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Piloting Beginner Urban Farmer Online Training in Utah

Abstract

Extension has expanded programming in urban agriculture. With the Utah State University (USU) online Extension Master Gardener Course, and programs such as the Urban Small Farm Conferences and Urban Homestead Expo moving to virtual platforms, interest and participation in gardening and small-scale agriculture has grown substantially. Increase in small-scale and beginner urban farmers throughout the state, along with consumer demand for fresh and local produce indicates need for additional learning platforms for growers. In 2023, USU Extension piloted a Beginner Urban Farmer Online Training program to meet demands for online learning and further support Utah's small-scale grower through a self-paced learning platform.

Participants expressed that the self-paced component and media content was the most useful aspect of the course. Interestingly, there has only been a 26% completion rate since the course launched. Participants "strongly agreed" that the learning objectives were met. However, there is need for more peer and presenter interactivity, such as a message board and in-person field day opportunities. The Beginner Urban Farmer Online Training generates a small but steady amount of funds through course fees to allow Extension to continue to expand our content, based on participant feedback and follow-up assessments. Overall, online programming can be an educational tool, but it is

important to integrate opportunities for interaction among small scale growers and course instructors.

Abbreviations: Utah State University (USU), Urban and Small Farms Conference (USFC)

Keywords: Urban Farms, Online Training, Small Acreage, Community Agriculture



Logo for USU's Beginner Urban Farmer Online Training program

<https://extensioncourses.usu.edu/wp-content/uploads/2023/06/Urban-Farmer-Training-Thumbnail.png>

Introduction

The number of small farms, or micro farms, defined as 1-9 acres, increased by six percent between 2007 and 2012 (USDA, 2012). Along with the growth of urban agriculture comes a variety of benefits to communities including food security, environmental sustainability, and physical and mental health (Hazell, 2005; Colasanti et al., 2012). Urban farms provide communities with access to fresh and local food which addresses concerns of both food security and environmental sustainability (Lovell, 2010). Systems such as farmers markets and community gardens have been shown to increase fruit and vegetable intake (Savoie-Roskos, et.al, 2015) and can build community relationships, cultural identity, recreation, and more realistic understanding of and personal connection with food (Lovell, 2010). Multiple studies have cited that increasing social bonds, crisis support, greater resource acquisition including funding and positive policy creation are benefits of urban agriculture (Santo et al., 2016). Additionally, urban farming supports increased biodiversity, micro-climate regulation, reduced air pollution, recycling of organic waste through composting, and upholds cities' capacity to produce food in times of crisis (Santo et al. 2016).

Most Utah farming operations are small acreage. A comparison of new and beginning producers (10 years or less in operation) to all producers shows an even greater majority of beginning farmers operating on small acreages: 1 to 9 acres (41% of farms) vs. 10 to 49 acres (28%), and only 8% of new and beginning producers farming 500 acres or more (NASS, 2020).

With over 35% of society constantly connected to social media and relying on the internet for information, Extension needs to develop digital content that is readily available to all clientele (Diem, et.al., 2011). High demand programming, such as urban agriculture and micro farm education can transition into online curriculum. This will increase outreach and strengthen communities. Extension programming has been expanding its focus to both beginning and advanced farmers on small scale acreages, using online-based platforms as an innovative approach.

During the pandemic in 2021-2022, annual USU events such as the Urban and Small

Farms Conference (USFC) and the Urban Homestead Expo were transitioned to virtual delivery. In-person USFC averaged 250 participants annually (2013-2020) and skyrocketed to 700 attendees annually (2021 and 2022) when the conference was held virtually (Curtis and Wagner, in preparation). In addition, numbers of participants who identify as beginner farmers increase each year. In response to demand, a team of USU Extension specialists and agents received grant funding for the Beginner Urban Farmer Online Training. The online training was piloted in 2023. Goals for our pilot year are to assess the value of an online course for beginner urban farmers, adjust as needed to improve quality and learning experience, and add content to the course according to clientele needs.

Methods

In 2022, a team of Extension Agents and USU Extension Specialists were awarded an Extension grant for the Beginner Urban Farmer Online Training. Funding was needed to support marketing, content editing, production, and travel fees. Needs assessments were conducted identifying current educational opportunities and gaps in programming as well as what subject matter was a high priority to clientele. There were multiple tactics in collecting needs assessments. Data collected from USFC surveys and session attendance indicated high demand for micro-farming (less than two acres) and beginner urban farmers. An additional needs assessment survey was emailed to various agriculture and horticulture listservs. Surveys were designed to identify four to five programming topics to include for the pilot year, as well as clientele preference for duration of the online training sessions.

