

4-1-2016

## A Qualitative Exploration of Entrepreneurial Learning Among Southern Arizona Small-Scale Farmers and Ranchers

Jessica Zamudio

*University of Arizona*, [jmzamudio1@email.arizona.edu](mailto:jmzamudio1@email.arizona.edu)

Matthew M. Mars

*University of Arizona*, [mmars@email.arizona.edu](mailto:mmars@email.arizona.edu)

Robert M. Torres

*University of Arizona*, [rtorres1@email.arizona.edu](mailto:rtorres1@email.arizona.edu)

---

### Recommended Citation

Zamudio, J., Mars, M. M., & Torres, R. M. (2016). A Qualitative Exploration of Entrepreneurial Learning Among Southern Arizona Small-Scale Farmers and Ranchers. *Journal of Extension*, 54(2), Article 25. <https://tigerprints.clemson.edu/joe/vol54/iss2/25>

This Feature Article is brought to you for free and open access by TigerPrints. It has been accepted for inclusion in *Journal of Extension* by an authorized editor of TigerPrints. For more information, please contact [kokeefe@clemson.edu](mailto:kokeefe@clemson.edu).

## A Qualitative Exploration of Entrepreneurial Learning Among Southern Arizona Small-Scale Farmers and Ranchers

### Abstract

Small-scale farmers and ranchers who participate in local food enterprise are challenged by a number of market uncertainties. These uncertainties include unpredictable consumer purchasing patterns, seasonal production variations, and relatively small customer bases. Moreover, farmers and ranchers turned local food entrepreneurs have limited access to business training and, thus, rely on experience and experimentation to guide their business decision making. This article draws on qualitative data to explore how farmers and ranchers who participate in Southern Arizona farmers' markets develop entrepreneurial knowledge and skills. Recommendations for how Extension educators can enhance the entrepreneurial learning of small-scale farmers and ranchers are provided.

**Jessica Zamudio**  
Graduate Student  
Department of  
Agricultural Education  
[jmzamudio1@email.arizona.edu](mailto:jmzamudio1@email.arizona.edu)

**Matthew M. Mars**  
Assistant Professor  
Department of  
Agricultural Education  
[mmars@email.arizona.edu](mailto:mmars@email.arizona.edu)

**Robert M. Torres**  
Professor and Head  
Department of  
Agricultural Education  
[rtorres1@email.arizona.edu](mailto:rtorres1@email.arizona.edu)

The University of  
Arizona  
Tucson, Arizona

### Introduction

Community development, whether in rural or urban environments, benefits in multiple ways from local agricultural production and consumption (e.g., Brown & Miller, 2008; Delind & Bingen, 2008). Thus, local food enterprise provides multiple opportunities for Extension educators to contribute to the economic development and overall vibrancy of communities (Sharp, Imerman, & Peters, 2002). Extension educators support local agricultural enterprise (e.g., community-supported agriculture shares, farmers' markets, you-pick farms) in various ways, including by conducting market research aimed at identifying specific consumer needs and preferences (Govindasamy, Italia, & Adelaja, 2002), fostering entrepreneurial networks among otherwise competing markets (Baker, Hamshaw, & Kolodinsky, 2009), and educating consumers on the quality and overall value of locally grown and harvested food products (Gwin & Lev, 2011).

The markets that underpin local food enterprise are often uncertain and limited in terms of profit potential. Yet these markets provide economic opportunities, albeit modest in scale relative to mainstream agriculture, to local farmers and ranchers who do not harvest enough product to meet the input demands of corporate grocers and industrial-scale food manufacturers (Chase & Winn, 1981; Payne, 2002). Nonetheless, farmers and ranchers engaged in local food production and

direct-to-consumer business models are confronted with myriad rigorous and uncertain market conditions. Equipping these farmers and ranchers with deeper knowledge and stronger skill sets in the areas of business management and entrepreneurship is one strategy for helping them overcome the volatility of local food economies. Extension educators are well positioned to provide such business training (Abel, Thomson, & Maretzki, 1999). However, little is known about the type of entrepreneurial curricula and programs that are most likely to engage and meet the educational needs and expectations of farmers and ranchers.

