

PR Award #: S423A220071

Organization: William Cary University

Project Title: Stepping Up STEM at WCU

Program Contact: Dr. Katie Tonore – ktonore@wmcarey.edu

Absolute Priority: 1

Competitive Preference Priorities: 1, 2, 3

Three-Year Award Amount: \$2,172,133

Project Description: William Carey University (WCU) is submitting a proposal for the Supporting Effective Educator Development Program focused on the following priorities; Absolute Priority 1 – Supporting Effective Teachers. This project will a) provide pre-service teachers a nontraditional teacher preparation program following a two-year residency model, b) provide additional certifications in math, science, and STEM, c) provide the opportunity to serve in existing partner districts that are traditionally underserved, d) provide teachers in partner districts with evidence-based professional enhancement trainings for three years with the opportunity to obtain a STEM endorsement leading to a M ED. Competitive Priority 1 – Increasing Educator Diversity by recruiting, supporting, and graduating under-represented teacher candidates in high-needs schools. Teacher candidates will participate in a two-year residency model under the guidance of highly-qualified mentors, instructors, and university supervisors. Competitive Priority 2 – Promoting Equity in Student Access to Educational Resources and Opportunities. Eight partner districts are included in a Mississippi Teacher Critical Shortage area and will receive STEM resources, professional development and up to four high-qualified new teachers of math and science per school district. Competitive Priority 3 – Meeting Student Social, Emotional, and Academic Needs. This project is designed to meet student social, emotional, academic, and career development needs, with a focus on developing self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (CASEL, 2015), research-based professional development that will equip residents through high quality professional development with effective STEM based instruction.

Expected Outcomes and Contributions for Practice, Research, and Policy: WCU is currently in partnership with eight school districts in critical teacher shortage areas as a recipient of a Mississippi Department of Education Mississippi Teacher Residency Grant. The Stepping Up STEM program consists of two cohorts of pre-service teacher candidates leading to certification while increasing the quantity and retention of math and science teachers in underserved school districts. This program is designed to improve student achievement in science, math, technology, engineering and computer science. Finally, this program will spur workforce development in local communities through the knowledge, skills, and supports provided to students to encourage job equity and economic growth in local communities.

Evaluation: WCU will partner an external evaluator to assess the impact of the program on student growth and achievement. The research will use a quasi-experimental design to meet WWC Standards with Reservations. The study will examine the impact of the Stepping Up STEM program outcomes on: a) program completion and retention, b) teacher candidate perceptions of support, c) in-service teacher motivation, retention, and student engagement, d) student achievement in math and science and e) impact of social-emotional learning in teacher and student perceptions.