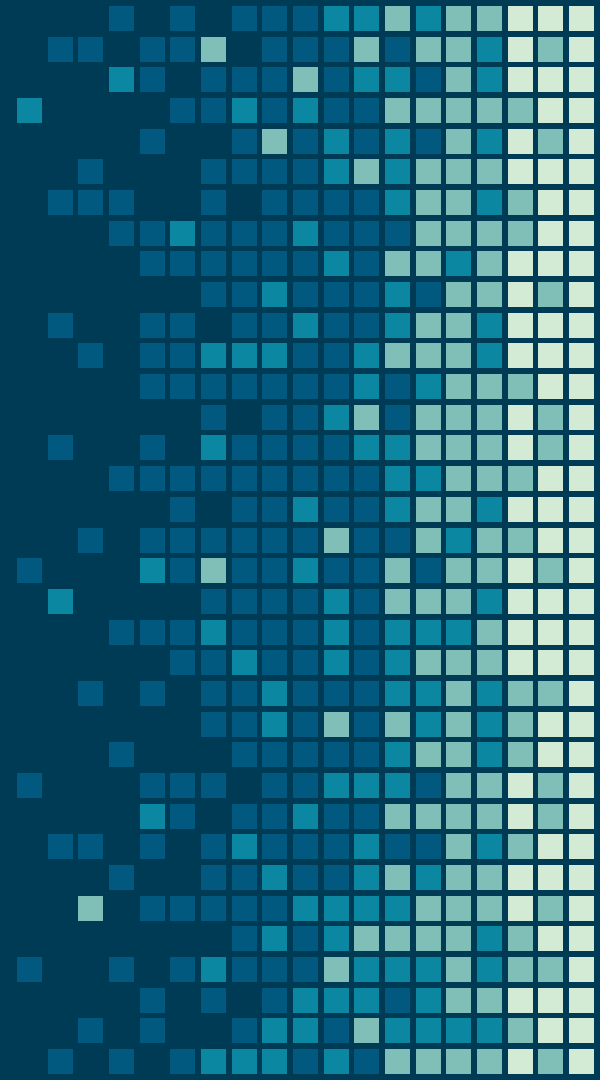# Do CS Teacher Preparation Programs Use Equity Pedagogies?: Survey Says "A Little"

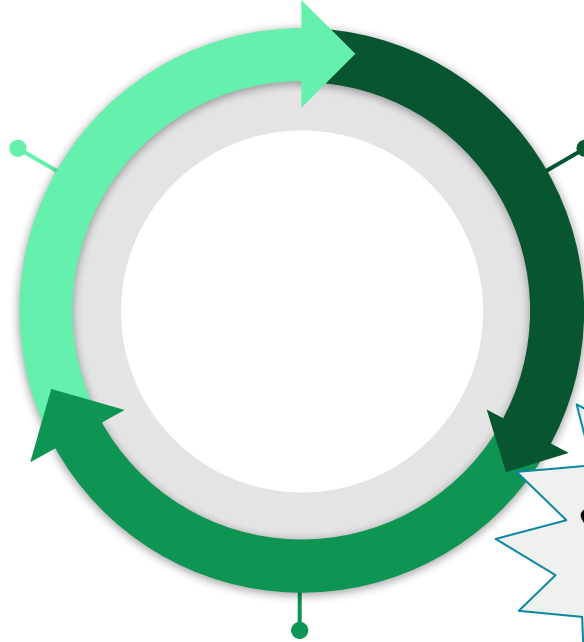Anne Drew Hu, Michigan State University
Marie K. Heath, Ed.D., Loyola University Maryland
Aman Yadav, Ph.D., Michigan State University
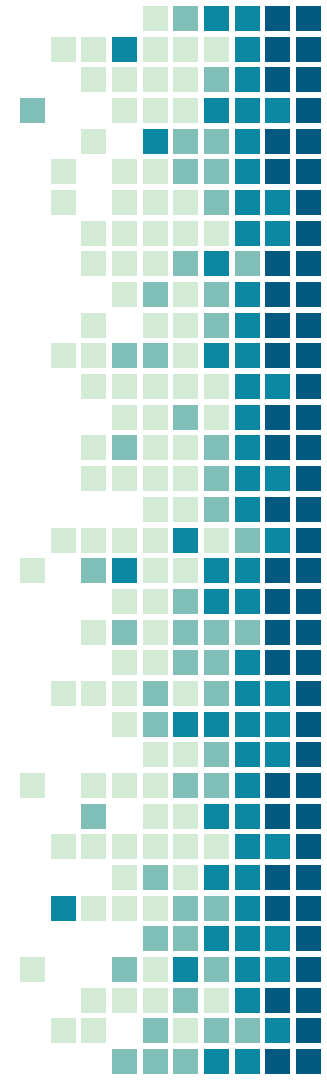
Problem Statement

CS designers and programers create discriminatory and harmful tech

Critical turn in CS research

CS teacher ed to change practices

K-12 curriculum and pedagogies remain the same

AY

Theoretical Lens: Equity Pedagogies

"…equity is defined as intentionally facilitating justice-oriented learning experiences for minoritized students. This requires viewing teaching and learning as inseparable from pursuing justice while attending to students' access to rigorous instruction and equitable outcomes. (Madkins et al., 2020, p. 3)