## Purpose and Methods

The purpose of the study reported here was twofold. First, the researchers sought to gain insight into and understanding of how small-scale farmers and ranchers who participate in farmers' markets develop business knowledge and skill sets (e.g., inventory management, marketing, price setting). Second, the researchers aimed to illustrate the conditions and environments that are most likely to promote and support the entrepreneurial learning needs and goals of small-scale farmers and ranchers who sell their products directly to customers via farmers' markets. These two goals were pursued through a 9-month period of qualitative fieldwork in the Southern Arizona regional food system. The fieldwork was designed to reveal the patterns and themes that characterize and shape the entrepreneurial learning opportunities available to small-scale farmers and ranchers in this food system. The descriptor "small-scale farmer or rancher" was limited to only those who sell their products via farmers' markets and, in some cases, other local agriculture models.

The study was framed conceptually by using Politis's (2005) entrepreneurial learning model. This model frames entrepreneurial learning as an experiential process that occurs through the accumulation of relevant experience, ongoing experimentation, and the refinement of held assumptions and perspectives through personal reflection and interpersonal exchange among relevant actors (e.g., competitors, customers, suppliers). The development of entrepreneurial wisdom that accrues over time through experience, experimentation, and reflection, it is argued, enhances the capacities of entrepreneurs to recognize opportunities, avoid critical mistakes, and productively cope with the risks and uncertainties inherent in entrepreneurship.

Primary data were collected through semistructured interviews with 21 small-scale farmers and ranchers who are located in Cochise, Pima, and Santa Cruz Counties, Arizona, and participate as vendors in Southern Arizona farmers' markets (see Table 1). The participants were purposively selected through a theoretical sampling strategy as well as through a chain strategy that extended the depth of expertise of those included in the sample (Biernacki & Waldorf, 1981). All interviews were audio recorded and transcribed. Participants were assigned pseudonyms to protect their anonymity.

**Table 1.**  
Description of Participant Sample

Production activity			Local agriculture enterprise experience		Local agriculture enterprise activity		
			Novice	Seasoned			

Produce only	Livestock only	Produce and livestock	(< 5 years' experience )	(> 5 years' experience )	Farmers' market	Community-supported agriculture	You-pick farm
12	8	1	12	9	18	1	2

Data were also collected through naturalistic observation of the 21 participants (Patton, 2001). In particular, the researchers collectively spent nearly 65 hr observing the participants operating their booths during farmers' market hours. Observations of participant interactions with other vendors and customers were recorded as field notes. Documents reflective of the entrepreneurial strategies being deployed by the participants (e.g., advertisement flyers, business cards, business plans) were also collected.

The interview transcripts, field notes, and documents were first organized by individual participant and then idiographically analyzed, using a structured coding framework (Gelo, Braakmann, & Benetka 2008; Miles & Huberman, 1994) reflective of Politis's (2005) entrepreneurial learning constructs. The researchers then engaged in axial coding to compare the initial patterns that emerged from the idiographic analysis across the sample to reveal preliminary themes (Glaser & Strauss, 1967). These themes were narrowed and refined through several rounds of iterative analysis (Srivastava & Hopwood, 2009). The researchers also inductively analyzed the data at both individual and sample-wide levels, using an open-coding approach to reveal any additional relevant insights (Strauss & Corbin, 1990). Measures to enhance the trustworthiness of the analysis were implemented throughout the analytical process. These measures included triangulation across the data sources, comparison of coding between researchers, member checking, and the development and maintenance of an audit trail (Creswell & Miller, 2000).

## Findings

The business decisions of participants were primarily influenced by experimentation and lessons learned through experience. For example, "Debbie," a goat farmer, said, "I am continually playing with the [product] demand. I don't make a lot of money right now because I really just want to get my product out there. I soon plan to slowly raise prices to see what happens."

"Andrew," a farmer who sells watercress, green chili, corn, spinach, and kale through several farmers' markets, reported a history of entrepreneurial experimentation that only recently had begun to produce noticeable benefits. He explained his situation:

I think I'm very entrepreneurial, but this, I would say, is like the first one [business model] that I'm actually making money off of, and now I'm probably doing it full-time, like, actually living off of it [product sales].

"Charlie," an organic produce farmer, described how he operates his farm in terms of both growing and business strategizing by declaring, "I experiment like crazy!" The comments made by Debbie, Andrew, and Charlie illustrate an overarching theme of entrepreneurial learning through experimentation and the accumulation of experience.

Participants sometimes turned to peer observations when making business decisions, especially those pertaining to product pricing and marketing. "Amy," for instance, described monitoring and altering the prices she sets for the produce she grows in her 3-ac garden by "following what other people selling the same vegetables are selling theirs for." Amy explained, "If their prices go up, mine go up! If their prices go down, mine go down!" Participants also regularly monitored the stand setups, web pages, and social media sites of other market vendors in efforts to, as one participant described, "keep up with the Joneses and all the jazzy things people are doing to push their stuff."

