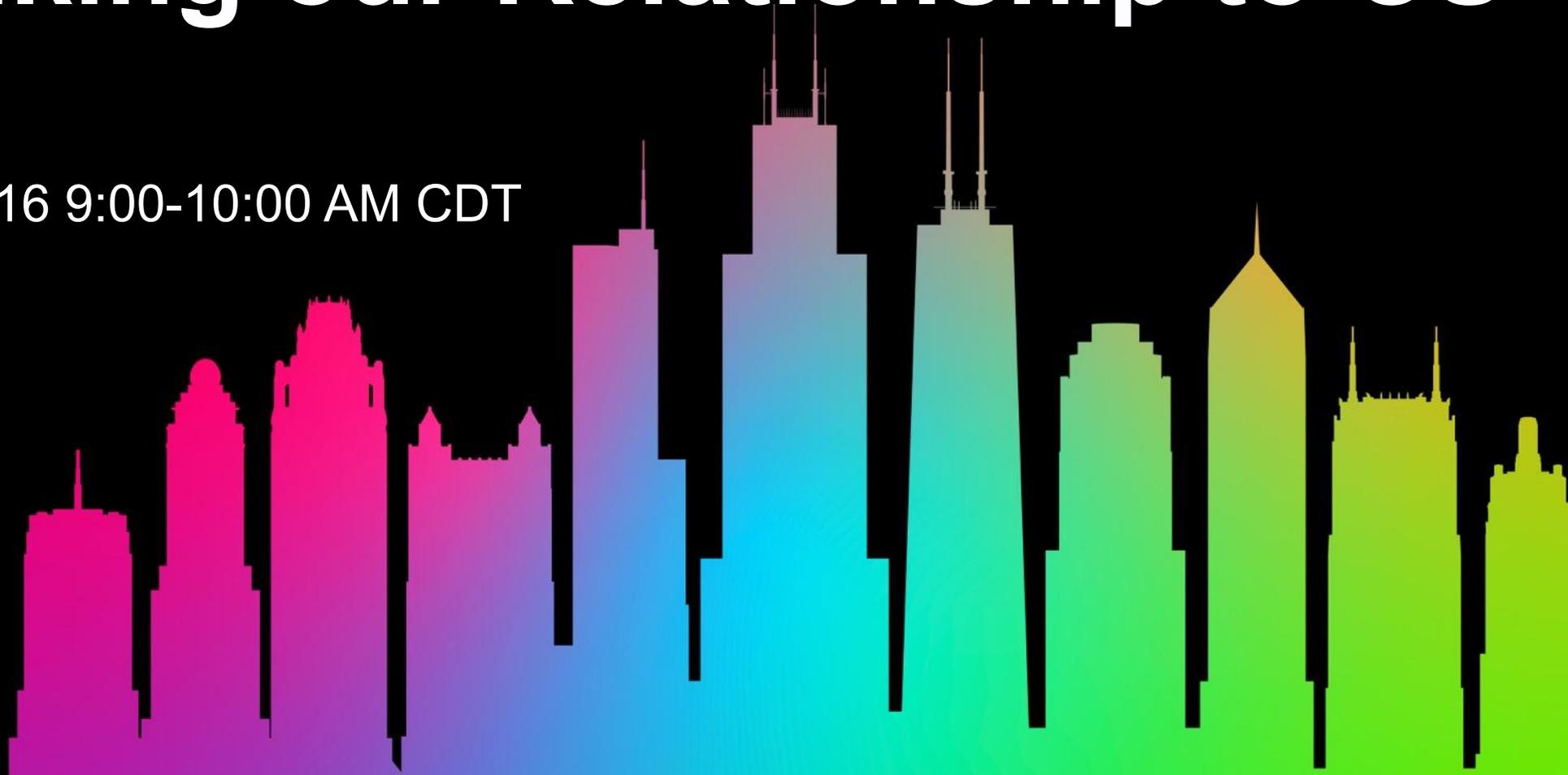


# Engineered Inequality and Rethinking our Relationship to CS

Jared O'Leary

Saturday, July 16 9:00-10:00 AM CDT



# How to reach the resources

→ [www.JaredOLEary.com](http://www.JaredOLEary.com)

