

# Food Council and Extension Partnership Builds Food Literacy Using Experiential Food System Education

The local food policy council partnered with Extension to promote public education and outreach on food issues to council members and the community. Forty-seven individuals attended food system field trips led by Extension staff throughout the year, and 26 participants completed a retrospective survey to assess perceived benefits. More than 75% reported gaining knowledge and confidence to do food systems-related work. Food system field trips provide an interdisciplinary learning experience that helps increase food council member knowledge and confidence to do food system-related work, essential for stakeholders whose actions may affect access to healthy food.



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The food system is vast and encompasses all aspects related to food, from its source, to the table, and beyond. Basic learning about the food system consists of identifying its key activities, such as agricultural production, processing, distribution, transportation, retail, consumption, and disposal. However, deeper learning occurs when the inter-relationships of its key activities and responsiveness to external factors such as the economy, climate, availability of natural resources, impacts on health, and equity are better understood. Everyone who eats has a stake in the local food system and the potential to transform it through individual

food choices or collective action. Community decision-makers, such as food policy council members, may be able to provide better leadership impacting policies, systems, or environments that influence community health if they possess a systems-level knowledge of the local food system.

### LITERATURE REVIEW

Food literacy is a term used to describe individual competence or knowledge about food. The Ontario Dietitians for Public Health website (2021) describes food literacy as *"a set of interconnected attributes organized into the categories of food and nutrition knowledge,*

*skills, self-efficacy/confidence, food decisions, and other ecologic (external) factors such as income security, and the food system."* They propose a Framework for Healthy Eating guided by individual attributes categorized as food and nutrition knowledge, food skills, and self-efficacy and confidence. These attributes help a person navigate external ecologic factors, such as the local food system, to make informed food choices that support health (Locally Driven Collaborative Project Healthy Eating Team, 2018).

Food policy councils are bodies of stakeholders formed to improve the food system. The Johns Hopkins Center for a Livable Future's Food Policy Network website (2021) defines food policy councils as diverse networks that address food-related issues and needs in a designated area. It also explains that collaborative capacity is vital to help food policy councils make meaningful change through policy within their food system. Collaborative capacity has been described as the organizational ability to create inter-organizational systems with the aspiration of achieving collective impact (Thomas, Hocevar, & Jansen, 2006). A food council's influence may be determined by the geographic area it serves (e.g., local, state, or regional). Other factors that may limit or enhance its level of influence include its structure, the logistical and financial support it has, external factors like political climate or community context, and the attributes of its members, including leadership, dedication, diversity, and knowledge (Harper, Shattuck, Holt-Giménez, Alkon, & Lambrick, 2009). As food council members represent different sectors and possess varying degrees of food system knowledge, opportunities exist to increase council member capacity through learning.

Adult experiential learning theory

states that effective learning should include: concrete experiences; reflective observation about the experience; abstract conceptualization, new ideas, and learning; and active experimentation or application of ideas (McLeod, 2017). The social capital of council members and community support of their work, both essential elements of food policy council effectiveness, may be modified using educational efforts focused on food system issues (Calancie et al., 2018). Pedagogy themes such as collective action, systems thinking, experiential learning, and interdisciplinarity should be a part of sustainable food systems education (Valley, Wittman, Jordan, Ahmed, & Galt, 2017). Experiential learning consists of learning outside of the traditional classroom with field trips or studying abroad (Claiborne et al., 2020). Thus, food system field trips can provide an interdisciplinary learning experience to help increase food council member knowledge related to healthy, sustainable, and resilient food systems, potentially increasing the effectiveness of their food policy councils.

## PURPOSE

The purpose of providing food system field trips to food policy council members and the community was to increase knowledge and awareness about the local food system. Extension staff proposed that the food council and community members could improve their capacity to act on local food system issues through increased food literacy at the personal level, considering the attributes of knowledge, confidence, and awareness of ecological factors.