However, such peer observations did not evolve into an entrepreneurial learning network composed of farmers' market vendors. In some cases, leanness of the knowledge and skills others possessed prevented participants from engaging in entrepreneurial learning through peer collaboration.

"Heather," for instance, who sells the eggs she harvests on her chicken, duck, and goose farm, described the lack of opportunity to learn from other vendors:

The thing about the farmers' market is that most of them [vendors] are not businesspeople. They're mom-and-pops that have some extras [product] or something. They are usually somebody that's either retired or just needs a little boost to their income or do it just for fun. This is a business for us. This pays our bills. There's a big difference.

In other cases, participants indicated that the threat of competition, whether real or perceived, prevented any form of collaborative learning among vendors. "Danielle," a farmer who grows and sells a wide range of produce, illustrated the competitive undertone of the farmers' market trade when telling a story of how another vendor tried to block her from selling her produce at a particular market:

It is very, very competitive. This other vendor told me, "Hey, we don't want you to grow what we grow. We don't want you at our farmers' market because we want to be the only vegetable vendor." Stuff like that. Why would we then try to help them or ask them for any kind of assistance?

The researchers also noted during naturalistic observations at the farmers' markets the reluctance and unwillingness of vendors to exchange information and knowledge with one another. In fact, no vendor-to-vendor conferment was observed. Conversely, the farmers regularly interacted with customers regarding the quality and price of their products. However, the vendors took mostly a defensive, albeit subtle, position with customers who focused on the justification of the prices of the vendors' goods. This position limited the capacity of the farmers and ranchers to objectively receive and learn from the perspectives and expectations of their customers. In short, the aversion to constructive peer-to-peer and vendor-to-customer interactions compromised the opportunity for entrepreneurial learning.

Some of the participants were not naïve to the limitations of their reliance on experience and experimentation to guide their business decisions and practices. For example, Andrew, a previously mentioned produce farmer, stated, "I'd like to think that I'm getting a little bit better than a lot of people around here, trying to make it businesslike. But I really do need help, but I'm probably not

compelled to go look for it [training]." "Justin," another produce farmer, expressed a similar perspective:

I think I have a lot to learn when it comes to making the most of my business. I have thought about taking a class or something like that at the community college, but there just isn't time. I am barely keeping my head above water as it is.

"Nick," who sells beef and pork from animals he raises on his ranch, indicated a willingness to attend business-oriented workshops at an annual organic farming conference "if something else doesn't pique [his] interest more." Although he recognized the value of expanding his business knowledge, it was not a priority in his professional development agenda. Participants such as Justin and Nick were complacent in their efforts to seek relevant business training through nonformal and formal learning channels. Other participants indicated that they neither had considered nor were even aware of opportunities to develop their business skills through coursework and planned curricula.

Overall, the farmers and ranchers who participated in the study operated on the basis of a settling logic. Specifically, they overwhelmingly assumed that growth in production and/or sales was out of reach and, thus, accepted the modest levels of success (and in some cases failure) of their businesses. Justin, the previously mentioned produce farmer, stated, "We are finally making a small profit and are holding on to a slim margin. I'd like to grow in the future." He went on to describe a "wish list" of additions he would like to bring to his farm, which included a wood chipper to support composting and fencing to allow for a flock of free-range chickens. However, he also said, "This is just me dreaming. I don't want to push my luck by getting over my head. Any profit is good." This settling logic was at least in part perpetuated by the perception that operational growth was a threat to even the most modest level of success. Consequently, this logic discouraged many of the farmers and ranchers from exploring and pursuing activities and initiatives that would expand their entrepreneurial knowledge and potentially stimulate the expansion of their businesses.

The aforesaid reluctance to experiment beyond modest success also pointed to the participants' overall struggle with managing the uncertainties and risks associated with entrepreneurial activities. Politis (2005) identified this type of struggle as "coping with the liabilities of newness" (p. 399). Some of the study participants were able to see opportunities for expanding into new market spaces, such as by producing and selling food products (e.g., jams, salsa), but were unwilling to confront and overcome the associated barriers to entry. Consider, for instance, "Jack," a produce farmer who expressed frustration with government regulations requiring that food products sold to the public be prepared in certified kitchens. He explained his position:

We are expected to know all of that stuff and to abide by those rules and regulations whether we agree with them or not. So government is a huge obstacle as far as business practices because they dictate to you what your practices are going to be, and that's, I think, that's probably the biggest issue for us.

