

## 2019 Javits Awards Abstracts

**(S206A190008) University of Arkansas at Little Rock (AR) is seeking \$494,260 of funds for STEM+C Program.** The goals of the program are to develop, implement, and disseminate a replicable model that links universal screening, teacher talent-spotting, and innovative elementary gifted and talented services in STEM, including Computer Science. The project aims to increase access to effective teachers in high poverty and/or isolated rural schools and will serve approximately 1,380 Grade 2 and Grade 3 students, 60 classroom teachers, 30 gifted education specialist teachers, and 30 principals across two cohorts in 30 Arkansas elementary schools. Cohort 1 receives project services in Years 1, 2, and 3; Cohort 2 receives project services in Years 3, 4, and 5. Key activities will include 1) collecting universal screening data from principals and gifted and talented teachers on students from 30 high-poverty schools; 2) disseminating new information on the STEM+C<sub>2</sub> model and its expected impacts online and at a minimum of three professional conferences; 3) initiating the National Board for Professional Teaching Standards (NBPTS) process over the duration of the project; 4) implementing formative feedback three times annually through educator surveys to ensure continuous improvement throughout design and delivery of project services; and 5) Convening the STEM+C<sub>2</sub> Advisory Panel annually for project review.

**(S206A190014) West Virginia University (WV) is seeking \$94,331 for the Project Appalachian Coders program.** The program's goals include using high-quality instruction to promote teachers' and the district's capacity to engage general- and advanced-level students in rigorous, evidence-based coursework in computer science (CS) through engagement in professional learning (PL) and through the provision of materials, curriculum, and tutorials; to expand student access to rigorous, evidence-based coursework in CS by supporting teacher learning in CS for use in general and Gifted and Talented (GT) classrooms (Tier 1); to expand general and GT student participation in rigorous, evidence-based coursework in CS by increasing districtwide CS enrichment activities (Tier 2); to expand access to rigorous, evidence-based coursework in CS by supporting general and GT teachers' learning in gifted education pedagogy (Tier 2 & 3). Another goal is to build collaborative systems that include teachers, students, and students' families, particularly to support CS awareness; to increase educator, student, and family awareness of computer science; and to cultivate relationships among teachers, students, and students' families. In addition, this project aims to promote effective instruction in rural and high-poverty classrooms and schools for students who live in rural and low-income households and will serve K-5 students. Teachers, students, and students' families will attend communal CS events such as *Hour of Code* and an annual year-end *Project Appalachian Coders* enrichment fair for the dual purposes of supporting increased CS awareness and greater collaboration between school and home.

**(S206A190025) George Mason University (VA) is seeking \$594,527 for the ExCEL (Experiences Cultivating Exceptional Learning) – Ignite (E-Ignite) program.** The program is designed to increase the number of underrepresented populations including Black, Latino, and English Learners - those who are economically disadvantaged and children with disabilities by implementing STEM aligned Problem-Based Learning (PBL) curriculum as a universal screening that embeds a dynamic performance assessment. The program is expected to increase enrollment in Gifted and Talented classes from the baseline year to meet or exceed Ford's (2014) Equity Index for each subgroup; increase achievement from baseline year as measured by grades and on annual state tests and assessments in ELA, mathematics and science, student cognitive skills, engagement and the motivation to learn as measured by EMR, SEM and AES, and Teacher understanding of PBL; and increase the use of universal screening as measured by CAR. Implementation will take place in nine middle schools reaching approximately 300 teachers serving 40,000 students. The project will serve Miami Dade County Public Schools, Virginia Beach City Public Schools, and Charleston County School District. Key activities will include expanding teacher knowledge of observations of student performance during PBL program at least three times per year and providing supports to those teachers to implement PBL curriculum to identify 6<sup>th</sup>-grade students two times per year.

