Project Abstract: COMPUGIRLS Remixed: Developing a Culturally Responsive Social System

Arizona State University’s Center for Gender Equity in Science and Technology proposes an I3 development grant that addresses Absolute Priority 4 (Influencing the Development of Non-Cognitive Factors) and Absolute Priority 5 (Serving Rural Communities) by expanding our empirically-based program, COMPUGIRLS, in partnership with a consortium of 11 of Arizona's highest needs rural and urban schools. COMPUGIRLS Remixed is intended to impact non-cognitive outcomes, engaging 100 girls in the pilot study and 640 girls in a full impact and implementation study. In collaboration with American Institutes for Research, our external evaluator, the impact study will use a student-level block randomized design. Based on strong theory of self-efficacy and culturally responsive computing, we propose building on our existing strategies to meet the following objectives: Objective #1: Revise an out-of-school culturally responsive computing curriculum as an in-school model; outcome: More girls from high needs areas will have access to a prolonged intervention with a strong theoretical foundation. Objective #2: Expand our curriculum to provide participants with increased opportunities to positively affect their interests, self-efficacy, self-regulatory, self-concept and computational thinking skills; outcome: More girls from participating high needs area possess non-cognitive and computational thinking skills poising them to pursue future STEM coursework and careers; Objective #3: Integrate more experiences within our curriculum that demonstrate cultural relevance of learning from varied social actors; outcome: More girls from high need areas will have access to a strong support system that will influence self-perception in short and long-term outcomes.