Jack's discomfort with learning new guidelines and operating within a more heavily regulated market space pushed him to decide not to pursue the opportunity to prepare and sell food products. Jack's decision is illustrative of the general intolerance of the participants toward the uncertainties associated with expanding their businesses into unfamiliar market spaces. This intolerance toward the liabilities of newness limited the capacities of the farmers and ranchers to accumulate new experiences and learn through experimentation, in turn further stunting the potential growth and long-term viability of their businesses.

## Discussion and Recommendations

Consistent with Politis's (2005) model, the entrepreneurial perspectives and practices of the small-scale Southern Arizona farmers and ranchers included in the study were heavily shaped by the accumulation of relevant experiences and experimentation. The study findings also revealed three notable barriers to the entrepreneurial learning and development of the study participants, which were stifling the long-term growth of their local food businesses. These limitations centered on risks associated with the pursuit of new business opportunities, resistance to collaborative opportunities, and lack of involvement in learning opportunities:

- The accumulation of new experiences and the capacity to learn through experimentation were limited by the participants' unwillingness to contend with the liabilities that accompany the pursuit of new business opportunities. By avoiding new opportunities that are underpinned by degrees of uncertainty, the participants were unable to learn from new experiences and engage in further experimentation. The unwillingness to confront uncertainty and risk short-term failure is often detrimental to the long-term viability of entrepreneurial ventures (Fixson & Rao, 2011).
- The participants were, generally speaking, resistant to forming entrepreneurial learning networks with other small-scale farmers and ranchers engaged in local food enterprise. Such resistance prevented productive peer-to-peer exchanges of insights and knowledge. Accordingly, the participants were not able to learn from the experiences and experiments of others operating in the same or similar market spaces, nor were they able to create a supportive dynamic to aid one another in coping with the liabilities of newness that are inherent in entrepreneurial initiatives. This resistance to learning through the experiences and perspectives of others spilled over to prevent the farmers and ranchers from learning through interactions with their customers.
- The participants expressed minimal interest in, limited access to, and/or a lack of awareness of formal learning opportunities (e.g., community college coursework) and nonformal learning opportunities (e.g., Extension programs) specific to business and entrepreneurship. Such positions of indifference and/or unawareness prevented the participants from enhancing their entrepreneurial capacities through more directed and organized learning models.

Considering the competitive-defensive orientation of the participants toward one another and their customers and their lack of interest in, access to, and/or awareness of more formalized opportunities for business and entrepreneurship training, Extension educators in Southern Arizona are positioned to act as objective facilitators in the development of a more collaborative and productive entrepreneurial learning environment.

The findings of this qualitative study are specific to the Southern Arizona regional food system and, thus, are not generalizable. However, recommendations for Extension education practices aimed at fostering collaborative and productive entrepreneurial learning communities within and across regional food systems warrant more widespread consideration. In particular, the development of Extension-led interventions that target the entrepreneurial development of the small-scale farmers and ranchers who supply regional food systems likely would complement existing Extension activities aimed mostly at the viability and sustainability of the markets themselves (e.g., Baker et al., 2009; Civittolo, 2012; Govindasamy et al., 2002; Gwin & Lev, 2011).

One recommendation for compensating for the limitations of entrepreneurial learning through the accumulation of experience, experimentation and constructive interaction is to expand the diversity and accessibility of nonformal curricula and programs. Given the scarcity of time expressed by the participants, formal coursework offered by colleges and universities is likely infeasible. Nonformal entrepreneurial and business management curricula delivered by Extension educators through flexible learning channels (e.g., noncredit online courses, mobile applications) likely would help fill this void.

Extension educators also should further foster the efficacy of entrepreneurial learning through the accumulation of relevant experiences and experimentation. In particular, Extension educators are encouraged to position themselves as neutral, objective facilitators among farmers and ranchers who are otherwise resistant to knowledge exchange. For example, the creation of community blogs and online forums that bring local food entrepreneurs together to share their business successes and failures and exchange insights gained through experimentation warrant exploration. Similarly, the development of peer mentor programs, such as those commonly found in mainstream business incubators, should be considered as an approach to fostering a less competitive, more collaborative entrepreneurial learning community among local food entrepreneurs. Equally important, the farmers themselves should be included in the initiation and implementation of such innovations in order to create tools and models that are both relevant and effective. By working in an intermediary role that involves the mediation and enhancement of cooperative learning through informal exchange, Extension educators can create promising opportunities to assist small-scale farmers engaged in local food enterprise in overcoming the steep learning curve and uncertainties that are inherent in entrepreneurship. Doing so would both support the market success of the farmers and contribute further to the economic development and overall vibrancy of communities through the expansion of local food enterprise.

