

Early Phase Competition -- Absolute Priority 3 (STEM)
Uncommon Schools, Inc.
S411C210094

Expanding Access and Opportunity Through Culturally Responsive Computer Science (CURE CompSci)

PROJECT ABSTRACT

Uncommon Schools' proposed EIR early-phase project — Expanding Access and Opportunity Through **Culturally Responsive Computer Science (CURE CompSci)** — addresses Absolute Priorities 1 and 3 and Competitive Preference Priorities 1, 2, and 3. CURE CompSci uses a culturally responsive computing framework to embed computational thinking units in five courses across the general education high school curriculum, enabling *all* students — not just those with an interest in (and aptitude for) STEM-CS — to benefit from foundational learning experiences that drive participation and success in CS. Mathematica, Uncommon's research partner, will evaluate CURE CompSci using a RCT design that meets WWC standards without reservations and will provide feedback for continuous improvement over the project period. The project will pursue three objectives: Objective 1: Increase access to, participation in, and success in CS opportunities for over 8,500 high-need students (i.e., economically disadvantaged Black and Latinx students) in Grades 9 and 10. Objective 2: Demonstrate the scalability and sustainability of CURE CompSci as an integrated, culturally responsive computing initiative. Objective 3: Contribute to the growing evidence base of effective strategies for increasing access, participation, and success in CS. The project combines four innovative design elements — (1) embedding CS within the general education curriculum; (2) centering student identity; (3) equipping educators to empower students; and (4) designing for sustainability — to enhance students' CS self-efficacy, increase participation in CS electives and AP courses, improve performance in Math and Science courses and on AP CS exams, and increase interest in CS-focused post-secondary pathways and careers. EIR funds will leverage Uncommon's renowned PD framework to build the institutional and individual capacity necessary to sustain the project on public dollars, and all products will be shared via Uncommon's open-access Curriculum Hub.