## METHOD

The Extension Healthy Food Systems (HFS) team in a large urban Extension office in Las Vegas, Nevada, provides the local food policy council with logistical support. Extension support includes facilitation and a community space to convene regular meetings, administrative support such as distributing agendas, keeping meeting minutes or routing information, maintaining the food council website, and other logistical activities. Through the many different programs that Extension offers to and with the community, its staff has developed excellent relationships with a large and diverse group of stakeholders representing a wide range of activities within the food system. Thus, it was easy for Extension staff to arrange educational opportunities such as food

system field trips. The Extension partnership also helped meet one of the food council's overall goals of promoting public education and outreach on food issues.

As a result, the HFS team created educational field trips made available first to food council members, and then if space remained, were opened up to the community. Extension offered transportation whenever possible and gave field trip participants the option of arranging their travel or meeting at the field trip location. In 2019, five food system field trips were offered, including:

- The largest hydroponic indoor vertical farm in Las Vegas, NV at 215,000 square feet that grew a wide selection of lettuces, microgreens, herbs, and more;
- The largest (110,000 square foot) residential recycling center in North America, home to state-of-the-art recycling technologies which feature an interactive Learning Center that gives visitors a rare, first-hand view of the recycling process;
- A 140,000 square foot, Safe Quality Food (SQF) Program Level 2 Certified produce distribution and processing center which inventories and distributes over 2,500-line items of bulk and fresh-cut fruits and vegetables;
- A large 3,000-acre 9,600 cow dairy farm located just 100 miles northwest of the city that milks its cows twice daily in state-of-the-art milking barns, produces both conventional and organic milk, has its calf ranch and an onsite compost area; and,
- A tour of three vastly different community gardens, including a newly developed one-acre community garden operated by a local church located in a low-income food desert, a well-established public four-acre community garden in downtown Las Vegas which also hosts community social events, and a lush two-acre neighborhood community garden with an orchard, egg-laying hens, pizza oven, and covered meeting space.

In December 2019, a program evaluation was done using a retrospective survey. The survey link was emailed to the 47 people (11 of whom were food council members) who had signed up for a field trip throughout the year. Some participants brought a guest who did not need to provide an email to attend; thus, they were not sent a survey. The anonymous survey asked participants about themselves and their work, which field trips they had attended, and what types of trips they would like in the future. It also included several questions about the perceived benefits they associated with their experience.

## RESULTS

Of the 47 surveys emailed, 26 were returned and completed, for a total response rate of 55%. The mode for the number of field trips that respondents reported attending was two, and 17 respondents attended two or more trips. Eight of the survey respondents represented education, 11 were from government agencies, six came from non-profit organizations, and one was from a farm. The top four content areas the participants reported working in were local or community food systems, health, youth, and economic development.

The majority of the respondents (88%) worked for employers that had or were developing food system goals, and 92% believed that progress towards achieving those goals was likely within five years. All respondents thought learning about the food system was very important to help them build their food system network. All believed learning was moderately to very important in helping identify, understand, and address food system issues. At least 76% of those who attended a field trip agreed with statements indicating gains in food system knowledge, social capital, and confidence (Table 1).

A variety of responses were provided for survey respondents to choose topics or places they would like to see or visit in future field trips. Although a free text option was given, no respondents decided to fill in the blank. The number of responses (and their corresponding percentages) indicating interest included the following:

- School food service / Institutional food program – 21 (84%)
- Animal food production / farm – 15 (60%)
- Landfills / waste – 12 (48%)
- Food banking / food pantries – 20 (80%)
- Grocery / retailing – 18 (72%)
- Culinary programs / union – 21 (84%)

The next question allowed respondents to write in free text about other desired food system services or programs. Common responses included volunteer opportunities, more educational experiences, webinars, guest speakers, hands-on participation, networking opportunities, and community outreach. The end of the survey allowed general feedback, which was very positive and supportive of the field trips, e.g., *"Keep arranging interesting trips, let's have a meal or snack*

*let's have a meal or snack afterward, and let's share our takeaways from the learning experience."*

## DISCUSSION

The purpose of providing food system field trips to food policy council members and the community was to increase knowledge and awareness about the local food system and its related issues. Of the 47 people that signed up to attend a field trip, 11 were food policy council members making up 23% of the total attendees. Although slightly less than one-fourth of all attendees, this number accounted for 73% of the 15 active council members at the time. Twenty community members attended, but higher community participation would have been preferred.

