

**A Proposed Model for Providing
Elementary Agriculture Teachers with Ongoing Professional Development**

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Introduction

In 2019, Georgia initiated a pilot program to formally integrate agricultural education into public elementary schools serving grades K-5. The pilot included 30 teachers, all of whom needed professional development to increase their own pedagogical content knowledge (PCK) so they can develop agricultural literacy among their current and future students in K-5 agricultural education (Bailey et al., 2021). Professional development is important for all teachers' professional growth but is especially important in innovative and emerging educational areas such as Elementary Agricultural Education (EAE). One of the many challenges in implementing EAE teacher professional development is that *current* EAE teachers require hands-on professional development synchronously while *future* EAE teachers will need similar/same training each subsequent year. Traditional professional development models among middle and high school agriculture teachers may not be appropriate for EAE teachers because EAE teachers have different backgrounds, views, and resources regarding professional development. Therefore, the objective of this poster is to share one proposed model for providing EAE teachers with professional development. This project addresses the American Association for Agricultural Education's National Research Agenda Research Priority 5, "Efficient and Effective Agricultural Education Programs" (Roberts, Harder, & Brashears, 2016).

How it Works

The proposed model utilizes three components working together: an asynchronous repository website, an asynchronous online teaching platform, and synchronous face-to-face instruction. As much content as possible from each of these workshops is recorded and archived on the EAE website and Google Classroom for asynchronous delivery to future EAE teachers.

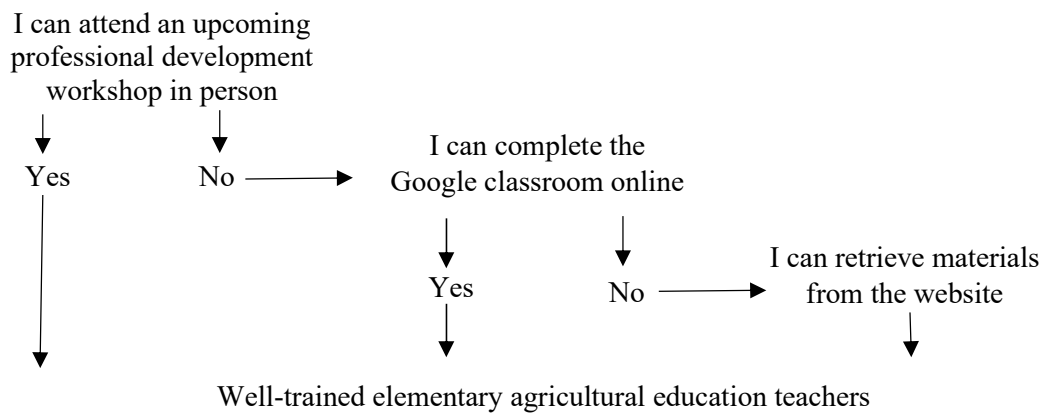
The first component is professional development workshops delivered synchronously by the Department of Agricultural Leadership, Education and Communication at the University of Georgia, Georgia Farm Bureau, and the Georgia Foundation for Agriculture. These workshops serve as practical examples of how new EAE teachers can conceptualize their local program. Each workshop is recorded and archived within the Google Classroom for absent and future EAE teachers. The second component, the Google Classroom, serves as an asynchronous component primarily focused on providing online workshops that teachers can continually attend or reference, especially if they are unable to attend an in-person training. The Google Classroom further acts as an archive of all professional development and training videos. Finally, the third component is a website that serves as a repository for EAE resources (e.g., curriculum, grants, etc.) As it is continually updated, it serves as a central-point of information for the EAE teacher. Relevant materials include professional development workshops, garden and agriculture-based curriculum, funding opportunities, and other related resources. Figure 1 depicts the interaction of these components over time.

Results to date

Approximately 10 of the 30 current EAE teachers have actively engaged in the professional development workshops, all of which (past and future) train EAE teachers in building community support (highlighting Cooperative Extension); establishing and utilizing school farms; establishing a farm-to-school program; and developing student interests in food, agricultural, natural resources, and human (FANH) sciences, experiential learning, and environmental education, as recommended by Bailey (2021). Workshop one piloted the Google Classroom. Upon completion of modules, teachers were eligible to apply for a mini-grant, and 5 teachers received mini-grants of \$2,500 each. Updating the Classroom has been manageable, but there is a challenge in providing timely feedback for participants as the program lacks personnel to provide daily feedback. The EAE repository website grows as resources are added and EAE teachers increase adoption. However, a challenge that is foundational to continuing this training is identifying new EAE teachers who need training. The EAE program is new to Georgia, so teachers do not report to a state level agricultural education entity and are difficult to locate.

Figure 1

A Proposed Model for Accessing EAE PCK Professional Development Material



Future Plans

This model currently operates in Georgia and may serve as a national model. A specific objective of the USDA/NIFA grant (Peake, 2021-2024) is to host five synchronous professional development workshops. Future plans involve workshops focused on the integration of experiential learning and environmental education into EAE. Observations of and feedback from these workshops will guide the development of a proposal of this model for a national level.

Costs

Several costs are associated with the synchronous professional development workshops, including travel reimbursements, workshop materials, and meals. Each synchronous workshop costs \$6,000 - \$8,000 to conduct. Additional costs include mini-grants to encourage teachers participation ($\$2,500 \times 5 = \$12,500$). There are no costs associated with the asynchronous website and Google Classroom as they are available resources free to use.

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