

Resisting edtech colonialism through Inclusive Innovation in Kentucky Appalachia

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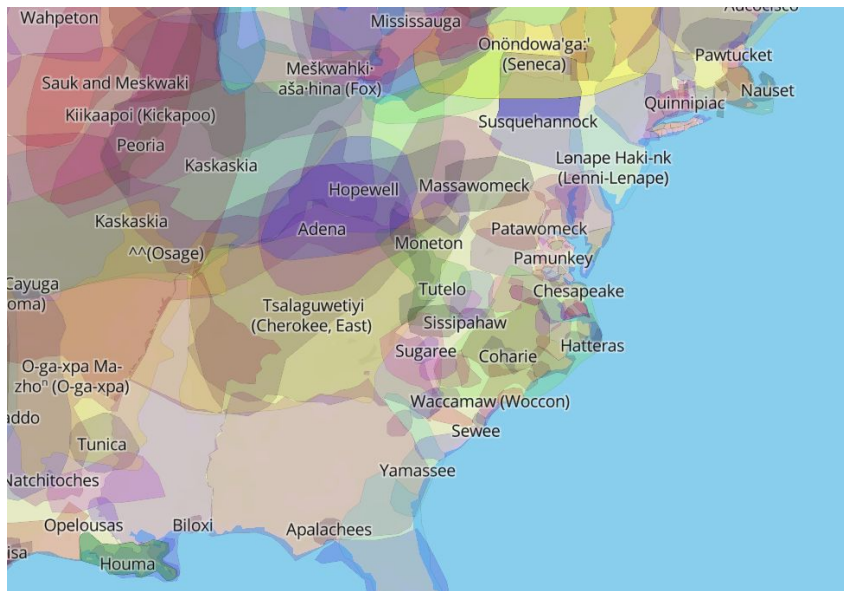
Overview

1. Land acknowledgement
2. Author perspectives
3. KY Appalachia and NSF *Tough As Nails*
4. Edtech colonialism
5. Research questions & methods
6. Four attempts to resist colonialism & progress updates
7. Conclusion and questions for you

Land Acknowledgement

Pikeville, Kentucky: Tsalaguweti
(Cherokee), Shawandasse Tula
(Shawnee), and S'atsoyaha (Yuchi)

Floyd County, Kentucky: Adena,
S'atsoyaha (Yuchi), Shawandasse Tula
(Shawnee) and Tsalaguweti
(Cherokee)



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Author perspectives



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Culturally
responsive
design &
partnership in
education

Every student is
exposed to CT/CS
in a meaningful
way, for better
economic opptys for
themselves &
Easter KY

CT as a *means*
for critical-
thinking rather
than an *ends*
as a stand-
alone topic

Purposeful CSEd
includes
understanding
students' cultural
and historical
contexts

Centering student
self-efficacy and
K-12 throughlines
in CS/CT
education

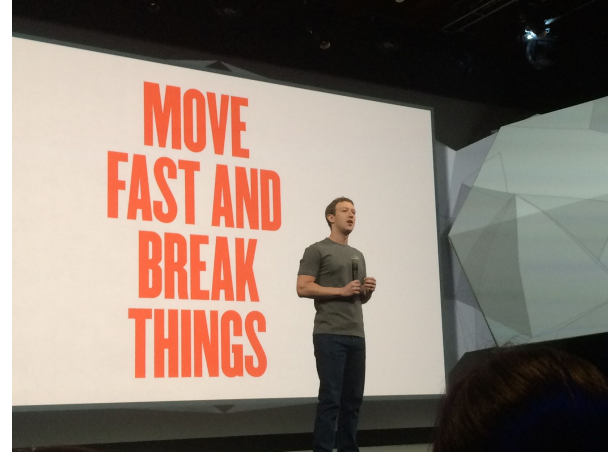
KY Appalachia & NSF *Tough As Nails*

- Eastern Kentucky (yellow)
- “Mountain people” (kinship, strong love of place, egalitarianism, independence, religious worldview, etc; Keefe 2005)
- Coal industry → computer science & entrepreneurship?
- Education leaders invited Digital Promise researchers to help design a K-8 Computational Thinking pathway



“Edtech colonialism” - possible threat to E KY independence

- (1) Edtech has its own language and culture that it aims to promote
- (2) Edtech has great economic and political clout
- (3) The culture and values currently promoted by edtech companies are fairly monolithic



Research questions & methods

Questions:

- How has our research practice partnership (RPP) attempted to resist “edtech colonialism”? How well has that gone?

Methods:

- Identify & examine three values our project tried to uphold to resist edtech colonialism.
 - Values: Student agency is core; E KY leads pathway development; Competencies first (over themes and tools)
 - Data sources: Project meeting notes, educator surveys, videos and observations of professional learning events

Eastern KY leads the pathway development

Attempts

- Vision and goal setting through SCRIPT
(Strategic CSforALL Resource & Implementation Planning Tool)
- Emphasis in “your pathway,” “your grant,” “what do you want/need”
- Training teacher leaders via teacher leaders; Teachers design lessons

Evidence of uptake

- SCRIPT values statement & goals for each district.
- 72 CS/CT lesson plans from 50 K-8 teachers. High enthusiasm.

Threats

- Many competing efforts at the district, related to pandemic & turnover

Competencies first (over tools and themes)

Attempts

- Messaging focused on “preparing students for the future of work”
- Some teacher PD around CT competencies
- PD on CS/CT emphasizes relevance to content subject area competencies

Evidence of uptake

- 51/72 lessons plans are integrated into existing academic classes

Threats

- CT/CS competencies and implementations are new, broad, nebulous and lack accessible assessments

Student agency is core

Attempts

- PD focused on student meaning-making

Evidence of uptake

- Lesson plans (examples)

Threats

- Subscription(s) to skill-building CS/CT curricula becoming a primary focus
- Pandemic funding needing to be used somehow, quickly (and often to edtech subscriptions, devices and curricula)

Added effort - naming ‘culturally responsive’

Attempts

- Drs Stafford Hood & Hobart Harmon as advisors
- Project studied & applied community cultural wealth (Yosso, 2005)
- Adding “culturally responsive” as the “4th C” for CS pathway

Evidence of uptake

- RESPECT 2021 panel discussion; Culturally responsive entrepreneurship was a focal feature in Keynote to educators

Threats

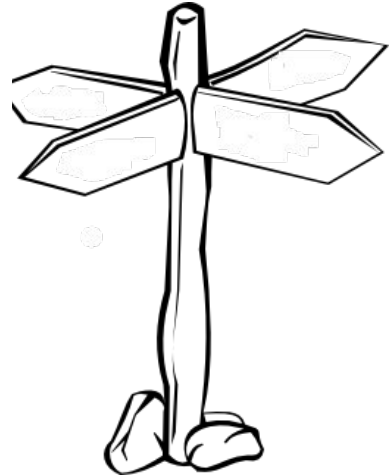
- Culturally neutral tech standards & accountability driven climate

Conclusion

Naming the possible threat of edtech colonialism and **planning specific strategies** to resist it has been useful. **Some educators and leaders in KY are thinking and acting to leverage CS to sustain their cultural values.**

Threats to culturally sustaining CS education not only come in forms of edtech company pressure, but also our perceived need for efficiency, and structures of the current educational systems (e.g., accountability to state standards).

National Crossroads? Future of Work & the Future of Schooling.



Questions for you

What methods have you used to resist threats and pressures related to colonialism?

How have you expressly discussed “big picture” issues like colonialism and racism with your project and project partners?

How has the availability of pandemic-related funding affected your projects?



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