At least 76% of those who attended a field trip and responded to the survey perceived gains in one or more positive attributes (Table 1) associated with food literacy. For food council and community members alike, gains in food literacy should help them make more informed personal choices despite external factors like socio-cultural influences, socio-economic status, or environmental conditions (Desjardins & Haliburton, 2013). This increased awareness of external factors also contributes to increasing the capacity of food policy council members to make informed decisions and entertain innovative ideas to improve community resilience and health while considering food system issues.

A significant aspect of these field trips is the partnership with Extension through provision of resources, both capital, and human. By nature of its programming and mission, Extension is ideal for providing education regarding the food system. It has relationships with most key players in the food system, facilitating connections to engaging experiential opportunities. Its staff knows how to conduct non-traditional educational activities to maximize learning and improve outcomes. Nearly half of the total field trip participants (22) were Extension employees who helped fill available spaces at the last minute or transported tour participants. Since the field trips gave staff opportunities to build their knowledge about relevant food issues related to their Extension work, the trips contributed to their professional development. In this case, the partnership was mutually beneficial and a good example of how Extension can support a local food policy council to provide community-based food system education with human resources,



transportation, technology, and communication.

In-kind support provided to food policy councils also helps free up precious limited funding that is a needed resource that many councils need more of or lack. Approximately 68% of the 269 food policy councils surveyed in 2018 reported an annual budget of less than \$10,000, and nearly half of those had zero funding (Bassarab, Santo & Palmer, 2019). In Las Vegas, Extension has helped the local food council achieve its goal of promoting public education and outreach on food issues by organizing and co-leading these food system field trips.

Future Extension and food council food system field trips will be planned at sites that help meet the desired topics of learning expressed in the survey. Future field trips will feature reflection time to enhance participant learning as requested by survey respondents. Extension is also considering incorporating a shared meal or snack into future trips as suggested by a survey respondent. This would provide an ideal time for reflection and discussion amongst participants. A limitation of this project was using Eventbrite to capture registration instead of taking attendance on site. An improvement will be to ask for contact information for follow-up just prior to engaging in the field trip experience. Another limitation was not knowing how many respondents were food council members since this question was not asked. Future evaluation should consider whether knowledge gains from experiential food system education helps the council as a whole achieve greater effectiveness.

In conclusion, this paper provided an overview of a food policy council and Extension partnership that provided its members and the community with experiential food system education. The combination of Extension resources and the food council's purpose provided a mutually beneficial opportunity to increase food literacy among the community, and increase the food policy council's capacity and confidence as citizens engaged in the food system. It makes good sense and good stewardship for Extension to partner with food policy councils to help them achieve their goals and maximize their precious resources, so food council members can focus their work on building more healthy, sustainable and resilient local food systems.



You may click here to access the references, tables, and graphs for this article.



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**Table 1**

*Level of agreement regarding perceived benefits associated with field trip participation, N = 25\**

Statement ( <i>attribute associated with food literacy</i> )	Agree (#) %	Undecided (#) %	Disagree (#) %
I learned about more educational resources to inform my work ( <i>food and nutrition knowledge</i> ).	(22) 88%	(2) 8%	(1) 4%
I now have people I can contact who are passionate about this work ( <i>social capital; external factors</i> ).	(20) 80%	(3) 12%	(2) 8%
I gained more confidence to take action related to food systems ( <i>self-efficacy and confidence</i> ).	(19) 76%	(5) 20%	(1) 4%
I gained more confidence in knowing how food systems are affected in all aspects of my work ( <i>self-efficacy and confidence; external factors</i> ).	(23) 92%	(2) 8%	(0) 0%

*Note. \*one respondent did not attend the field trip and was excluded from this set of questions.*