

## Food systems practitioner and education resource database

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## **Abstract**

This report shares insights from The Food Systems Practitioner and Education Resource Database that was created in 2021 through a cooperative agreement with USDA Agricultural Marketing Service (AMS) in partnership with nine different organizations as a second phase of the Food Systems Core Competency project. The database aims to highlight and bring awareness to partner networks, educational resources, and food systems practitioners. It serves as an identification tool for individual to find mentors, peers, and learning opportunities related to personal and professional growth desires. This paper will review the database and its potential uses, profile types and network engagement opportunities.

## **Keywords**

competencies, framework, community, food systems, leadership

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This report shares insights from The Food Systems Practitioner and Education Resource Database that was created in 2021 through a cooperative agreement with USDA Agricultural Marketing Service (AMS) in partnership with nine different organizations as a second phase of the Food Systems Core Competency project. The database aims to highlight and bring awareness to partner networks, educational resources, and food systems practitioners. It serves as an identification tool for individual to find mentors, peers, and learning opportunities related to personal and professional growth desires. This paper will review the database and its potential uses, profile types and network engagement opportunities.

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## INTRODUCTION

Food Systems practitioners are involved in a variety of efforts and are expected to know a wide range of competencies needed for this work (Long & Chase, 2020). The Food Systems Practitioner and Education Resource Database was created to accelerate professionalization through a “concentrated effort to track and identify local food practitioner curriculum and a consensus set of core competencies as it relates to needed training and professional development opportunities” (Long & Chase, 2020). Competency based education exists among many different fields including public health, medicine, business, and foreign language (Soare, 2015). Typically, competency-based education focuses on teaching particular skills, abilities, knowledge, attitudes, and values associated with a particular field (Soare, 2015).

This project set out to understand and identify competencies for practitioners working across the food system to showcase the breadth of knowledge a person may hold to work in this field. The team also believed that the tool developed could give way to other educational experiences such as mentorship or apprenticeship opportunities, connections between practitioners working in the same or differing competency areas, and opportunities to evaluate gaps in education or programming as it relates to food system development.

To further describe the intent of the database, it is important to understand the history of the project. “Between August 2019-December 2019, Iowa State University partnered with USDA AMS and thirty national organizations to collectively identify core competencies needed for practitioners working in food systems by creating a set of learning objectives for each competency and identified existing curricula around the nation that met the objectives” (Long & Chase, 2020). This led to the group agreeing upon nine categories: Food Systems, Equity, Community Capacity, Economy & Business Development, Government & Policy, Public Health & Wellness, Environment, Leadership and Evaluation. An additional 41 themes and 142 competencies with three levels of learning for practitioners working in food systems were identified within the categories, shown in Figure 1.

