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Chicago Alliance For Equity in Computer Science

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PROJECT IN PRACTICE

REL Midwest facilitated a set of companion trainings for school counselors to build their understanding of how CTE courses can contribute to students becoming career and college ready and identify opportunity gaps in accessing CTE courses.

MICHIGAN TEACHERS WHO ARE NOT TEACHING: WHO ARE THEY, AND WHAT WOULD MOTIVATE THEM TO TEACH?

RESEARCH QUESTIONS

- How many of Michigan’s certified teachers were not teaching in Michigan preK–12 public schools during the 2017/18 school year? What were their demographic, employment, and certification characteristics, and which demographic and employment characteristics distinguish them from teachers who were teaching?
- What reasons did certified teachers who were not teaching in 2017/18 give for leaving or choosing not to teach in preK–12 public schools? Did these reasons vary by demographic and employment characteristics?
- What incentives did certified teachers who were not teaching in 2017/18 indicate would motivate them to return to or enter teaching in preK–12 public schools? Did the attractiveness of the incentives vary by teachers’ demographic and employment characteristics? Were some incentives more persuasive than others in influencing teachers to consider teaching?

WHY THIS STUDY

Faced with teacher shortages across multiple regions of the state and content areas, Michigan education leaders are assessing the viability of recruiting certified teachers who are not currently teaching to fill vacant teaching positions in public schools. This study examined the characteristics of these teachers, their reasons for not teaching, and the incentives that would motivate them to teach in public schools.

MAIN FINDINGS

The study found that approximately 61,000 teachers certified in Michigan were not teaching in the state’s public schools in 2017/18. A survey of nonteaching certified teachers found that they most frequently selected wanting a higher salary as one of the three most important reasons why they were not teaching and that they most frequently selected an increase in salary as one of the three most important incentives that would motivate them to teach. Respondents also frequently selected financial incentives, such as allowing retirees to retain their retirement benefits, improving other benefits, and forgiving student loans, as one of their three most important incentives.

PROJECT IN PRACTICE

Drawing on the study findings, the Michigan Department of Education launched the “Welcome Back Proud Michigan Educator Campaign,” which seeks to recruit individuals with expired teacher certificates into the teacher workforce by reducing—and in some cases eliminating—professional learning requirements for recertification.



CHICAGO ALLIANCE FOR EQUITY IN COMPUTER SCIENCE

FOUNDED
2012

JOINED NNERPP
2019

MISSION


CAFÉCS is committed to ensuring that **all** students in Chicago participate in engaging, relevant, and rigorous computing experiences by addressing problems of practice through research and development that increases opportunities for **all** students to pursue computing pathways and prepares **all** students for the future of work.


PARTNERS

- [Chicago Public Schools \(CPS\)](#)
- [The Learning Partnership](#)
- [DePaul University](#)
- [Loyola University](#)
- [University of Illinois at Chicago](#)

ALL RESEARCH PROJECTS

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BROADENING PARTICIPATION AND SUCCESS IN AP COMPUTER SCIENCE A (AP CS A)

RESEARCH QUESTIONS

- To what extent has Chicago Public Schools (CPS) been successful at broadening participation in the AP Computer Science A (AP CS A) course for under-represented populations in computer science?
- What variables predict differences in AP CS A exam passing (i.e., college credit receiving; >3 score on the exam) rates among over- and under-represented populations in CPS?

WHY THIS STUDY

This study seeks to help us better understand if our partnership and district has been successful at increasing equitable participation and success in advanced computer science courses, specifically the AP CS A course.

MAIN FINDINGS

Participation in the AP CS A course has indeed broadened among demographic groups, specifically among Black and Hispanic female students. However, there remains an inequitable trend of more male students taking the AP CS A course than female students. Over- and underrepresented students took the AP CS A exam at statistically comparable rates. After adjusting for teacher and student-level prior experience, there were no differences among passing rates related to racial categorizations and their gender interactions. Taking the Exploring Computer Science (ECS) course before AP CS A emerged as an important predictor for passing the AP CS A exam, with students who took ECS being 3.5 times more likely to pass the AP CS A exam than similar students that did not take ECS before AP CS A.

PROJECT IN PRACTICE

Increasing access to advanced computer science courses is an essential goal for achieving the CAFÉCS mission of creating opportunities for all students to pursue computing pathways. This research informed the development of a computer science readiness dashboard for identifying and recruiting new schools that were ready to add advanced computer science courses.