MH

Theoretical Lens: Equity Pedagogies

Focus on:

- Identity development
- Personal and socio-political relevance of technology
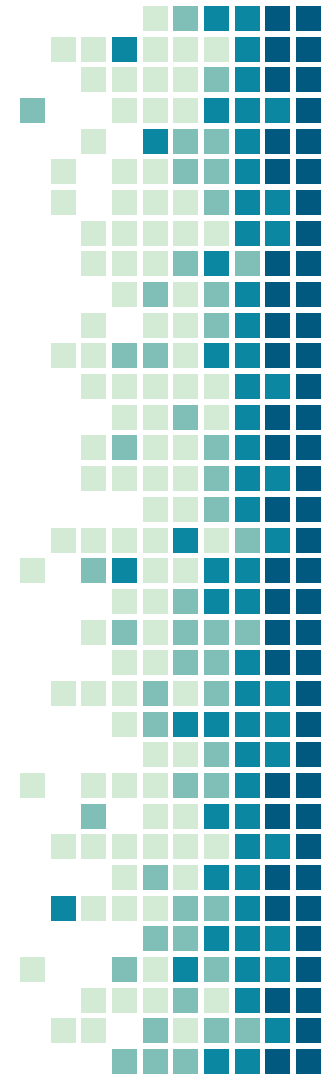- Positioning students as creative agents/change agents

MH

RQ

To what extent are equity pedagogies included in CS teacher preparation programs?

MH

Methods

- Searched CS teacher prep programs in CSforEd

- Looked for mentions of equity in course descriptions

- Deductively coded for equity pedagogies (Madkins et al., 2020)

- Limited by what prep programs put online

- CSforEd database is not comprehensive

ADH

Findings

- Majority of programs (n=25/39) didn't mention equity at all

- Of those that did talk about equity (n=14), we identified instances of equity pedagogies

    - Identity development

    - Socio-political relevance

    - Change agents

ADH

Equity Pedagogies

Identity Development

(n=10)

Examples:

-Course on intersecting identities in STEM

-Personal commitment to identity work from faculty, not a course objective

Socio-Political Relevance
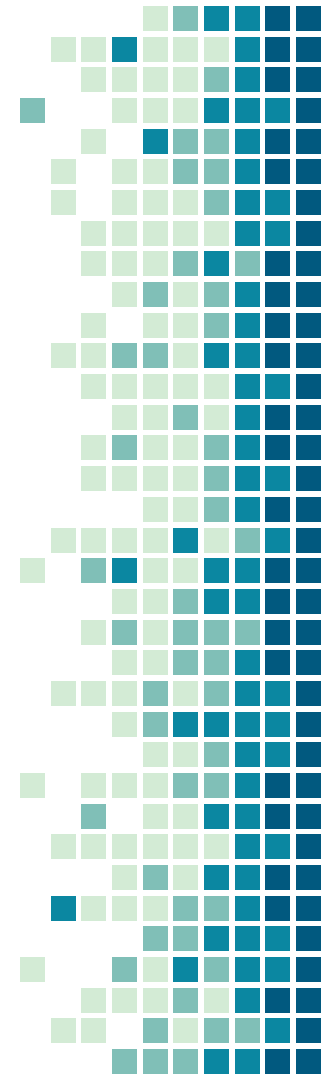
(n=6)

Examples:

-Situating CS within its social context

-Not always clear whether this was from a critical perspective
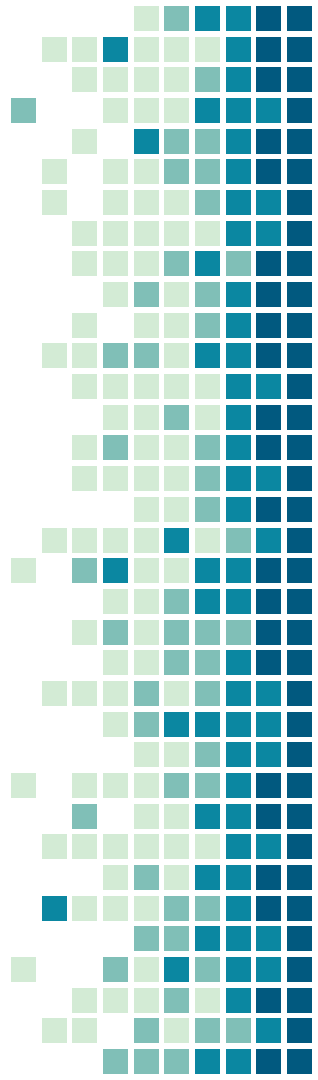
Change Agents

(n=2)

Examples:

-Positioning students to make an impact in their community

-Only one program used the language of social justice

ADH

Recommendations

Use our power as scholars and educators

- Shift to localize justice-oriented CS curricula
- Insist on embedded justice in curricula
- Attend to local restrictions on educators and engage in actions to protest
- Refuse to self-censor in anticipation of laws
- Encourage program officers to fund critical STEM work

MH

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