Chicago Alliance For Equity in Computer Science (CAFECS): Cycles of Improvement

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ECS is the primary course that students have been using to fulfill the graduation requirement in CPS. The ECS curriculum is composed of activities that are designed to engage students in CS inquiry around meaningful projects. The pedagogy of ECS is structured around three interwoven strands: equity, inquiry, and CS concepts. The ECS professional development program is designed to prepare teachers to implement these inquiry-based activities while also guiding teachers in building a classroom culture that is culturally responsive and adapting lessons to the backgrounds and interests of the students.

Course Units
- Human Computer Interaction
- Problem Solving
- Web Design
- Introduction to Programming
- Computing and Data Analysis
- Robotics

ECS supports large increases in computational thinking outcomes by race and gender are equivalent
- ECS supports a “chain of cognitive accomplishments” approach to development of programming expertise
- Students who take ECS first are significantly more likely to take another CS class (about ⅓ continue)
- Perceived value of the course increases interest in CS

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