

2016 USU Extension Grant: Final Report

School Gardens: Here We Grow K–5 Professional Development for Utah Teachers

Discipline: 4H and Youth

Principal Investigator: Denise Stewardson (A00344667)

Co-principal Investigator: Lynn Wallin (A00406077)

Beginning Date & Project Duration: June 1, 2016 – December 31, 2016

Amount Requested: \$10,000

Summary:

This project supported Utah Agriculture in the Classroom's efforts in developing and delivering two school garden inservice workshops to K-5 Utah teachers. Participants received science-based lesson plans, technical information, and funding for implementing school gardens appropriate for students and available spaces.

Project Results:

Increased collaboration between on- and off-campus faculty

This project was an excellent vehicle to strengthen partnerships between USU Extension—faculty, specialists, county agents—Utah Farm Bureau volunteers, and Utah Agriculture in the Classroom (AITC). AITC education specialists created the teacher instructional resources and delivered the workshops. USU Extension horticultural specialists were invited to present their areas of expertise to teachers and offer additional Extension resources for preparing and maintaining school gardens. Farm Bureau volunteers provided lunches for the workshop participants and offered their resources for guest speakers and field trips to enhance classroom instruction.

Outcomes, outputs, impacts

Two school gardening workshops were conducted—one each in Salt Lake and Washington counties. Seventy teachers attended, consequently impacting approximately 2,450 K-5 students. Utah AITC offered all of its school garden-related lesson plans and activities on its website at www.utah.agclassroom.org. This is a searchable site in which teachers can find grade- and subject-appropriate resources by simply using a keyword in the search box. All of the lessons developed for the workshops supported by this grant are available—free of charge—on the AITC website. Additionally, the agenda containing all resource links is posted on a workshop page for easy access by teachers—both those attending the workshop and anyone searching the Utah AITC website: <http://utah.agclassroom.org/workshops/27here.cfm>. A school garden website—created and maintained by Utah AITC—is also available for teacher access. This website includes all resources and information created for this project: <http://utah.agclassroom.org/garden/index.cfm>.

It is anticipated that the resources and materials provided in the workshops will increase agricultural literacy and facilitate science, social studies, language arts, arts, math, and nutrition integration into K-5 curriculum. Specifically, the anticipated student outcomes are identified in the National Agricultural Literacy Logic Model and the National Agricultural Literacy Outcomes. Students will understand the relationships among agriculture, the environment, plants

and animals for food, fiber, energy, health, society, and economics; and understand the importance and value of agriculture in their daily lives. Teachers will understand and integrate student outcomes into academic subjects, and career and technical education. The approach of delivering these school garden workshops across the state provide opportunity for teachers to improve the quality of food, agricultural, natural resource, and human (FANH) sciences education, as identified by USDA-NIFA. Additionally, the use of school gardens often levels the playing field in offering equal opportunity for all students to develop a sense of community, induce feelings of belonging, increase social connection, and encourage environmental stewardship.

Efforts/plans to produce, publish, and disseminate scholarly materials

The program outputs, outcomes, and final data collected on this school gardens project will be shared at the 2017 National Agriculture in the Classroom Conference by Utah AITC's elementary education specialist, and the data collected will be submitted by the AITC Director for a research poster presentation at an appropriate conference. This model would also be appropriate to share in professional Extension publications and other appropriate Extension-related forums. Denise Stewardson, PI, will work with Extension faculty participating as workshop speakers to publish this project's impacts in the *Journal of the National Association of County Agricultural Agents*.

Additionally, all teacher workshop participants are invited to enroll in the AITC online professional development course (offered with both USU and USBE credit). Details of the course and information can be found at [Food, Land & People Online Course](#) (web link under construction as of 12/20/16; anticipated availability by 1/15/17).

Efforts/plans to secure extramural funds

Funding to support three additional inservice workshops is being pursued via the 2017 USU Extension Grants. The Utah Farm Bureau has agreed to provide meals for teachers, as they have done in the past for many AITC workshops. This partnership is very much appreciated by the Utah AITC team and the teacher participants. The overall plan is to provide a total of five inservice workshops over a 12-month period, therefore potentially offering agricultural literacy curriculum resources to every teacher in Utah. As aforementioned, Utah AITC funding will be used to support an undergraduate intern who will assist for the duration of this project, as needed.

Sharing Results and Lessons Learned within the USU Extension System:

Denise Stewardson, PI, has requested a presentation time slot and exhibit table for the 2017 Extension Annual Conference. Additionally, AITC has worked with Dennis Hinkamp to create and deliver a school gardening workshop webinar in spring 2017 for teachers unable to attend a location-based workshop. This webinar will be recorded and marketed via the Extension website.