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Using a performance-based learning model for beginning farmer education program

AT A GLANCE

Performance based curriculum used to enhance core competencies skills of beginning farmers in Idaho.

Participants harvest during hands-on workshop at the Sandpoint Organic Agriculture Center. Photo by Jen Jensen.

The Situation

As small farms continue to increase in Idaho, beginning farmer education continues to be a need. Participant surveys from previous beginning farmer education programs indicated a need for more in-depth and hands-on education. With this task in mind, a team of Extension **e**ducators utilized the performance-based learning design to develop both online and hands-on education modules that could be used at various locations.

Our Response

Extension educators first met with farmer collaborators to help determine what beginning farmers need to know and to be able to do to have a more productive and efficient farm operation. This determined the primary topics to be addressed in the learning modules. Extension educators then researched and were trained on the performance-based learning model. Adult learning styles were reviewed and learning objectives that focused on what beginning farmers need to do with the information they learn were developed. Core competencies or skills that farmers should be able to complete as a result of our training were identified. Modules for both the online course and hands-on workshops were based around core competencies and learning objectives. Modules incorporated assessment activities, practice activities and comprehension activities or presentations.

The online course curriculum focused on starting a small business in Idaho, market analysis, soils, climate assessment, irrigation, crop production planning, infrastructure needs and harvesting. This Zoom and online module class included presentations from Extension educators and farmers throughout the state to best address the needs of all participants. In class activities and homework addressed the assessment and practice activities. For the hands-on modules, the workshops were structured around the basic core competencies or skills that were identified as needs of beginning farmers. These workshops were offered

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around Idaho at different teaching garden sites. Some were offered at a university-run teaching market garden, others were held on farmer-collaborator sites, while others were held in a community garden setting. For all modules, participants were surveyed at the completion of the module. The survey asked participants to describe their knowledge on topics related to the module, as well as their confidence in their ability or preparedness to perform a related activity or skill.

Program Outcomes

The online webinar course had 35 participants in 2021 and 24 in 2022. Based on pre and post surveys, knowledge related to the core competencies increased knowledge related to legal requirements for starting a produce business, farm recordkeeping for tax and legal purposes, market options for selling products, how to create a crop production plan to meet your market goals, factors to consider when deciding which crops to grow, keeping crop production records, farm food safety practices, and how to determine what infrastructure you need for a safe and efficient harvest.

Confidence in participants' ability to perform competency skills was also measured and is displayed in the table.

For the hands-on workshops, preparedness such as preparedness to decide which soil health indicators are most useful for your situation and preparedness to take steps to improve your soil health. The majority of participants reported feeling moderately or very prepared for the soil health tasks covered in the workshop.

The Future

The goal is to further develop the curriculum to create a curriculum packet that would be useful to other educators. This would describe teaching farm models as well and workshop modules.

Table: Confidence in skills from post survey of online course.

Confidence in ability to…	Not at all Confident		Slightly Confident		Moderately Confident		Very Confident	
	2021	2022	2021	2022	2021	2022	2021	2022
Develop a farm recordkeeping system.	1		5	1	11	9	6	7
Maintain health/wellbeing while operating a market garden.			7		17	5	6	5
Assess soil texture.		2	7	6	14	7	6	2
Take a soil sample for testing.	1		2	4	13	6	12	6
Determine how much of each crop to plant based on market goals.			10	3	10	7	1	4
Determine when to plant specific crops.			7	3	9	6	5	5
Incorporate food safety practices on your farm.			2		14	9	11	7

FOR MORE INFORMATION

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