Virtually-Infused Collaborations for Teaching and Learning Opportunities for Rural Youth: Implementation and Evaluation of Online and Face-to-Face Delivery in High-Needs Schools

(Project VICTORY)

The Texas A&M Research Foundation; College of Education and Human Development Center for Research & Development in Dual Language & Literacy Acquisition; Education Leadership Research Center; Aggie STEM; LogMeIn, Nearpod, Dr. Janice Koch, Inline Resources, Ichor Solutions (private sector matches); and Johns Hopkins University (JHU; external evaluator) will be working with 60 Texas districts with Rural and Low-Income School (RLIS) program-eligible campuses. Project VICTORY (VP), a three-year longitudinal Mid-phase project, addresses Absolute Priorities 1—Moderate Evidence and 2—Promoting STEM Education. We will serve teachers, students, and families by building instructional capacity and improving students’ science and literacy performance via a randomized control trial (RCT) study and determining differences between virtual/online and face-to-face teaching and learning. VP will serve approximately 1,500 high-needs students per year (enrolled for three years longitudinally, which overall will be 4,500 students in 3rd, 4th, and 5th grades), including those who are economically challenged students eligible for free or reduced-price meals and/or English learners, attending one of Texas’ 418 RLIS districts. VP will be implemented in RLIS campuses with 60 in-service teachers (30 treatment/30 control). The overarching goal of VP is to assess the impact of virtual teacher instruction vs. traditional face-to-face classroom instruction through a literacy-infused science curriculum. Also, we will assess the impact of the Family Involvement in Science curriculum, Virtual Professional Development, Virtual Mentoring and Coaching, Virtual Classroom Observations (also testing machine learning-artificial intelligence observations vs. human observation), Virtual Fidelity of Implementation, and Science Role Models and Mentors.