

Project Title: Lone Star Advanced Placement (AP) Computer Science Principles (CSP)

Type of Grant; Absolute and Competitive Preference Priorities: Early Phase; AP 1: Demonstrates Rationale; AP 3: Field-Initiated Innovation STEM-CS; and Computer Science CPP

Number of Students and Grade Levels Served: 25,000 high school (9th-12th grade) students

High-need Student Definition: High-need students are those historically underrepresented in CS – females, low income students, and students of color (African American and Latinx).

Project Description and Activities: The National Math and Science Initiative (NMSI), a 501(c)(3) nonprofit organization, is applying for Lone Star AP CSP to expand the teacher supports in NMSI's proven College Readiness Program (CRP) from a one academic year model to a comprehensive three academic year model, complemented by CRP's standard school and student supports. Additionally, Lone Star AP CSP will provide greater support to school counselors as they identify/recruit students for AP CSP courses.

Project Objectives and Expected Outcomes: All of Lone Star AP CSP's components are designed to specifically increase access and qualifying scores on the AP Computer Science Principles (AP CSP) exam in 50 schools across Texas by 2023. We expect to see (a) increased course offerings and enrollment; and (b) increased numbers of underrepresented students (females, African-American, and Latinx students) who can see themselves in future CS courses or careers. Additionally, teachers will report higher confidence levels in CS instruction.

Special Features: Lone Star AP CSP we will design, implement, and evaluate a three consecutive year teacher professional develop and support model to reach AP CSP teachers in 50 schools across Texas; this project represents the first time that the NMSI CRP model has focused for three consecutive years on one key component, while keeping the other two model components constant, creating a promising new strategy to deepen our proven CRP approach, providing specific supports for teachers to increase the number of underrepresented students in computer science.

Project Partners: National Math and Science Initiative (Fiscal Agent); The Beauty and Joy of Computing, Mobile CSP, UTeach, and NCWIT (Implementation Partners); AIR (Evaluation Partner)