◆ Presentations

- Engineered Inequality and Rethinking our Relationship to CS



# What's the plan?

- Who am I?
- Beyond a digital divide
- What is engineered inequality?
- Rethinking our relationship to CS
- 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

# Jared O'Leary



- All grades K-20+
- Experience in both music education + computer science education
- Director of Education & Research at [BootUp PD](#)
- [Link to my CV is on my website](#)

# Beyond a digital divide

# K-8 Technology -> Coding

**Is this equitable?**

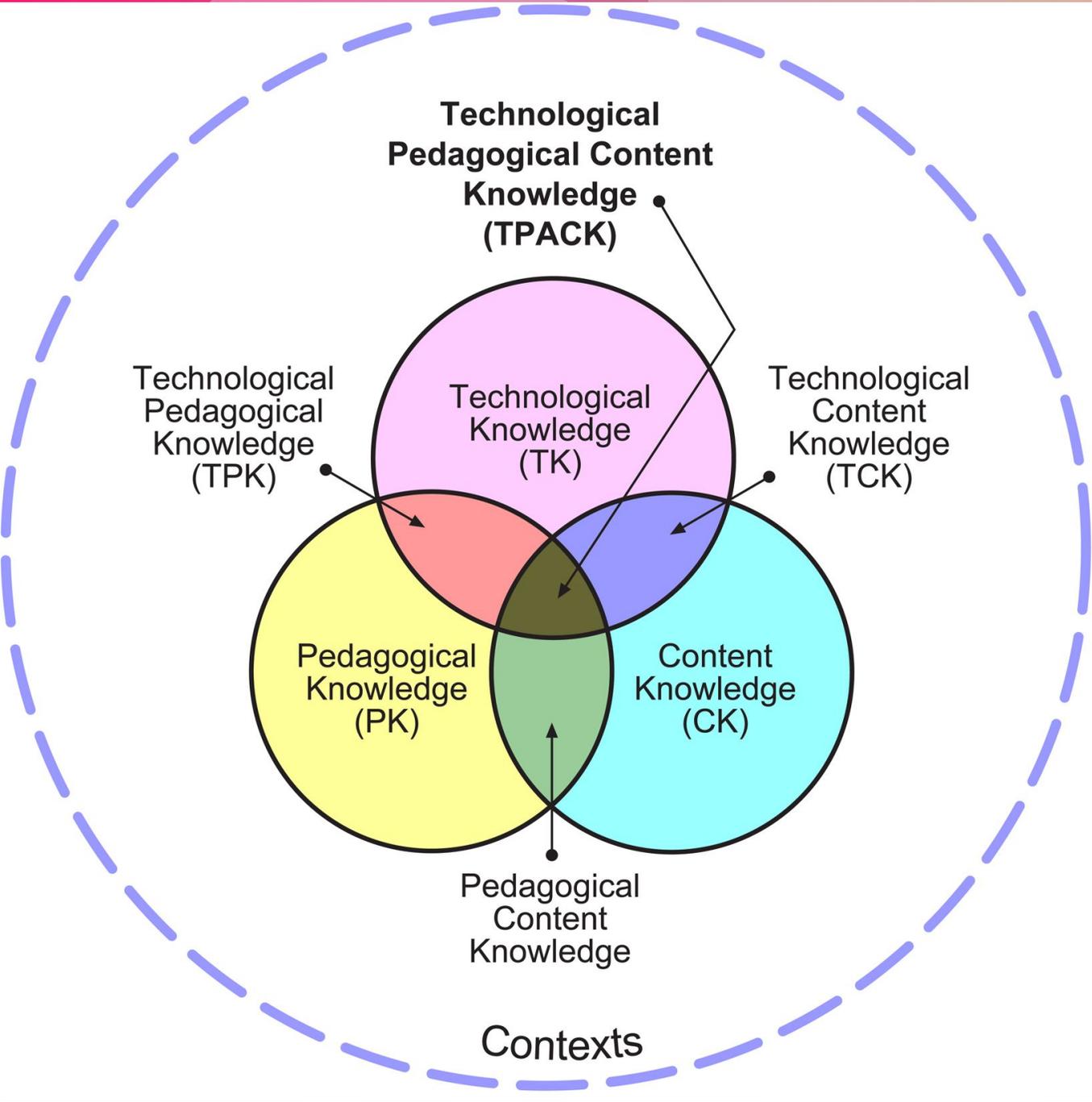
**Does this close the digital divide?**

Maybe

# What is engineered inequality?

# Some examples of engineered inequality

- **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:** ['The Computer Got It Wrong': How Facial Recognition Led To False Arrest Of Black Man](#)
- **Longer article:** [Racist in the machine: The disturbing implications of algorithmic bias](#)
- **Book:** [Algorithms of Oppression: How Search Engines Reinforce Racism](#)



# Critiquing from a safe distance



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



Breaking the glass drumhead dci.org



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.org



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



Top DCI Drum Lines michaelmerrett.com



DrumLine Battle in 360: Top Secret vs ... dci.org



Cavaliers 2013 Drumline ... youtube.com



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



2019 DrumLine Battle Indianapolis Photo ... dci.org



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



DrumLine Battle: Shadow vs. 7th Regiment dci.org



Blue Devils Drum line (: | Drum corps ... pinterest.com



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



Cavaliers Announce 2021 Percussion and ... cavaliers.org



2019 SCV Percussion Leadership ... scvguard.org



2018 DCI World Championships remo.com



Zombie drum line takes it home again at ... dci.org



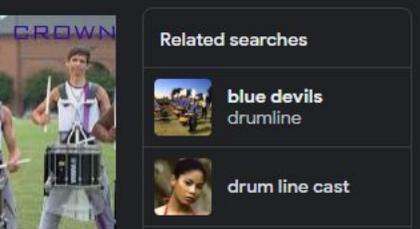
Crossmen Drumline @ DCI in Little Rock ... clean-beats.com



