

Improving Equity in AP Computer Science Principles: Scaling Beauty and Joy of Computing

PROJECT ABSTRACT

Project title: Improving Equity in AP Computer Science Principles: Scaling Beauty and Joy of Computing

Type of Grant Requested: Early Phase: STEM

Priorities: Absolute Priority 1—Demonstrates a Rationale, Absolute Priority 2—Field-Initiated Innovations—STEM, and Competitive Preference Priority 1 focused on expanding CS opportunities for high need students.

Total number of students to be served: 2,000

Grade level(s) to be served: Grades 9–12

Definition of high-need students: High-need students include girls, Black and Latinx students, and students from low-income families, each of whom are under-represented in computing.

Brief project description including project activities: This project will refine and study the impact of the *Improving Equity in AP CS Principles* program, a two-year computer science (CS) equity program centered on the *Beauty and Joy of Computing* (BJC). Activities will include (1) a school CS equity program (2) a teacher learning program and (3) the use of the BJC curriculum.

Summary of project objectives and expected outcomes: The project will increase schools' capacity to build an Advanced Placement CS Principles (AP CSP) program and achieve these goals for high-need students: (1) increase AP CSP enrollment, (2) increase AP CSP exam taking and (3) increase AP CSP exam passing, working with 40 treatment and 40 comparison schools.

Special project features: The BJC curriculum is free, available online, aligned to the AP CSP framework and College Board-endorsed, and has been piloted extensively in New York City.

Partnering Organizations: Abt Associates (Abt), North Carolina State University (NCSU), University of California Berkeley (USB) SAP, Microsoft TEALS, the College Board.