

Project VICTORY

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 is a \$7.9 million federally funded research project awarded to Texas A&M University that will partner with 60 rural Texas campuses (principals, teachers, students, parents) from 2021-2024 to reach the following goals:

- support grades 3-5 teachers in building instructional capacity to integrate literacy into science instruction
- cultivate student interest in STEM, particularly in science
- reduce disparities between rural and non-rural students
- examine impact of standards-aligned literacy-infused science lessons (lessons and curriculum materials provided)
- compare traditional face-to-face instruction and online instruction
- determine influence of additional science supports including family involvement in science and science mentors
- utilize technology to bring innovations to high-needs students in rural areas

Participating campuses will be randomly assigned to provide literacy-infused science instruction *either face-to-face* instruction during school hours, or *online instruction* outside of school hours. Research implementation starts Fall 2021 and follows the *same cohort of students for three years*: 3rd(2021-22) 4th(2022-23) 5th(2023-24)

Recruitment Goals: Due to longitudinal design of the study and the need to follow one student cohort from 3-5th grade, preference will be given to campuses that have 1) 3rd-5th grade on the same campus, *OR* 2) one elementary school (3rd-4th) that feeds into one 5th intermediate campus. Our target is to have at least 25 consented students per campus (1-2 teachers per campus).

Summary of Teacher Participation

- Participate in 15 hours of online professional learning/development (15 - 60 minute sessions)
- Implement Literacy-infused science lessons (two - 45 minute sessions per week for 9 weeks)
 - Curriculum materials, science materials, tablets, and access to Nearpod provided
- Participate in at least 2 virtual real-time coaching and mentoring sessions, reflect on teaching practices
- Support/advocate for parent participation in Family involvement in Science activities
- Facilitate interactions between university science majors and students
- Facilitate distribution and collection of student/parent consent forms
- Self-record 3-4 virtual classroom observations during science instruction (observation technology provided)
- Facilitate student testing before and after the 9 week intervention
- Participate in surveys and focus group interview
- Stipend paid based on participation (face-to-face teacher stipend up to \$900; online teacher stipend up to \$1575)

Summary of Principal Participation

- Provide flexibility for participating teachers to implement literacy-infused science lessons for 9 weeks
- Ensure project curriculum materials (technology, curriculum resources) shipped to campus are delivered to teachers
- Communicate with project personnel (reach out with any questions/concerns, respond to email requests)
- Attend/assign campus administrator to engage in virtual professional development along with teachers
- Provide scheduling flexibility for project-related student assessments before and after the 9 week implementation (Big Ideas in Science, ITBS, science interest survey)
- Provide access for campus/district IT to provide technology support as needed to assist teachers to conduct recorded classroom observations

Summary of Parent Participation

- Support student attendance and participation of online instruction (if applicable)
- Participate in at-home Family Involvement in Science (FIS) activities during the 9 weeks
- Tablets will be provided to record family interactions with the FIS activities
- Complete a survey based on their perceptions of FIS
- Participate in online/phone interview related to participation

1. Other Financial Incentives:

- District/campus technology support - \$400/year
- District data retriever - \$400/year to provide district science benchmark data and STAAR

Questions? Please contact Dr. Cindy Guerrero cguerrero@tamu.edu