DCI 2017 | Blue Devils - Drumline - YouTube youtube.com



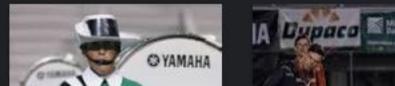
The Academy Drum an... pinterest.com

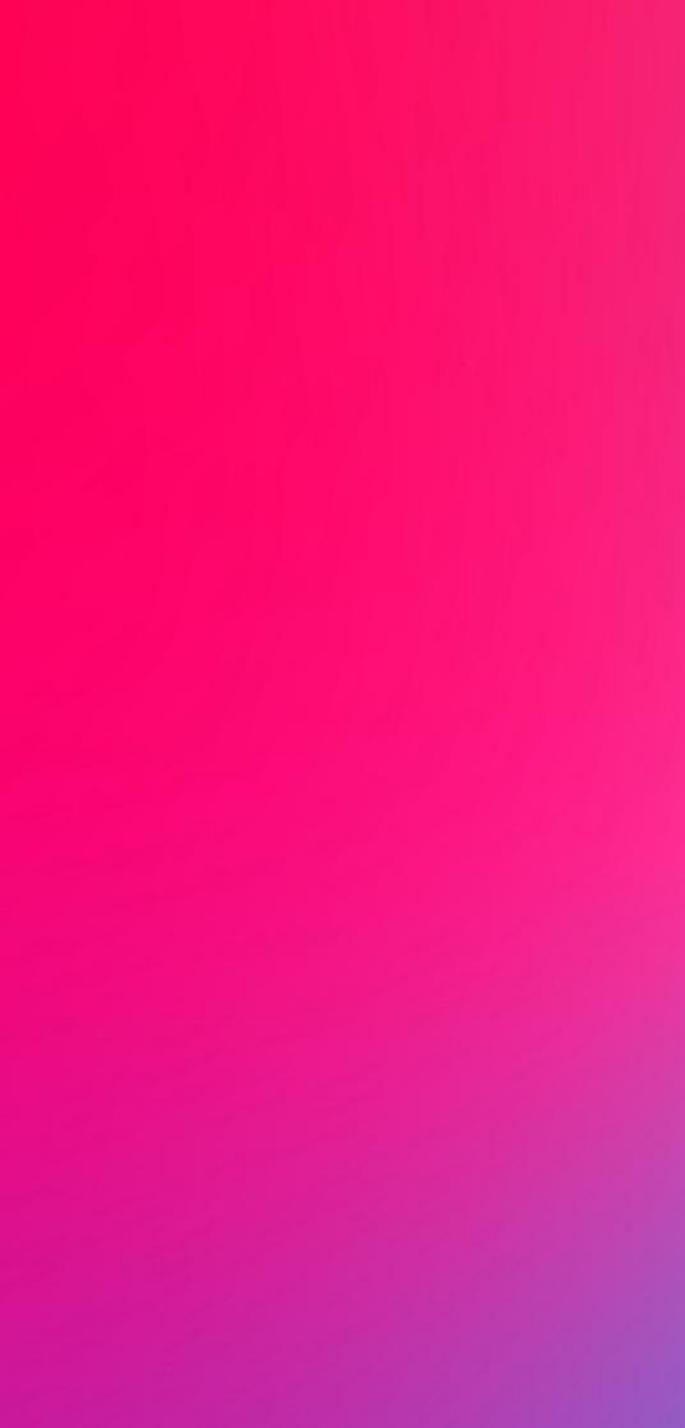


2021 Carolina Crown Drumline Exclusive ... lothype.com

Related searches

- blue devils drumline
- drum line cast
- drum line shark





Adillo

Frionterotta

Galegos

Garcia



Mrs.  
Moore