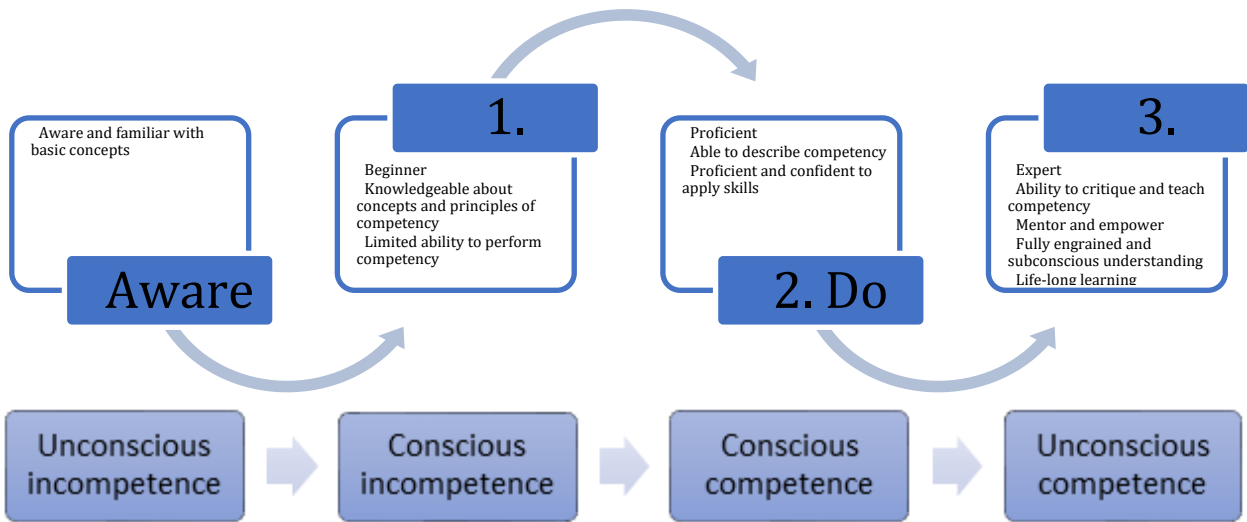


Figure 1: Levels of Learning related to Four Stages of Competence and Situational Leadership Model (Long & Chase, 2020)

Through this work, the primary objectives of networking and identification of food systems partners across the nation, understanding of existing curricula, and identifying gaps in curricula related to the identified core competencies were achieved. The next steps that were identified from the first phase included “creat[ing] an online portal to identify and highlight existing curricula, tools, networks and other best practices that support each level of learning and competency” (Long & Chase, 2020). This led to a second partnership with USDA AMS to create a database where food systems curricula and practitioners across the nation could be identified and evaluated based on competency area.

The second phase focused solely on database development, which also included understanding what practitioners and educational resources exist that meet the wide range of competencies identified in Phase 1. Goals of phase 2 included professionalizing food systems work and identifying gaps in existing food systems curricula and positions.

The developed food systems practitioner and educational resource database allows for practitioners to create individual profiles and to add educational resources based on the competencies along with other logistical considerations. Because of these inputs, viewers can search the database for practitioners and resources with specific competencies, levels of learning and areas of work. This includes searches for a particular organization, location, or affiliation to identify areas of interest. The goal for including these distinct categories is for individuals, regions, etc. to have an opportunity for networking across the nation or with particular communities of practice.

These features were officially launched in the spring of 2021 with the notion that initial users would be able to provide feedback on, and receive technical assistance for, profile creation and general navigation of the database. Within the website there is an embedded video for direction on profile creation. To build the network between users of the database we have created a quarterly newsletter that features practitioners and educational resource profiles and a database partner in each issue.

It is important to note, that while this database is available and has many opportunities for identification and connection, it is deliberate that there are not additional networking options or

professional development. Numerous organizations exist across the country that already provide professional development and networking among peers in food systems. Therefore, the food systems practitioner and educational resource database is specifically a website to identify information.

The following sections will discuss the methods in which the database was created including primary partnerships, profile types, and additional uses for the database.

## **DISCUSSION**

Local food practitioners across the United States working in urban settings need a wide range of professional experience and qualifications related to the jobs they currently hold. As mentioned, the Food Systems Practitioner and Education Resource Database project was developed to further professionalize the food system by creating a food systems competency resource database that showcases currently available curricula, resources, and food system employees nationally. Additional outcomes include increased networking throughout the nation on food systems curriculum, increased understanding of the existing curriculum related to food systems core competencies, and increased collaboration on these efforts between organizations.

The set of competencies and curricula identified from the fall 2019 Core Competency project was utilized as an initial starting point for development of the database. From the second survey in 2019, there were around 80 initial resources that shared information for the database. This information was used to understand how to best develop the educational resource profile questionnaire that leads to the resource profile.

There were three meetings with nine national partners to determine design and development of the food systems database. This included strategic collaboration with leading organizations that currently offer curricula and have been involved in local food systems curriculum throughout the last decade; North Carolina State, American Farmland Trust, Johns Hopkins Center for Livable Futures, the National Center for Appropriate Technology (NCAT), University of Vermont, Colorado State University, North American Food Systems Network (NAFSN), eXtension, Wallace Center.

To understand best practices, the team also sought out groups, such as the Food Safety Resource Clearinghouse, and learning from their development procedures. We also had partners who currently host databases and networks such as NAFSN, Wallace Center, and Johns Hopkins, as well as groups like the Local Food Economics webpage that aggregate multiple resources to share publicly. The Local Food Economics also now serves as one of the landing pages for more information.

