A Proposed Model for an Integrated Three-Component Model of Elementary Agricultural Education

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Introduction

Georgia is one state that recently formalized the teaching of agriculture education at the elementary school level (Georgia House Bill 1303, 2022). Traditionally, formal agriculture education has been taught at the middle and high school levels with teachers certified accordingly (National Association of Agricultural Educators, 2022). A common practice among these teachers is to use the three-component model, which clarifies that any agriculture education classroom should utilize the related components of formal instruction, experiential learning, and leadership development to create real-world learning experiences. Though a notable and recognizable tool, the model has not been tested among teachers or as a classroom practice at the elementary level. The purpose of this poster is to propose a model for an integrated three-component model of elementary agriculture education (EAE) based on how Georgia EAE teachers are currently implementing EAE in Georgia. This project met the American Association for Agricultural Education's National Research Agenda Research Priority 4, "Meaningful, Engaged Learning in All Environments" (Roberts, Harder, & Brashears, 2016).

How it works/Methodology/Program phases/Steps

Croom (2008) illustrated a manifestation of the Agricultural Education Total Program, which has previously been considered most appropriate for those in secondary education. The three-component model illustrated in Figure 1 is based on the philosophical underpinnings listed in Table 1, which represent the secondary level manifestations of agriculture education as proposed by Croom. Adjacent to Croom's hypothesis are the proposed same philosophical underpinnings for elementary agricultural education.

Figure 1

Diagram of the Integrated Three-Component Agricultural Education Model

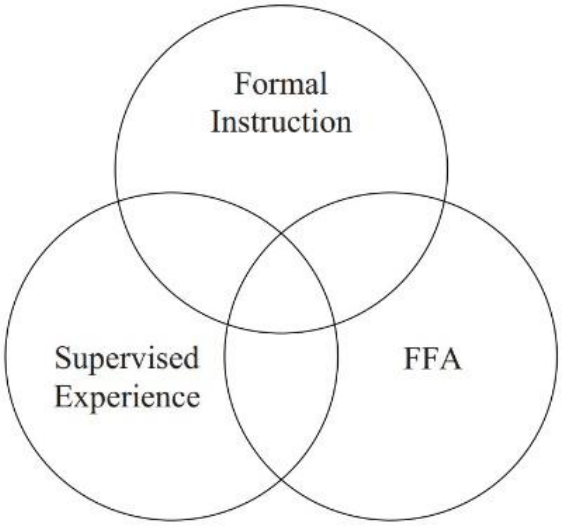

Table 1
Describing Philisophical Underpinnings and Manifestation at Secondary and Elementary Levels

Philosophical Underpinning	Manifestation at the Secondary Level (Croom, 2008)	Manifestation at the Elementary Level (proposed)
Cognitive Development	Formal Instruction	Formal Instruction
Experiential Learning	Supervised Experience	School Garden/Farm to School
Leadership Development	FFA	Citizenship (4-H, student org)

Cognitive Development: Formal Instruction has been adopted as the most appropriate mechanism to facilitate cognitive development in elementary age students by Georgia EAE teachers. While Georgia EAE teachers do not have an agreed upon lexicon to describe their formal instruction methods most EAE teachers use the terms: experiential learning, hands-on learning, inquiry-based instruction, and problem-solving.

Experiential Learning: Farm to School is a multi-faceted education program created to teach children about healthy practices around agriculture, food, nutrition, and the environment (National Farm to School Network, 2021). Several activities allow teachers to employ Farm to School, which are generally categorized under local procurement efforts, school gardens, and hands-on education.

Leadership Development: Citizenship is an activity that happens when citizens have power, influence, and responsibility to make decisions to positively impact their community (reference). The National FFA Organization currently does not recognize FFA below grade six; however, the Cooperative Extension Service's 4-H program has an existing curriculum focused on civic engagement as well as a long history of working with the elementary age students.

Results to Date/Implications

All 30 EAE programs in Georgia utilize formal instruction with an emphasis on experiential learning. Most EAE programs have some type of school garden and implement some Farm to School activities. Previous focus group studies conducted, but not yet published, among EAE teachers in Georgia support that school gardens are widely used and effective tools for implementing experiential learning at the elementary level. Leadership/citizenship education is the hindermost of the three components: some EAE teachers have started local FFA chapters while others have opted to start 4-H programs in their schools. Still others have decided to start new local organizations such as Garden or Ag Clubs.

Future Plans/Advice to Others

Local, School-Based Agricultural Education programs, including EAE, are community-based programs which should rely on the local teacher to determine the "best" way to implement the Total Program in their unique community. This model aims to demonstrate the functional as well as theoretical underpinnings of EAE so that administrators, new teachers, and parents understand possible best practices for implementation.

Costs/Resources Needed

There are no costs associated with this project.

References

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