PROJECT ABSTRACT

Project Title: STEM Early College Expansion Partnership; Type of Grant Requested: Validation; Absolute and Competitive Priorities: AP2: Improving Science, Technology, Engineering and Mathematics; CPP3: Supporting Novice i3 Applicant.

Project Description and Activities: SECEP, led by the National Center for Restructuring Education, Schools and Teaching (NCREST) proposes to improve STEM education in five districts in CT and MI by increasing the effectiveness of STEM teachers through high-quality professional development (PD). PD will be delivered through scaling the validated ECHS model in these districts, which significantly increases the success of high-need students in demanding programs of study.

SECEP will reach its objectives by: 1) implementing standards-based STEM-focused curricula that bridges to STEM postsecondary studies/careers; 2) delivering and embedding PD and coaching; and 3) developing partnerships to fully implement the STEM ECHS design.

Selected Project Objectives/Expected Outcomes: Students- At least a 10 percentage point higher rate of graduation; increase in students taking and succeeding in core college; at least 60% of graduates completing 2 STEM college courses transferable to postsecondary. Teachers- 85% of teachers who complete professional development report ability to apply STEM content and pedagogical content knowledge. Schools/districts- 15 schools in 5 districts sustain and expand the early college design and professional development program.

Target Number of Students to be Served in the Project: 22,000; Partners: Teachers College, Columbia University/NCREST (applicant); Jobs for the Future; Middle College National Consortium; Bridgeport Public Schools (CT); Genesee Intermediate School District (MI); Washtenaw Intermediate School District (MI); Delta-Schoolcraft Intermediate School District (MI); Lapeer County Intermediate School District (MI); SERVE Center at the University of North Carolina at Greensboro.