

Project Abstract

Title: Virtual STEM Role Model Connection

Grant Type: Early-Phase

Priorities to be addressed:

Absolute Priority 1	Absolute Priority 2	Competitive Preference Priority 1	Rural and Low Income (RLIS) with Locale Code	
Demonstrates a Rationale	Field-Initiated Innovations - STEM	Computer Science	Grandview SD 32 Mabton SD 32,41 Sunnyside SD 32, 41	Granger SD 32 Wahluke SD 32, 41 Yakima – no codes

Students to be served: (Study = 240) Plus Scale-up = 2,645

Grades to be served: 6-12

Our definition of high-need students

Students meet all of the following criteria; economically disadvantaged (evidenced by qualification for free or reduced price lunch), English learners, migrant and/or seasonal farmworker students, students of color and students with disabilities, located in rural schools.

Brief project description

The proposed **Educational Innovation** is to **Research** the impact of the increasing use of new virtual technologies to connect diverse STEM/CS Role Models with farmworker students in isolated small rural communities to examine changes in attitudes about pursuing STEM/CS fields. These students in rural communities **lack** STEM Role Models that look like them and understand their educational challenges. Virtual technology is becoming more universally common and is an emerging and promising innovation to make these connections possible.

There is an abundant amount of evidence that suggest STEM role models have a positive impact with girls. However, there is limited research on STEM/Computer Science role models and their impact on influencing minority and underrepresented students to pursue STEM/CS fields and careers. In addition, there is no research that meets **What Works Clearinghouse (WWC)** standards on the impact role models have on farmworker students. We propose to implement, refine, and evaluate the impact of a Virtual STEM/CS Role Model program that targets low-income, high-need, rural farmworker students using a randomized control trial (RCT).

Summary of objectives and expected outcomes

Development, adoption, and implementation of the **Virtual STEM/CS Role Model Connection** to support Computer Science experiences and STEM career pathways, participation, and engagement by farmworker students in 6 districts and scaling up to 22. Evaluation will produce data on students’ math and science achievement, STEM interests and postsecondary STEM/CS enrollment. A Virtual STEM/CS Role Model Guide/Toolkit will be developed for scaling-up.

Special project features (Rural Schools & serving Farmworker Students)

As a result of COVID-19, the use of increasing and emerging virtual technologies will be studied to solve the challenge of connecting diverse STEM role models with students in rural schools.

Partnerships

A Consortia of 6 rural school districts, University of Washington, Washington STEM, Educational Service District 105 and RGI Research Corporation will implement the project.