

Bringing the Universe to America's Classrooms

Overview:

OSU's Center for Research on Lifelong STEM Learning has partnered with WGBH Boston and PBS LearningMedia on a NASA-funded partnership, *Bringing the University to America's Classrooms*. The project will feature production, evaluation, and dissemination of a comprehensive set of supplemental instructional modules – curated collections of STEM resources highlighting NASA-produced digital media assets and custom-designed resources, including video clips, interactives, animations, digital games, lab experiences, and accompanying lesson plans. The instructional modules will align with the Next Generation Science Standards (NGSS) as examples of high quality and inquiry-based science education in K-12. To support the usage of, and sustain engagement with, teachers and educators in out-of-school settings who might make use of these resources as part of a broader reform in science education, WGBH proposes a portfolio of outreach and professional learning opportunities that meet educators “where they are,” with on-demand, real-time, and interactive products and services to support their work.

Scope of Work:

The Center for Research on Lifelong STEM Learning will conduct independent, external formative and summative evaluation over the duration of the five-year project. The ongoing research and evaluation efforts will be conducted iteratively to guide resource development and to shape evaluation measures in subsequent years, as the evolution of technologies enables new metrics and reporting mechanisms. The evaluation study will focus on the following overarching evaluation question: *Does the project add value to participating teachers and students?*

In year 1 of the project, OSU conducted a front-end needs assessment and initiated formative concept testing of the instructional modules through data collection efforts that included a Nationally distributed survey and convening of a teacher advisor board for review of existing assets, participation in focus group discussions, and classroom testing of instructional module prototypes. Years 2 through 5 of the study will focus on formative and summative evaluation to inform instruction module production and professional learning experiences for teachers while also documenting outcomes and impacts of the project on students and educators.

Broader Impacts:

The project aims to develop a learning ecosystem of digital media resources and a range of related support services that leverage NASA SMD content and WGBH brands for supporting K-12 STEM teaching and learning. The NASA-funded initiative will feature the production, evaluation and widespread dissemination of a comprehensive set of instructional modules – curated collections of digital media assets – designed to address the Next Generation Science Standards (NGSS).