Mrs.  
Nelson

Mr.  
O'Leary

Mr.  
Rubel



79 **H** *f* *L crush is the R's release*

R l l r r L r L R l l r r L R L r r l R l R l R l l r L R l l r r L r l l R l

84

r r L L R l R l r r l R R l r r L r R l L r R R l R L R l l r L r R l L

89 **I**

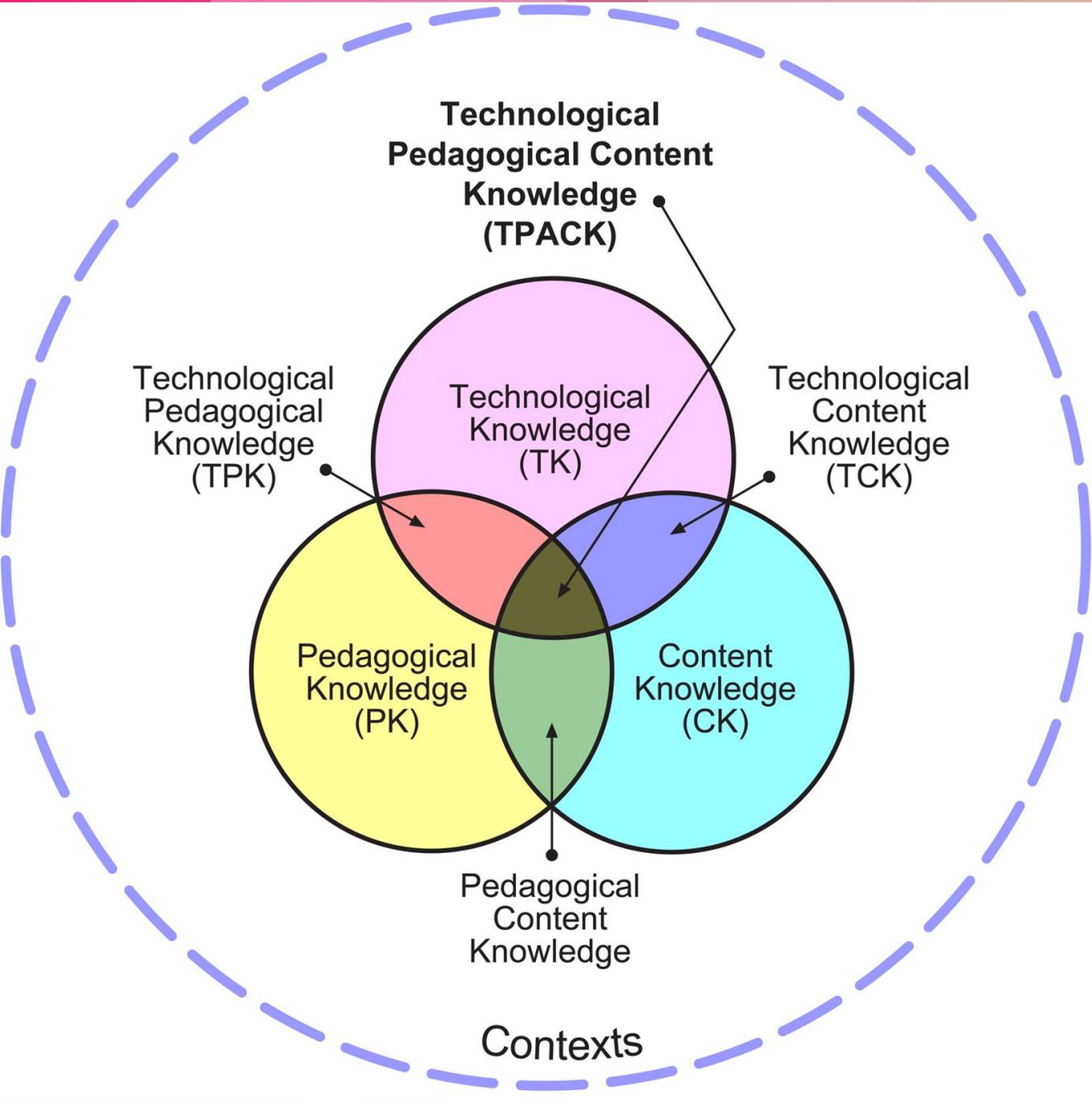
L r R l r r L l R l r r L l r r l R l l R L r L L R l r r l l R L r r l l

