CIFellows 2020-2021

Computing Innovation Fellows

Moving from Equity to Justice in Computing Education for Youth

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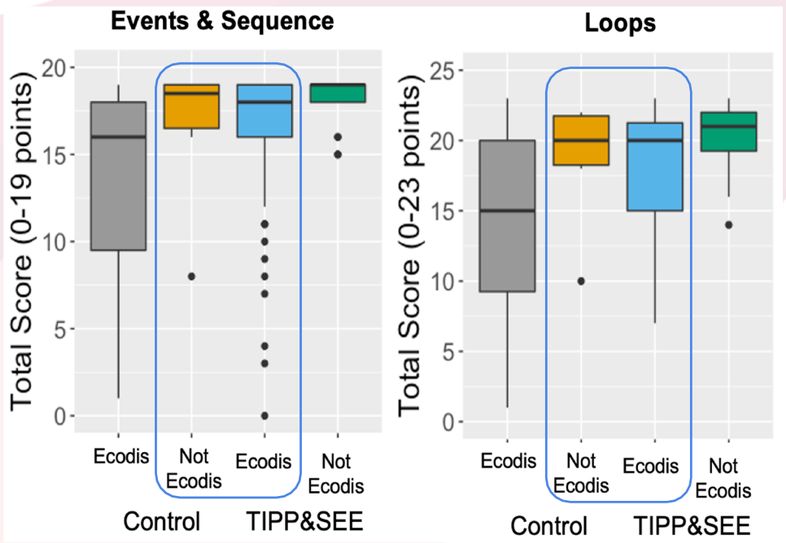
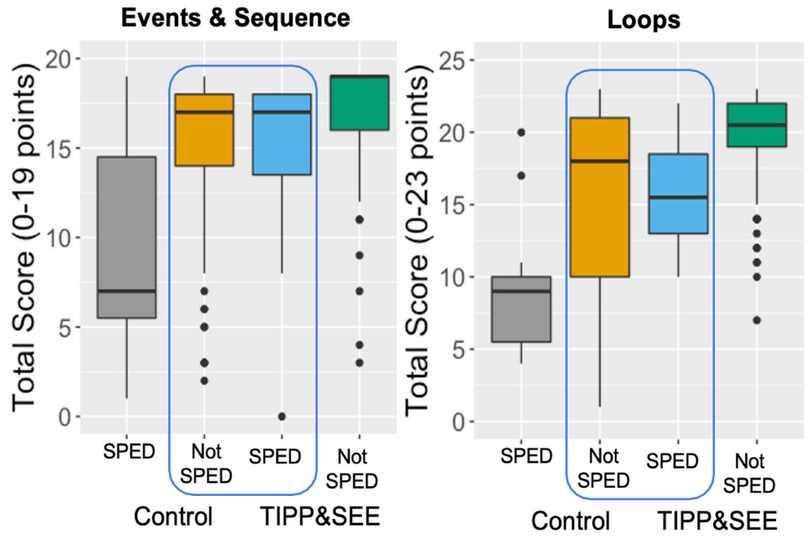
Equity: Ensuring Effective Computing Instruction for All

TIPP&SEE metacognitive learning strategy narrowed gap between students with and without academic challenges.

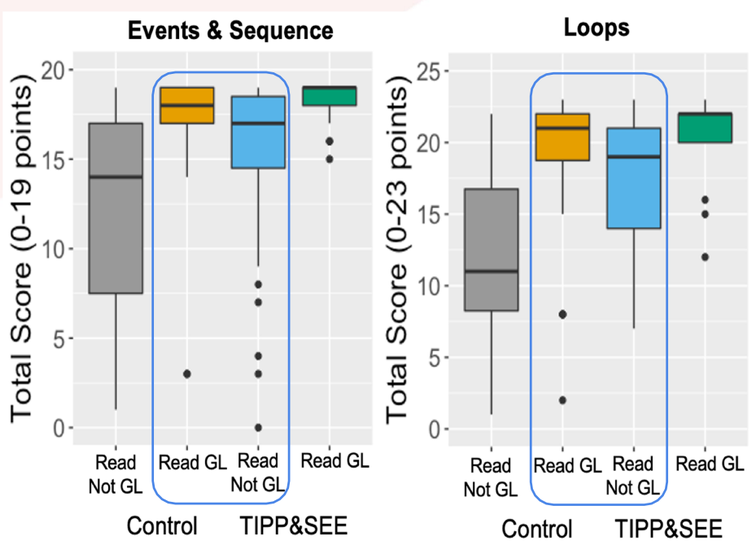
Students with Economic Disadvantages



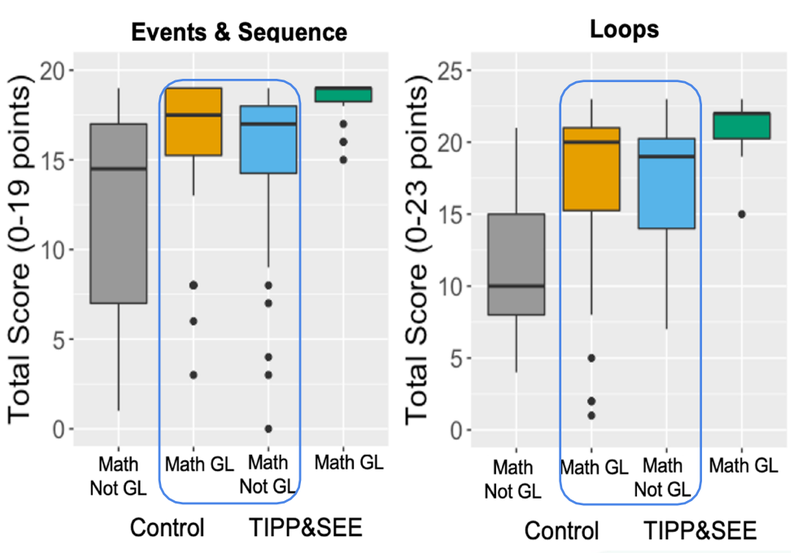
Students with Disabilities



Students Reading Below Grade Level



Students with Math Proficiency Below Grade Level



Justice: Rethinking the Narratives in Computing Instruction

Youth's Perceptions of Fairness in Computing

Research Questions:

- How do youth make sense of fairness in computing technologies?
- How do youths' identities and backgrounds shape their perceptions of fairness in computing?

Consequences of Not Teaching Critical Computing

Research Questions:

- How do students first encounter the harms of computing?
- How do those encounters shape their attitudes toward computing?
- How would critical computing instruction shape their perceptions of their negative early computing experiences?

Teacher Support for Critical Computing

Research Questions:

- What are the barriers to implementation in elementary school?
- How would educators make the tradeoff between engagement & criticality?
- What technological, pedagogical, and content knowledge would teachers need to teach critical computing?

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