Guide to Agricultural Education Practices

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Ag Ed Vision 3-Ring Model

Last Edit: Leslie Vite, Fall '22, 12/2022

The three ring model is incorporated into secondary agricultural education to promote the agricultural industry and create well-rounded and resilient students who are ready for the workforce. This model has been studied and proven by AgEd professionals to be most effective to the agricultural literacy field.
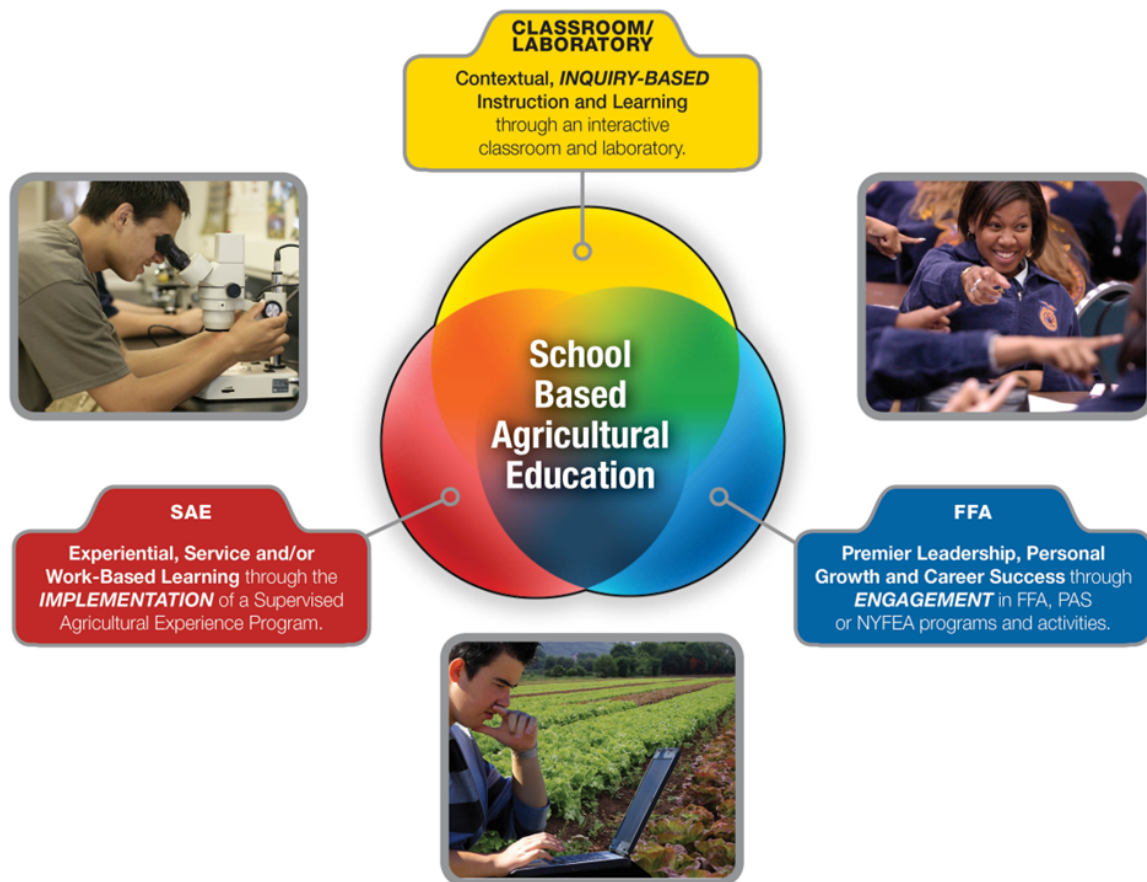
Although this model is not applicable to K-5th graders for the Food Explorers Program, it is important to keep in mind of the three components; classroom instruction, project based, and leadership/personal development. These components help shift the focus on curriculum building based on proven agricultural literacy practices.

Grade Levels	Academic Instruction	Experimental Learning	Leadership Organization
K-5	Understanding a	Applying the learned	Using lesson activities as

	deeper concept that relates to the agricultural goal for the lesson which challenges cognitive learning and life experiences	concept through activities such as planting, building, giving, counting, reading, writing, etc.	an opportunity to build on soft skills such as communication, teamwork, leadership, presentation, social skills
6-12	Learning contextual and inquiry based material on the agricultural industry which challenges cognitive learning and career readiness/exploration	Ultilizing out-of-the classroom agriculture projects that promote technical experience, service based work, meaningful practice, entrepreneurship, agri-research, or career readiness	Supporting agriculture club(s), leadership conferences, competitions, and community service activities so students can practice social, leadership and team development, interpersonal, emotional intelligence skills, etc.