In addition, we understood that sustainable funding for this type of project was necessary to both update data and reach new audiences about the tool. The Agricultural Marketing Resource Center (AgMRC) and their website also became a critical partner in the process. This collaboration includes adding the database to the existing framework of the scope of AgMRC in a national presence online. To accomplish this goal with AgMRC, an internal team at Iowa State University Extension and Outreach worked to develop a portal, including web development and design, server database and additional considerations determined by the partnership team. We agreed on the multi-partner development between AgMRC, Local Food Economics, and Iowa State University Extension and Outreach because this created the most effective maintenance plan and visibility strategy for the continuous additions to the database.

In addition to the specific methods of the committee, the database design team has continued to meet regularly in year 2 of the funding cycle. This has led to additional improvements to the database based on practitioner feedback on the usability of the database interface. We have also incorporated a pilot of testing out a regional food system working group map through the use of affiliations. Collaboration with the Iowa Regional Food Systems Working Group has allowed the team to better understand the constraints of the pre-existing forms in practitioner profiles, such as only being able to list one affiliation, or having to list a specific address for an office. Because of this

feedback we have changed the profile questions to allow for more than one affiliation as well as an “area of work” in addition to an address, to understand the full extent of each practitioner’s scope and region of work.

### **Profiles**

One of the primary elements of the database are profiles for practitioners and educational resources. Practitioners and educational resources are built through self-reported profiles that include food system categories and themes, location, and area of work. Practitioner profiles identify primary location, area of work, position title and organization and additional affiliations. Educational resource profiles also identify logistical aspects of each offering, such as: completion hours, fee for participation, languages offered and acknowledgement of completion; in addition to food system category, theme and competency met in the resource.

Practitioners can also add affiliations, like regional food systems working groups, coalitions, networks, etc. An example of this was shared in the discussion. Affiliations are a criteria in the search feature allowing for national, regional and state-based collaborative groups to be highlighted and promoted.

### **Engagement Opportunities**

The mapping component of the database allows for visualization of practitioner and educational resource profiles geographically. The map is a secondary searching capability tool to highlight each unique profile. From this development, we have learned about the continued need for development of individual state maps that utilize database information. We continue to work through options for widgets and “i-frames: on external websites to promote awareness of state-based resources and networks.

Additionally, due to the COVID-19 pandemic, we recognized a shift towards online educational curriculum. The database promotes online, national courses and certifications that are available to individuals across the nation. This could potentially lead to connections and networks that would not have otherwise been formed.

### **Curriculum Gaps & Opportunities**

Another opportunity for the database is to utilize the data to identify gaps in existing curriculum and what is taught in each competency. Comparing the existing educational resources across each other could lead to understanding gaps among competency areas.

Because the competency framework was used to identify objectives and learning outcomes, using the database as an assessment tool could help identify skill and knowledge areas within the competencies that need further development or are missing from existing educational resources.

Our proposal is to conduct a full identification and assessment process to understand missing components. Following this process, groups could come together to revise existing curricula or develop new material and continue to network and support practitioners working within areas of competencies to further identify needs and gaps. Additionally, based on a relatively new comparison with North Carolina State Extension Local Food Foundations Course and Iowa State University Local Food Leader, we believe it would be beneficial to apply for funding to gather a set of experts across each competency to fully address each learning objective for each level of learning and develop specific knowledge, skill and behavior sets. This would promote succinct and direct comparison options across educational resources.

### **CONCLUSION**

The Food Systems Practitioner and Education Resource Database is an appropriate professional development tool to support food systems practitioners in nine different categories of essential food systems competencies. The Iowa State Food Systems team will continue to develop

and upkeep the database and ongoing aspects such as accepting feedback from users, data collection for the newsletter and website, and outreach through quarterly newsletters.

Additional goals include partnering with curricula providers to compare and contrast educational resource; development of state, or regional, maps that include database profile information to be utilized on external webpages per organizational requests; develop working teams to further review and edit the learning objectives and define each competency area; and to develop an accrediting body that can review, critique and accredit curricula.

Overall, educational and networking opportunities for professional development continue to be needed and shared with food systems practitioners and competencies will need to continue to be addressed and assessed to ensure all areas of food systems work are being represented.

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