93 *cross over*

R l r r L r L r l R l L r R R l L r R l R l l r L r r L

97 *all pings* **J**

R l l r r L r r l l R l R l R L R L r r l r L r r L





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



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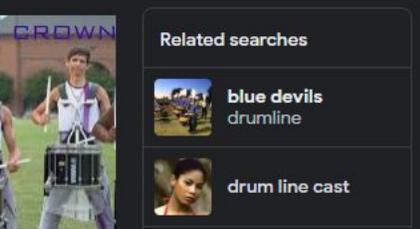
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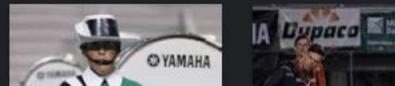
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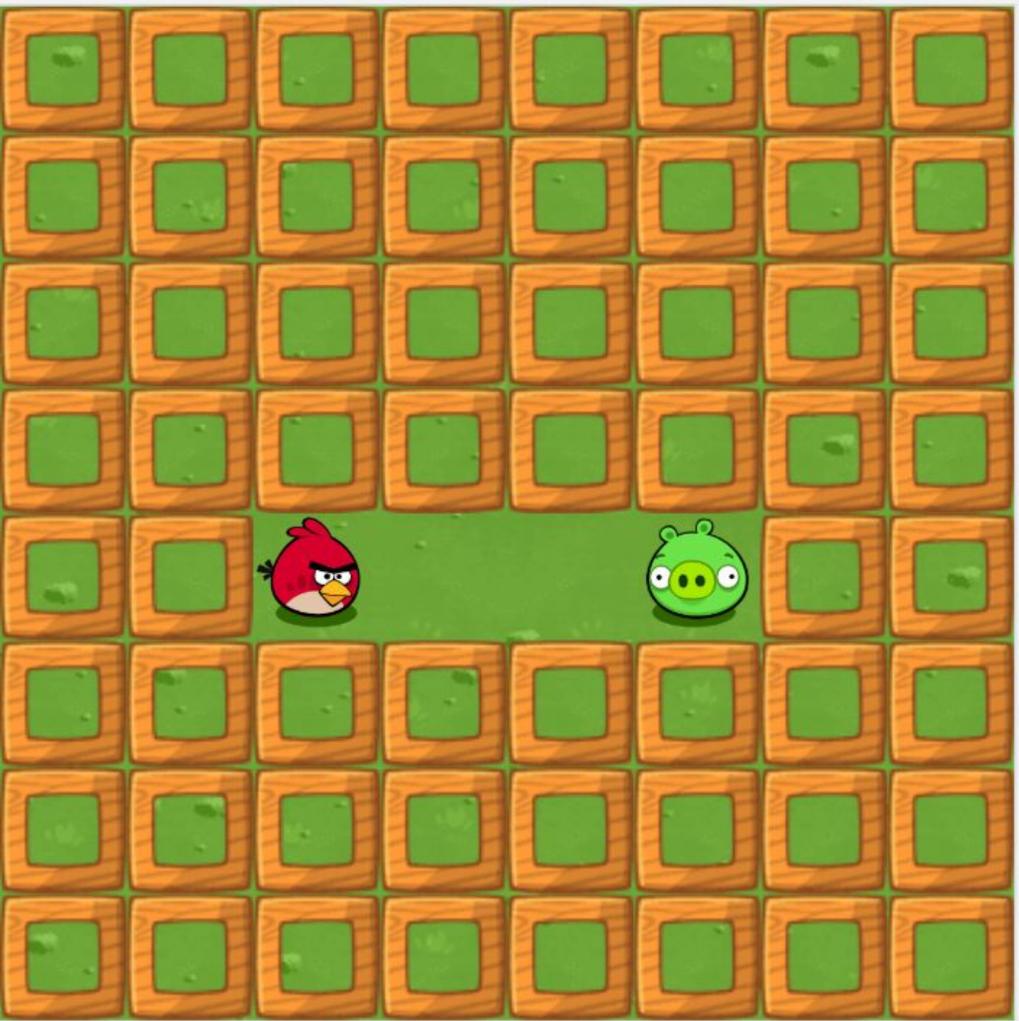
2021 Carolina Crown Drumline Exclusive ... lothype.com

