist: <u>Hardware practices</u>

Exploring resources and examples

# Let's continue to talk and reflect

- How might we modify or create technologies for (and with) the students we work with?
- How might we engage in pedagogical practices that encourages multiple ways of learning and engaging with CS within a shared space?
- How might we modify content designed for scale to better align to the interests and goals of the individuals we work with?