Analysis of the program follows the USU's suggested guidelines in identifying need: or the gap between two conditions: "Current Problems and Desired State," with integrating a program that fills the current need and thereby accomplishing the desired state (Narine et al., 2020). According to Raidl et al. (2004), retrospective surveys serve as "an effective way to measure self-reported behavioral change." Follow-up evaluations will be used as a tool to determine long-term impacts financial impacts, and the implementation of practices taught.

Needs assessment data helped the team develop specific curriculum topics for the pilot year. Each team member created learning objectives, curriculum outlines, and presentation drafts. Four priority topics were identified through needs assessment: Finance and Marketing, Soils, Site Assessment, and Weed and Pest Management. Needs assessments also indicated that clientele preferred 25 to 30-minute trainings.

PowerPoint presentations were created by a team of USU Extension Specialist/Experts assigned to each topic. The team worked with USU Marketing on PowerPoint design for consistency throughout the training. Presentations, or modules, were recorded by USU Extension Instructional Design team members. Modules were roughly an hour and a half long and broken up into approximately 30-minute segments. Field recordings were added to the modules to help participants conceptualize content visually. Team members created questionnaires and worksheets to further assist participants to apply concepts. Lastly, evaluation surveys were added to the end of each module with an overall course evaluation at course completion.

The course was designed in the Learning Management System (LMS) platform online which provides statistics on course completion, assignment completion, and the opportunity to add a student chat box. The course is designed so that participants can pause and resume learning at any time. There was not an interest in certification or continued education units (CEUs) according to survey data, therefore completion certificate or CEUs are not offered with the course. The course was launched in June of 2023, and advertised through USU Extension social media platforms, and invites were sent via email listservs across the Wasatch Front (northern Utah counties). Feedback and evaluations from the pilot year will be utilized for adjusting the training and to suggest new modules according to clientele needs.

Results

Extension Programing has been expanding its focus to both beginning and advanced farmers on small acreages, using online-based platforms as an innovative approach. A

comparison of Master Gardener training delivery methods (in-person, hybrid, and fully virtual) for Salt Lake County Utah was done. In-person was ranked as the most preferred method and virtual instruction along with Q and A sessions via zoom was the second highest ranking delivery method (Wagner and Schaible, 2021). Furthermore, the recent online USU Master Gardener program has been highly successful. This shows that there is an interest in the topics and in online sources of information.

So far, there are ten participants registered for the course, with only two individuals completing the course, resulting in inconclusive data until participation and completion number increase. Participants indicated that self-paced, online content is the most valuable aspect of the course, but improvements are needed for more interactivity with the presenters and fellow participants. In addition, there was feedback requesting more information on weed control, specifically. This shows that while there is more demand for online programming, online courses will need to be supplemented or integrated into other types of programming. This could be augmented with a field day or other opportunities for interaction.

Course evaluation results show an 80% increase in knowledge gained by participant. Participants “Strongly Agreed” that the learning objectives were met and plan to apply information/skills learned immediately. Lastly, 100% of responses would recommend the course to a friend or family member, showing that the materials in this format are effective in providing the information. Follow-up longer-term evaluations can capture other impacts of the course. Overall, the results show that the effectiveness of the online course is similar to other current methods of program delivery. Online courses can be a valuable part of Extension programming, but they will not eliminate the need for other types of in-person programming.

Discussion

The Online Beginner Urban Farmer Training provides an affordable option for busy growers to access research-based information at their own pace. As this is the pilot year for the Online Urban Farmers course, some improvements to the course are

needed. Overall, the course has been a successful resource for the participants. Plans are to expand the online program based on participant feedback. Although participants have contact information for each of the presenters, the most pressing demand from our participants is for more interactive engagement, therefore in-person learning opportunities such as field days should be implemented in future years.

Only 26% of participants have completed the course, resulting in partial data. Although there is no timeframe for course completion, it is unknown whether registered individuals who have not completed the training will continue to pursue their learning. The Course was launched during the growing season, which likely restricted free-time for growers. This could also be a compelling argument as to why clients preferred dividing modules into short 20 to 30-minute segments.

The goal of Beginner Urban Farmers Online Training Pilot year was to assess benefits of the training and address any additional needs to support small scale growers. Additional advertising is needed to increase participation by spring 2024. With increased advertising during the off season for many growers, it is anticipated the course participation and completion will increase. Long-term impacts will be determined through follow-up surveys using Qualtrics in July of 2024.

Conclusion

With the increase in small acreage growers in urban Utah and consumer demand for fresh, local produce, it is important to support urban growers whether they are starting a business, community farm, or school garden. An online curriculum is an opportunity for busy growers to learn at their own pace during free time. The pilot Online Beginner Urban Farmer Training serves to collect feedback that will help improve and expand outreach goals for urban farm clientele.

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