Below there are examples on how the 3-ring model is used in agricultural education:

6-12 Grade Agricultural Education Examples: Full Potiental of the Three Ring Model
- Student takes an animal science courses
- Interns at local vet clinic and raises
- Completes Veterinary Science compeitions
- Have an interest in becoming a vet
  Without Academic Instruction
  - Vet tech drops out of college; knows how to give shot, but not how it works
  Without Experimental Learning
  - Student who is not comfortable around blood.
  - They understand the science, but cannot demonstrate skills
  Without Leadership Skills
  - They understand the science, but cannot articulate their communication skills well

K-5 Grade Agricultural Education Examples: Full Potiental of the Three Ring Model
- Student learns about plant growing and soil science in agriculture-based program
- Help in garden through planting
- Develops a sense of responsibility and leadership role in the garden

- Student has a greater appreciation of agriculture and farmers which results in them making better nutritional choices

    Without Academic Instruction
    - Students do not understand why gardening is relevant or how a plant grows

    Without Experimental Learning
    - Student cannot build applicable skills that will help them start a simple garden

    Without Leadership Skills
    - Students will not know how to communicate or advocate for the environment, agriculture, or nutrional choices in their homes, communities or school

Learning Goals

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A instructional objective is a collection of words intended to let others know what you wish for students to achieve. It provides a specific and measurable goal which is targeted towards students, not the instructor.

Questions to Ask Before Writing Objectives:
1. What should the students be able to do at the end of lesson?
2. Under what conditions should students be able to learn?
3. How well should it be done by the students?

In other words; Three Key Characteristics
1. Behavior - students actions
2. Condition - environment
3. Critieria - proficiency level

Application of the Three Key Characteristics
1. Behavior - Use Bloom's Taxonomy to choose an active verb

Active verbs developed based on Bloom's Taxonomy

Knowledge	Understand	Apply	Analyze	Evaluate	Create
define	explain	solve	analyze	reframe	design
identify	describe	apply	compare	criticize	compose
describe	interpret	illustrate	classify	evaluate	create
label	paraphrase	modify	contrast	order	plan
list	summarize	use	distinguish	appraise	combine
name	classify	calculate	infer	judge	formulate
state	compare	change	separate	support	invent
match	differentiate	choose	explain	compare	hypothesize
recognize	discuss	demonstrate	select	decide	substitute
select	distinguish	discover	categorize	discriminate	write
examine	extend	experiment	connect	recommend	compile
locate	predict	relate	differentiate	summarize	construct
memorize	associate	show	discriminate	assess	develop
quote	contrast	sketch	divide	choose	generalize
recall	convert	complete	order	convince	integrate
reproduce	demonstrate	construct	point out	defend	modify
tabulate	estimate	dramatize	prioritize	estimate	organize
tell	express	interpret	subdivide	find errors	prepare
copy	Identify	Manipulate	survey	grade	produce
discover	indicate	Paint	advertise	measure	rearrange
duplicate	Infer	Prepare	appraise	predict	rewrite
enumerate	relate	produce	Break down	rank	role-play

2. Condition - What will the learner be expected to use when learning? (tools, material, learning environment (inside/outside))
3. Criteria - How well must it be done? (Time limit, accuracy, quality, etc.)

Examples of Intructional Objectives
- Using photographs provided by the instructor, identify ten beef breeds with no errors.
- Given a specific leadership style, build a paper structure according to original style height, and durability.
- Recite the FFA Creed from memory with no more than three prompts.
- Label five reproductive parts on a flower with 100% accuracy.
- Describe the process and by-products formed when making butter from cream with 90% accuracy.
- Using photographs provided by the instructor, identify ten beef breeds with no errors.
- Given a specific leadership style, build a paper structure according to original style height, and durability.
- Recite the FFA Creed from memory with no more than three prompts.
- Label five reproductive parts on a flower with 100% accuracy.

Unit Objectives

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Unit objectives are similar to learning objectives, but are more broad goal for the entire unit of instruction. This often uses behavior-based learning goals.

Examples of Unit Objectives

Objectives for Unit 12 of Intro to Agriscience
- Discuss the history and domestication of small animals
- Determine the economic importance of small animals
- Describe the types and uses of various small animals
- Discuss how to properly feed and care for small animals.

Steps of Unit Planning
1. Review standards/contents of the unit
2. Compose unit objectives
3. Consider amount of time needed to teach unit objectives
4. Include any additional unit objectives that should be added
5. Sequence the unit objectives in a logical order
6. Determine number of days needed to teach the unit Include time for:
   a. Direct Instruction
   b. Learning Activities
   c. Assessments of learning

AgEd Focused California Standards

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These standards are more created for secondary education by ag ed professionals, but can still be applicable and simplified for K-5th grade.

Some of the standards include:
- [CTE Model Curr Stds: Ag & Natural Resources - Standards and Framework (CA Dept of Education)](#)
- California Academic Standards
- Next Generation Science Standards (NGSS)

Other Curriculum Resources
- [Teaching and Curriculum Resources | California FFA and Agricultural Education (calaged.org)](#)
- https://learnaboutag.org