



# Micro-Farming: Reducing rural and urban food deserts through job training

**Abstract:** A community college sustainability coordinator formulated a continuing education course to educate aspiring farmers about all aspects of producing and marketing local foods in southwest Iowa. The course curriculum was shared with other Iowa community colleges.

## Principal Investigator:

**Matt Mancuso**  
Iowa Western  
Community College  
Council Bluffs

**Budget:**  
\$16,994 for year one

**Q** Could a continuing education program for aspiring local farmers increase contributions to the local food system?

**A** The Dream to Farm: Micro-Farming program was created and extensive follow-up took place for a year after the project. Participants were placed in three different categories: contributing, developing and not contributing to the local food system.



**MARKETING**

## Background

The Micro-Farming: Reducing Rural and Urban Food Deserts through Job Training project led to an innovative 42-hour continuing education course at Iowa Western Community College (IWCC) in Council Bluffs. The course, named, Dream to Farm: Micro-Farming, will continue to train a new generation of farmers to increase production of fresh, healthy and affordable food to alleviate identified regional food deserts in southwest Iowa. Urban and rural food deserts in Cass, Fremont, Harrison, Mills, Page, Pottawattamie, and Shelby counties in predominantly rural southwest Iowa were served by this project.

IWCC and its partners engaged in a collaborative effort to meet the goals of the grant. The objectives were:

- Develop a Micro-Farming training course specifically for southwest Iowa
- Recruit and train 30 students within the first year
- Graduates of the Dream to Farm: Micro-Farming program will increase the number of local food producers in southwest Iowa with continued support for Iowa Western and its partners
- IWCC will make this curriculum available to any of Iowa's 11 community colleges
- The Micro-Farming project will be sustained through tuition of future participants, as well as ongoing grant development by IWCC and Golden Hills RC&D

## Approach and methods

In March 2012, Iowa Western Community College and Golden Hills RC&D convened a meeting of local farmers, instructors from the college and local food advocates to develop a curriculum that would encompass both the business and science of growing local foods in southwest Iowa. After a series of meetings, two instructors from Iowa Western, two farmers from the local foodshed and one businesswoman in local foods developed a comprehensive curriculum. Members of this development group became the instructors for the Dream to Farm: Micro-Farming program.

The coordinators from Golden Hills RC&D and Iowa Western worked closely with Andy Larson from ISU Extension Sustainable Small Farms, who served as an advisor throughout the process. After the curriculum was created, four local farmers reviewed the full curriculum and provided feedback. Based on their advice, changes were made to ensure the relevance of the curriculum.

Iowa Western scheduled two Dream to Farm: Micro-Farming session that ran for 14 weeks; one starting in May 2012 and another in September 2012. Iowa Western and Golden Hills RC&D created brochures to disseminate to all local food partners. Iowa Western placed these class listings in their course catalog which is distributed to more than 30,000 households in southwest Iowa. Social media as well as stories in newspapers and on the radio were used to get the word out, along with promotion by partners. For the May session, there were 17 individuals and 12 for the September program. In the first class, there were two individuals from local government who came to gain knowledge and better understand how they could help the local food movement from a political standpoint.

## **Results and discussion**

Iowa Western created a usable curriculum for local farmers in southwest Iowa. This curriculum was developed by educators and farmers. Due to the changes in the local food environment, this curriculum will be altered to meet the current needs and ensure a comprehensive education in local food production. Segments of the curriculum covered business planning, farming technologies, soils, animal husbandry, irrigation and integrated pest and disease management.

The objective was to train 30 individuals over two class sessions; Iowa Western was able to train 29 individuals. Twenty-three percent of the students from the two sessions now are growing and selling food. They are pumpkin growers, cattle producers and vegetable farmers in both urban and rural areas. These students already are having a positive effect on the local food production arena in southwest Iowa. One farmer created a new farmer's market in a low-income area where she sells her local produce. Most of these farmers are not large-scale producers, however, with the education and support from the Dream to Farm program, these individuals will continue to scale up their operations.

Another 23 percent of the students work in the local food industry or are transitioning in order to sell their products in the next year or two. Even after the funding ended, Iowa Western worked with the producers who are trying to make the leap to larger harvests by providing farming mentors and other resources. Some students became gardening educators and community garden managers. In the original proposal, organizers didn't anticipate that some students would choose not to produce local food, but would make a contribution to the development of gardeners and farmers in the community. Only 70 percent of the students who started the program completed it; students dropped out in both sessions. After talking with the students, it was determined that most did not realize how much work it takes to be a local producer and the information in the course was an eye opener for them.

## Conclusions

The Dream to Farm: Micro-Farming program has helped encourage new local producers in southwest Iowa. Seven of the 30 students currently are producing and selling their produce and before this class they were not. This program gave them the education and resources they needed for their farms to succeed. The curriculum that was developed by the educators and farmers is a resource that Iowa Western will share with any interested parties. One unexpected result was that almost 30 percent of the students did not complete the program. This was partly due to the students not having a full understanding of what the program (and local food production) entailed. Better explanations on the marketing material might have helped.

## Impact of results

Iowa Western worked hard to share the curriculum with other colleges that were interested. Three Iowa community colleges received the curriculum as well as an institution in Omaha, Nebraska. The organizers saw this as an important aspect of the project and hope that other community colleges would implement similar programs to further develop the local food system throughout Iowa. The curriculum was duplicated by Metro Community College in Omaha, which is located in the same foodshed as southwest Iowa. Iowa educational institutions could utilize these results and enhance their local food economies. The program yielded 23 percent of graduates producing and selling food items and 46 percent of the graduates producing, scaling up and/or making some contribution to the local food industry. Over time, these contributions will strengthen their communities' local food economy.

Iowa Western was able to obtain funding for three more training sessions of the Dream to Farm Program and will continue to educate future local farmers of southwest Iowa. Over time, if the statistics of graduates producing and making contributions remain steady, there will be an increase in producers and in local food contributions. The development of a stronger local economy based around food would benefit any Iowa community.

## Education and outreach

After the creation of the Dream to Farm: Micro-Farming curriculum, Mancuso began communicating with Iowa's other 11 community colleges to disseminate information about the program. In August, Mancuso met with Des Moines Area Community College and Kirkwood Community College to share the curriculum. In September, the curriculum was electronically shared with Northeast Iowa Community College. Metro Community College in Omaha had two instructors take the May program to become familiar with the curriculum and knowledge so they could provide a similar program at their college. They have since developed an Urban Farm program by modifying the curriculum from the Dream to Farm program.

## Leveraged funds

No additional funds were leveraged by this project.

***For more information,  
contact:***

*Matt Mancuso,  
Sustainability  
Coordinator, Iowa  
Western Community  
College, 2700 College  
Rd., Council Bluffs, IA  
51503, (712) 325-3448,  
e-mail mmancuso@  
iwcc.edu*