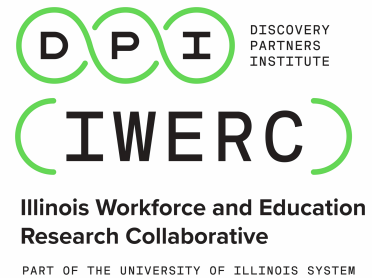


Towards an "Uplifting Environment": Understanding Supports and Barriers for Students in Illinois Computer Science College Programs



Part 1 of The Pathways and Experiences of Illinois Computer Science Undergraduate Students Series

This Series aims to understand the pathways and experiences of computer science (CS) students in post-secondary programs, paying particular attention to students from historically marginalized groups.

Part 1: Key Findings



High school preparation played a dual role

Students exposed to CS prior to college either in a formal (e.g., course) or informal (e.g., clubs) education setting felt they had an advantage in their CS undergraduate programs. However, students without prior exposure saw this lack of preparation as a disadvantage and often felt behind their classmates or lacked confidence in their abilities.



Institution type (public vs. private or 2-year vs. 4-year) was associated with both supports and barriers

Students who enrolled in a 2-year community college were statistically less likely to select several supports related to the campus or programmatic aspects more commonly found at 4-year institutions. At the same time, students in 2-year programs were also statistically less likely to say their *coursework was overwhelming or too fast paced* compared to their peers in 4-year programs.



Some barriers were experienced more by students from historically marginalized backgrounds, resulting in compounding issues.

Barriers such as *not many of my peers look like me*, *lack of inclusive culture*, and *negative interactions with the CS community* were more likely to be noted by female students and racially minoritized students. In addition to these barriers, the same groups also experienced the more common barriers their fellow classmates noted as well, resulting in subgroups of students dealing with more barriers.

Read the Full Report: <https://go.illinois.edu/cser>