Interpretations and Uses of Data for Equity in Computing Education

Benjamin Xie (he/him) | bxie@uw.edu | @benjixie | benjixie.com/icer21

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We can support informed, timely, and equitable action by designing interactions with data that enable stakeholders to connect their interpretations of data with their domain-expertise. To do so, we must consider prior knowledge, perceptions of power relationships, cultural competency.

**Codeitz.com**
- informed agency in online learning
  - progress indicator
  - recommendation
  - skill bar

**StudentAmp.com**
- amplifying voices of minoritized groups
  - Staying motivated throughout the quarter; feeling connected to the activities/content of the class; dealing with stresses from outside of school.

**DIF (Differential Item Functioning)**
- interpret test bias w/ domain expertise

**RQ**: How can contextualizing student feedback w/ identity inform teachers of equity issues?
- **method**: designed Student Amp and deployed in large courses, interviews w/ students & teachers
- **findings**: students shared challenges beyond course; teachers used contextual info to consider minoritized identities

contextualizing feedback w/ identity provides benefits, privacy risks

agency must be an informed option, but it can be unfamiliar

**RQ**: How do domain-experts interpret data on test bias by gender and race?
- **method**: DIF to identify empirical evidence of bias, workshop w/ designers
- **findings**: Designers consider bias relative to test design, curriculum design, broader systemic issues

judgement of domain experts enables richer interpretations of data on bias