Related searches

- blue devils drumline
- drum line cast
- drum line shark



# Critiquing close to home



### Instructions



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

### Blocks

Workspace: 2 / 4 blocks

move forward

turn left ↶ ▾

turn right ↷ ▾

when run  
move forward

▶ Run

# Integration styles

## Types

- Crossdisciplinary
- Interdisciplinary
- Interdiscipline
- Integrated
- Metadisciplinary
- Multidisciplinary
- Pluridisciplinary
- Transdisciplinary

## Relationships

- Affective integration
- Co-equal integration
- Social integration
- Subservient integration

# Images of curriculum

- Curriculum as content or subject matter
- Curriculum as a program of planned activities
- Curriculum as intended learning outcomes
- Curriculum as cultural reproduction
- Curriculum as experience
- Curriculum as discrete tasks and concepts
- Curriculum as an agenda for social reconstruction
- Curriculum as currere

# Curricular venues

- Intended curriculum
- Taught curriculum
- Experienced curriculum
- Hidden curriculum
- Tested curriculum
- Null curriculum

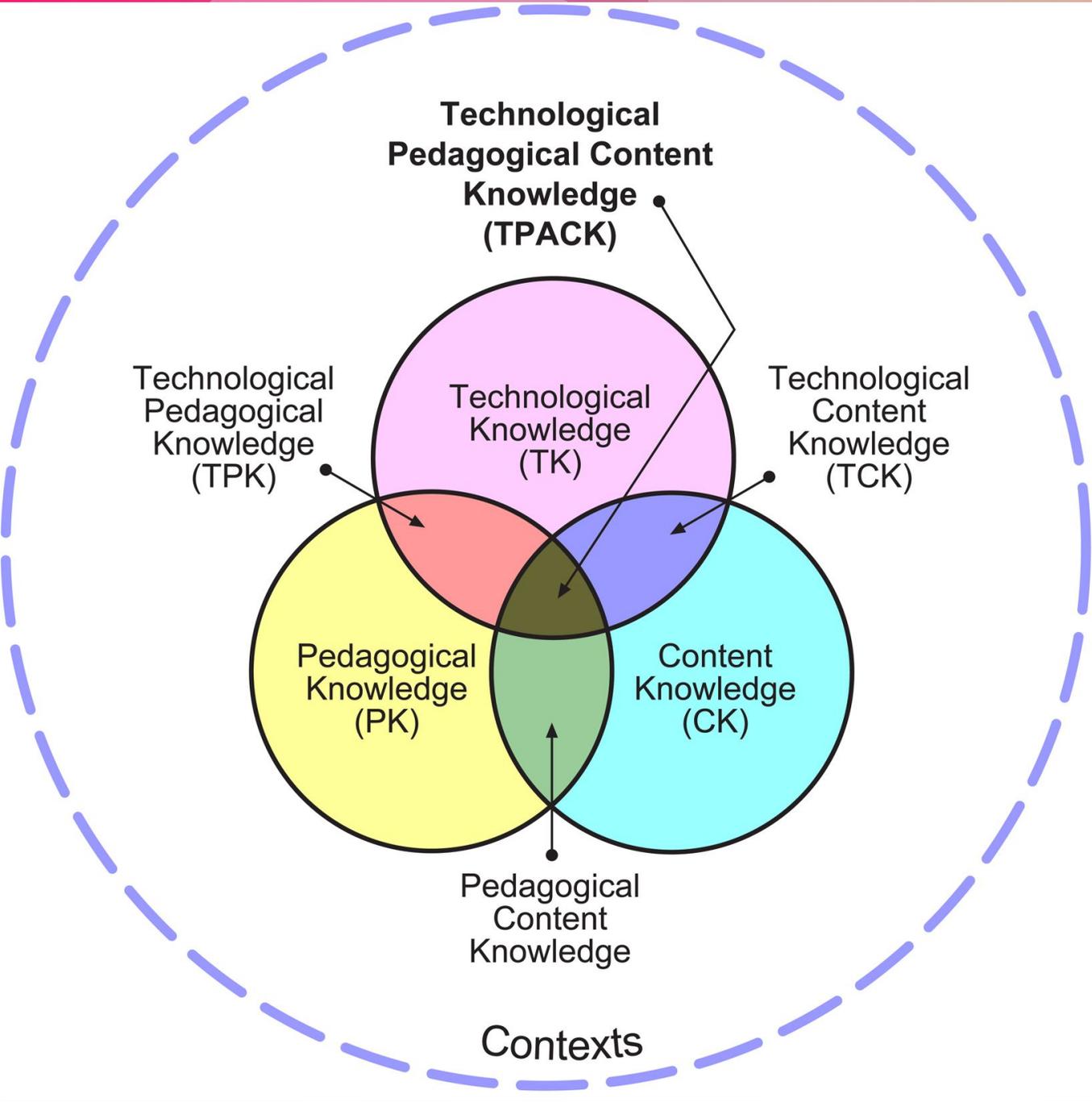
# Some podcasts on integration

## 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**

Acknowledge Racism  
in CS and Enact  
Anti-Racist Practices

**02**

Create Inclusive  
and Equitable  
Classroom Cultures

**03**

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

**04**

Student Voice, Agency,  
and Self-Determination  
are Prioritized in  
CS Classrooms

**05**

Family and Community  
Cultural Assets are  
Incorporated into  
CS Classrooms

**06**

Diverse Professionals  
and Role Models Provide  
Exposure to a Range of  
CS/Tech Careers