**(S206A190009) Milwaukee Board of School Directors (WI) is seeking \$563,652 for Serving the Underrepresented by Grouping Equitably (SURGE) program's.** The program goals include 1) Collaboration—Increase the level and depth of collaboration among school and District personnel, students, and student families to support the academic success of students from economically disadvantaged (ED) and culturally diverse families; 2) Assessment—Increase the number of underrepresented, ED students identified for and immersed in advanced services through the evaluation of existing measures and the implementation of culturally responsive identification practices; 3) Instruction—Increase the percentages of underrepresented, high-achieving/high-potential (HA/HP) ED students who achieve “proficient” or “advanced” levels in reading, math, and science; 4) Sustainability—Position SURGE schools to continue full program implementation for a minimum of three additional years after Javits funding; 5) Dissemination—Develop and disseminate an online cluster grouping handbook. The project will initially include 30 classroom teachers (kindergarten through third grade), serving approximately 750 students in Milwaukee Public Schools. The Milwaukee Board of School Directors will partner with the University of Wisconsin–Whitewater and the Wisconsin Center for Education Research to serve as the external evaluator for the SURGE project and provide systematic and formative evaluation of the program implementation and outcomes to inform program improvement and impact.

**(S206A190028) University of Connecticut (CT) is seeking \$470,551 for the Project Building Up Mathematics Proficiency Utilizing Push-in (BUMP UP) program.** The program is designed to increase the identification of gifted students from underrepresented/underserved groups; to increase the math achievement of gifted students from underrepresented/underserved groups; to develop talents of high achieving students not identified as gifted; and to improve student motivation and attitudes toward school and math. The project will serve Pinellas District in Florida. Key activities will include designing and conducting a needs assessment; developing training materials; developing a Fidelity of Math Implementation checklist; developing a *Push-in Dosage Documentation Log*; developing math observation protocols; developing a mathematics assessment; holding annual Advisory Board meetings; developing a student math challenge scale; field testing and revising training materials; obtaining test data on 3<sup>rd</sup> and 4<sup>th</sup> grade students; identifying eligible schools and conducting randomization; providing multiple training sessions on different topical areas (for gifted specialists and classroom teachers); conducting sessions on the pullout program; administering the School Attitude Assessment; administering the *Students' Perceptions of Math Challenge*; analyzing quantitative data; administering *Mathematics and Me*; and disseminating a professional development module. University of Connecticut will partner with Pinellas County Schools.

**(S206A190020) Purdue University (IN) is seeking \$334,186 for the Closing Excellence and Opportunity Gaps for Students from Traditionally Underserved Populations in Gifted Education: A Multi-Tier Systems of Support Approach Program.** The project is designed to implement and evaluate the effectiveness of the extended *Achievement Motivation Enhancement (AME+)* model in five schools that meet Javits Priority 3: Promoting effective instruction in classrooms and schools that are located in communities served by rural local educational agencies and high-poverty schools. The goals of the project focuses on improving teacher knowledge, skills, and perceptions regarding socioemotional needs and support for talent development for traditionally underserved students; improving identification and access to opportunities for students from traditionally underserved populations; increasing student achievement, engagement, motivation, wellbeing, and self-efficacy in STEM, particularly for those students from traditionally underserved students; and enabling school personnel across the country to implement AME+ through effective dissemination of research, support materials, and professional development training modules. Tier II of the model will be open to 1,000 students, and Tier III will be open to 600 students over the course of the project. The project will serve up to five schools in this scaled-up application of the AME model. Key activities will conduct regional, on-site professional development training; developing, training school coordinators on data collection; engaging schools in identification of learning potential; and evaluating data on student achievement, engagement; motivation, well-being, and self-efficacy in STEM (Percira).

