What Factors Predict CS Student Outcomes?
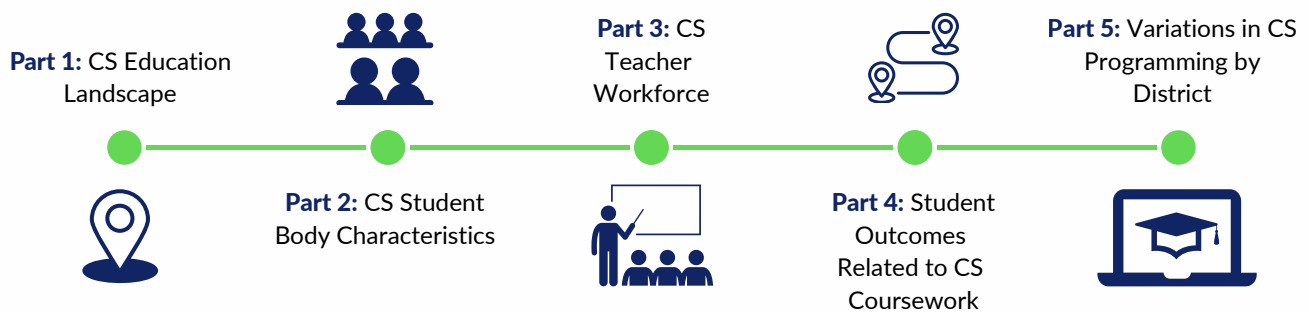
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Illinois Workforce and Education Research Collaborative

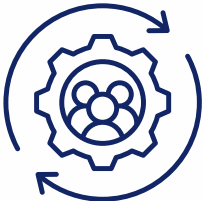PART OF THE UNIVERSITY OF ILLINOIS SYSTEM

The State of Computer Science in Illinois High Schools Series

The State of Computer Science in Illinois High Schools Series analyzes the landscape, structures, and pathways of computer science (CS) education in Illinois and creates a baseline by which to measure the expansion of CS education in the coming years. **The Series includes five reports, each analyzing a different aspect of CS education:**

Part 1: CS Education Landscape

Part 2: CS Student Body Characteristics

Part 3: CS Teacher Workforce

Part 4: Student Outcomes Related to CS Coursework

Part 5: Variations in CS Programming by District

Part 4: Key Findings

We observed statewide disparities in CS passing and continuation rates that permeate through individual courses and districts for Black/African American, Hispanic/Latino, low-income, and EL students, as well as students with disabilities, indicating a need for systemic change.

On average, students taught by CS-endorsed teachers demonstrated higher rates of passing and a greater likelihood of enrolling in additional CS courses.

Girls and Black/African American students paired with teachers of the same gender and/or race were associated with increased odds of passing their CS course, suggesting the value of culturally and/or gender affirming instructional contexts.

Data was provided by the Illinois State Board of Education and includes students who enrolled in at least one CS course between school years 2017-18 through 2021-22.

Read the full report: http://go.dpi.uillinois.edu/cser