## References

- Abel, J., Thomson, J., & Maretzki, A. (1999). Extension's role with farmers' markets: Working with farmers, consumers, and communities. *Journal of Extension* [online], 37(5) Article 5FEA4. Available at: <http://www.joe.org/joe/1999october/a4.php>
- Baker, D., Hamshaw, K., & Kolodinsky, J. (2009). Who shops at the market? Using consumer surveys to grow farmers' markets: Findings from a regional market in northwestern Vermont. *Journal of Extension* [online], 47(6) Article 6FEA2. Available at: <http://www.joe.org/joe/2009december/a2.php>

- Biernacki, P., & Waldorf, D. (1981). Snowball sampling: Problems and techniques of chain referral sampling. *Sociological Methods & Research*, 10(2), 141–163.
- Brown, C., & Miller, S. (2008). The impacts of local markets: A review of research on farmers' markets and community supported agriculture (CSA). *American Journal of Agricultural Economics*, 90(5), 1296–1302.
- Chase, N. M., & Winn, J. H. (1981). Farmers' markets: An idea whose time has come . . . again. *Journal of Extension* [online], 19(2). Available at: <http://www.joe.org/joe/1981march/81-2-a2.pdf>
- Civittolo, D. (2012). Extension's role in developing a farmers' market. *Journal of Extension* [online], 50(1) Article 11AW3. Available at: [www.joe.org/joe/2012february/iw3.php](http://www.joe.org/joe/2012february/iw3.php)
- Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, 39(3), 124–130.
- Delind, L. B., & Bingen, J. (2008). Place and civic culture: Re-thinking the context for local agriculture. *Journal of Agricultural and Environmental Ethics*, 21(2), 127–151.
- Fixson, S. K., & Rao, J. (2011). Creation logics in innovation: The underlying mental model of the entrepreneurial leader. In D. Greenberg, K. McKane-Sweet, & H. J. Wilson (Eds.). *The entrepreneurial leader: Developing leaders who shape social & economic opportunity*. San Francisco, CA: Berrett-Koehler Publishers, Inc., pp. 43–61.
- Gelo, O., Braakmann, D., & Benetka, G. (2008). Quantitative and qualitative research: Beyond the debate. *Integrative Psychological and Behavioral Science*, 42(3), 266–290.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine Publishing Company.
- Govindasamy, R., Italia, J., & Adelaja, A. (2002). Farmers' markets: Consumer trends, preferences, and characteristics. *Journal of Extension* [online], 40(1) Article 1RIB6. Available at: <http://www.joe.org/joe/2002february/rb6.php>
- Gwin, L., & Lev, L. (2011). Meat and poultry buying at farmers' markets: A survey of shoppers at three markets in Oregon. *Journal of Extension* [online], 49(1) Article 1RIB4. Available at: <http://www.joe.org/joe/2011february/rb4.php>
- Miles, M. B., & Huberman, M. (1994), *Qualitative data analysis*. Thousand Oaks, CA: Sage Publications.
- Patton, M. (2001). *Qualitative research and evaluation methods*. (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Payne, T. (2002). *U.S. farmers' markets 2000: A study of emerging trends*. Washington, DC: U.S. Department of Agriculture, Agricultural Marketing Service.
- Politis, D. (2005). The process of entrepreneurial learning: A conceptual framework.

*Entrepreneurship Theory and Practice*, 29(4), 399–424.

Sharp, J., Imerman, E., & Peters, G. (2002). Community-supported agriculture (CSA): Building community among farmers and non-farmers. *Journal of Extension* [online], 40(3) Article 3FEA3. Available at: <http://www.joe.org/joe/2002june/a3.php>

Srivastava, P., & Hopwood, N. (2009). A practical iterative framework for qualitative data analysis. *International Journal of Qualitative Methods*, 8(1), 76–84.

Strauss, A., & Corbin, J. M. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Thousand Oaks, CA: Sage Publications.

---

Copyright © by *Extension Journal, Inc.* ISSN 1077-5315. Articles appearing in the Journal become the property of the Journal. Single copies of articles may be reproduced in electronic or print form for use in educational or training activities. Inclusion of articles in other publications, electronic sources, or systematic large-scale distribution may be done only with prior electronic or written permission of the *Journal Editorial Office*, [joe-ed@joe.org](mailto:joe-ed@joe.org).

If you have difficulties viewing or printing this page, please contact [JOE Technical Support](#)