**Open Education Resources to Support
Adult STEM Teaching and Learning**

Background

As the national economy expands in areas of science, technology, engineering and math (STEM), the teaching of this content has become vital for adults to succeed in the workplace. The US Department of Education's Office of Vocational and Adult Education (OVAE) is invested in accelerating the teaching and learning of STEM competencies through high-quality open educational resources (OERs) and high quality adult education instruction of STEM.

Overview

OVAE, through a contract with American Institutes for Research (AIR), will develop new and innovative ways to improve the teaching of STEM content to adult education students using OERs. Though freely available online, the sheer volume of resources and the fact that many are geared toward children or college students poses challenges to adult educators for using them with low literate adult learners. To address these challenges, the project will develop criteria to evaluate resources suitable for adult learners and identify OERs that meet the criteria. In addition, the project will develop courses to train adult educators on STEM OERs and will provide training on how to use the OERs. The project will also develop a communication plan that will generate interest in the project and resulting resources as well as generate excitement and interest in the adult education field about STEM topics. Additionally, the project will provide two briefs on the application of the National Education Technology Plan (NETP) for adult education and the feasibility for non-traditional educational entities' use of digital badges. The project period is June 2012 to June 2015.

Project Milestones

- Develop a communications plan for building interest in STEM among adult educators.
- Establish online user groups to use and evaluate science and math OERs.
- Create online courses on how to use OERs.
- Develop and implement professional development training for the online courses.

Outcomes and Products

- A collection of reviews of science and math OERs, highlighting the relevance in adult education.
- Evaluation criteria by which practitioners can review other science and math OERs.
- Two online courses that will demonstrate how to teach with science and math OERs.
- Recommendations brief on the National Education Technology Plan for adult education.
- Recommendations brief on the use of digital badges in adult education.

Contact: Tanya Shuy: Tanya.Shuy@ed.gov