# Rethinking our relationship to CS

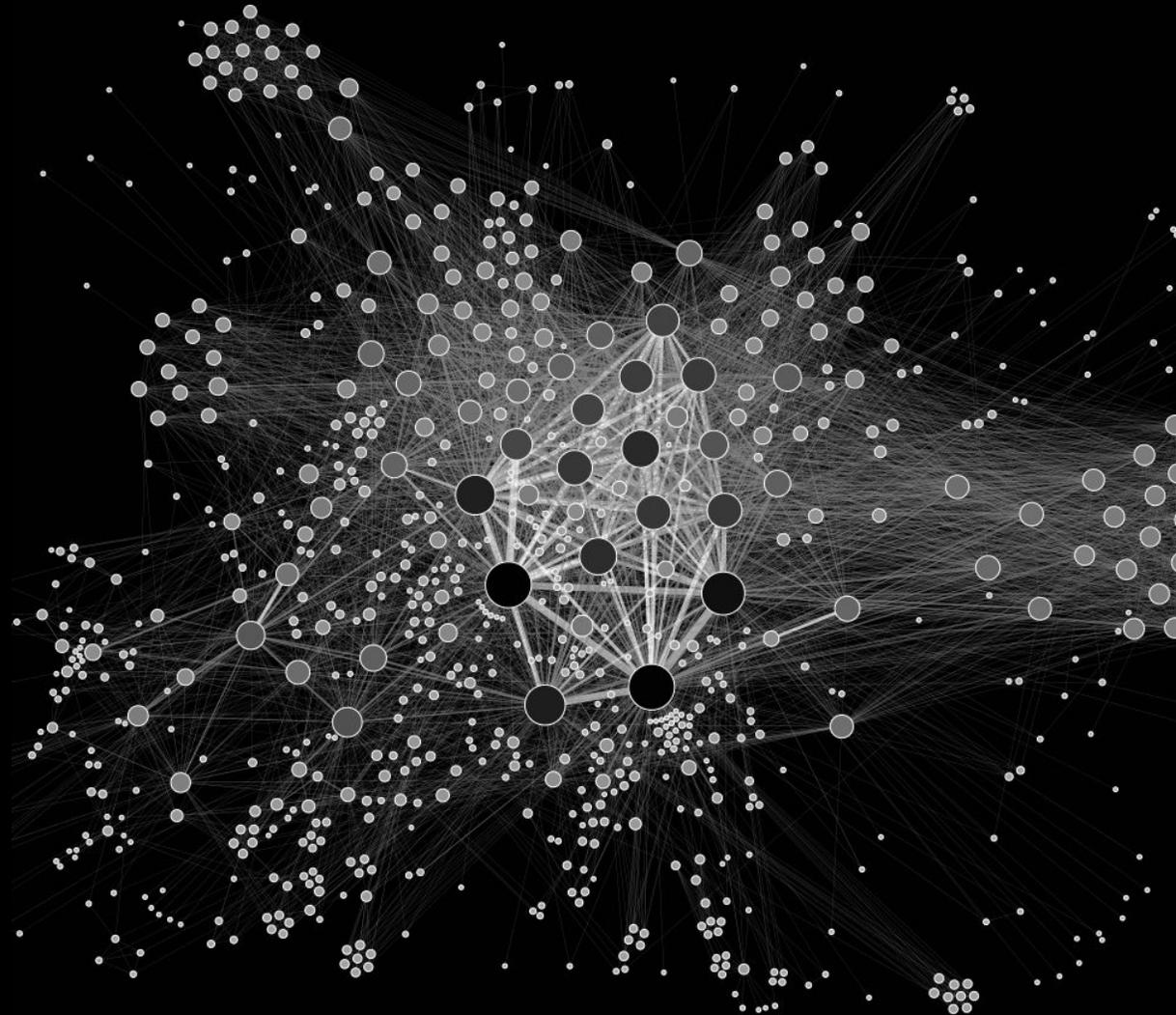




# Sequential design



# Rhizomatic design



# Interconnected practices from [my dissertation](#)

Composition practices

Entrepreneurial practices

Performance practices

Visual art practices

Maker practices

Community practices

Coding practices

# Affinity space characteristics

- 1 - Affinity spaces share a common endeavor
- 2 - Affinity spaces are not segregated by age
- 3 - Affinity spaces are not segregated by experience
- 4 - Affinity spaces encourage, but do not require, active participation
- 5 - Interaction transforms content within an affinity space
- 6 - Affinity spaces encourage both intensive and extensive knowledge
- 7 - Affinity spaces encourage individual and distributed knowledge
- 8 - Affinity spaces encourage dispersed knowledge
- 9 - Affinity spaces encourage and honor tacit knowledge
- 10 - Affinity spaces encourage a multitude of engagement
- 11 - Affinity spaces have multiple routes to status
- 12 - Leadership is porous and leaders are resources

- [Affinity spaces podcast episode](#)
- [Affinity spaces chapter](#)

# Some examples of hardware modifications

- **Video:** [I Turned a 1920's Typewriter into an EDM Drum Machine](#)
- **Video:** [Music Machines at Scratch Day MIT](#)
- **Video:** [BEAT JAZZ by ONYX ASHANTI](#)
- **Images:** [Hardware modifications shared within my dissertation](#)
- **Playlist:** [Hardware practices](#)

# Exploring resources and examples

# Reflection + Q&A

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

# Love this session? Continue the conversation!

**Join the Virtual Community  
to connect all year long**