**(S206A190030) School Board of Pinellas County, Florida (FL) is seeking \$342,501 for Project Expanding Equity & Engagement (E3).** The project is expected to significantly improve the provision of services for gifted and talented students by promoting STEM education and improving instruction in classrooms. The goals of the program include implementing the *Total School Cluster Grouping Model* in 25 schools each year, for a total of 78 schools by year three; providing professional development and support for a total of 468 gifted and talented cluster teachers (who serve approximately 10,296 students) so they will be able to differentiate their gifted and talented students; identifying more students from under-represented groups for talent development programs and for gifted identification; providing a talent development program that is STEM-focused and centered on computer science, creative problem solving, and career-preparedness; and implementing *Camp Invention* for gifted and talented students. The activities will include districtwide implementation of the **Total School Cluster Grouping Model**, revamping the current talent development programs to focus on STEM, and establishing a high-quality summer enrichment camp for both gifted and talented students. The project will serve grades K-12 in Pinellas County Schools (PCS).

**(S206A190022) Minnesota Department of Education (MI) is seeking \$401,425 for the Universal Plus: A Two-Step Process for Equitably Identifying Computer Talent program.** The program is designed to identify students showing increased interest in and positive attitudes toward their learning in general, and computer science. The goal of the program is to identify a greater number of students as gifted, particularly in computer science, who are limited English proficient, 2e, or are from a traditionally underrepresented racial/ethnic group. Universal Plus will serve up to 360 2<sup>nd</sup> and 3<sup>rd</sup> grade students in rural southern Minnesota and their teachers. Six school sites will be selected: three in southeast Minnesota and three in southwest Minnesota. Key activities will include assessing student pre- and post-project perceptions of interest, challenge, choice, and enjoyment of school in general; creating a teacher rating instrument to measure computer science aptitude that is culturally and linguistically sensitive for use as part of a two-step identification procedure; and administering the *Project North Star* training modules to teachers from participating districts who may also attend face-to-face *Hornell Institute* trainings. Minnesota Department of Education will partner with Mouse, Inc., a national educational nonprofit that offers a variety of project-based activities in the STEAM model (STEM + Art: emphasizing creativity within science and technology), all delivered via step-by-step instructions on an online learning platform.

**(S206A190023) University of Connecticut (CT) is seeking \$434,119 for the Project Twice Exceptional with Autism Spectrum Disorder (2E-ASD) program.** The goals of the program are to identify research-based characteristics of academically talented students with Autism Spectrum Disorders (hereafter referred to as 2E-ASD) who are sophomores and juniors in high school, and to develop a research-based identification system to conduct research about students' academic needs and strengths. The program is designed to identify advanced-level high-end learning and enrichment teaching strategies that enable students to succeed in high school and successfully transition to college. Through the project, 50 academically talented high school sophomores and juniors with ASD will be identified, and approximately 200 of their high school content area and special education teachers in up to 20 school districts and private, non-profit schools across New England will participate. The research will take place within school districts - Norwalk, CT; Regional School District 19 in Storrs, CT; Willimantic, CT; LEARN Regional Education Services Center; and East Hartford, CT. Project activities and findings will be disseminated through presentations and journal publications for various audiences such as researchers, practitioners and project participants, the project website, and through a 15-minute video featuring the most effective and successful instructional and personal strategies.

**(S206A190006) Duke University (NC) is seeking \$318,237 for the Project Launch Press program.** The program is designed to grow the capacity for sustained engagement of academically talented students from rural areas and high-poverty schools (RaHPS) by identifying and providing services for gifted students; promoting computer science engagement; and promoting effective instruction for gifted students. This project seeks to provide targeted outreach recruitment to 3,000 parents; targeted services to 1,643 students, with an additional 25,000+ students receiving resources and support; and promotion of effective instruction

of gifted students to 3,000 educators who work with students in the 5<sup>th</sup> grade. This project will provide 60 targeted outreach recruitment sessions in 60 RaHPS; targeted services at three physical locations in NC, GA, and TX; and 60 targeted outreach training sessions for educators from 60 RaHPS across the U.S. Key activities will include week-long, summer, face-to-face, and residential programs, an online learning experience, and a book club.