

15

Cooperative Extension's Past and Present Investment in Workforce Development

Kenneth M. Sherin
Cheryl Burkhart-Kriesel

The land-grant university system may not be the first institution that comes to mind when you think of our country's historical link to workforce development. But its connection to improving country or rural life and ultimately its workforce goes back many years to the early 1900s. Theodore Roosevelt's Country Life Commission identified the workforce as one of the deficiencies in rural America that had to be addressed. In 1910, President Roosevelt wrote, "The strengthening of country life (rural America) is the strengthening of the whole nation" (Bailey 1917, p. 10). A few years later in 1914, the Smith-Lever Act was passed, which created the Cooperative Extension System as part of the land-grant colleges and universities to literally "extend" the knowledge of the institution so that the common person could use the information to improve their daily life (Muske, Shepelwich, and Woods 2007). Much of this information was vocational in nature and initially focused on the needs of agriculture and rural family life. Over time the extension system's outreach into applied research and knowledge has mirrored the economic diversification of both rural and urban areas. Although education surrounding workforce issues was being conducted, regrettably, the use of the term *workforce development* has slowly vanished in the extension culture. Learning new techniques and skills that apply to work or employment, however, is still a foundational outcome and is embedded in many of the current Cooperative Extension's programs and resources.

The information shared in this chapter will lift up the extension's long history in this area, highlight the variety of audiences currently

reached, and showcase the range of workforce development strategies that land-grant universities currently deliver through their cooperative extension systems.

LAND-GRANT UNIVERSITY CONNECTION

The land-grant system was established in the nineteenth century and expanded twice to include the current collection of colleges and universities. In 1862, Congress passed the Morrill Act to grant federal land to establish educational institutions in each state. Nearly three decades later in 1890, a second Morrill Act was passed to establish educational institutions for black students. Then in 1994 tribal colleges and universities were officially added to the land-grant system (Muske, Shepelwich, and Woods 2007).

The mission guiding these land-grant systems also evolved through three iterations. Initially the institutions were focused only on teaching students. Then research as a mission was added in the Hatch Act of 1887. Finally, outreach and extension were added: “The third mission of the Cooperative Extension Service challenged this unique set of colleges to extend their resources to solve public needs through non-formal, non-credit educational programs” (Muske, Shepelwich, and Woods 2007).

Extension professionals have historically relied on timely research-based content and interpersonal and group-process skills to make the connection with the people they serve. The knowledge base has mirrored the evolving needs of society, from the initial adoption of new farm practices to today’s inclusion of youth-based STEM (science, technology, engineering, and math) opportunities (Gould, Steele, and Woodrum 2014). These can be easily seen in extensions’ work with youth career readiness, in specific areas such as robotics, and in human and animal health. Interpersonal and group process skills have also had to evolve from the early field demonstration projects with agents as group organizers to current Web-based sessions and applications using real-time interaction (Peters 2002).

Efforts to strengthen and expand workforce skills have historically been addressed by the extension in several ways. For example, a

specific need, such as technology training, has been incorporated into various program areas (Elbert and Alston 2005). Another approach has been to target a particular workforce area, such as child care, food service safety, or production agriculture, and provide knowledge and skills training (Durden et al. 2013). Often these workforce areas look to the extension as a way to gain or maintain standards necessary for certification in their field. Still another avenue has been to focus on a segment of the population, such as youth, and provide career opportunities (Rockwell, Stohler, and Rudman 1984) or to work with low-resource families and identify needed support and services (Bowman, Manoogian, and Driscoll 2002). For example, many extension systems work with the Supplemental Nutrition Assistance Program (SNAP) that helps people lead healthier lives by understanding the fundamentals of good nutrition, how to make food dollars stretch further, and how to be physically active to maintain health and well-being. These three aspects are fundamental to develop a healthy and productive workforce. Additionally, in the early 1990s the extension model was used in the development of the national Manufacturing Extension Partnership (MEP) program, a tool for providing small rural manufacturers the same access to academic innovations and resulting knowledge as the traditional extension program had done with agriculture (Maher and Spencer 1997).

All of these examples address specific workforce needs. But even with this experience, extension administrators surveyed nationally in 2013 still identified workforce development as one of the top five emerging issues (Urbanowitz and Wilcox 2013). This fact supports the notion that workforce development is a persistent and evolving societal need that garners current interest and investment within the extension system.

One recent illustration of this investment was documented by extension faculty who began the process of indexing resources related to workforce development in the North Central extension region of the United States. The intent of the effort was to develop a resource “pool” that could be shared among professionals working in this area. Once the word got out that this was happening, colleagues in other areas of the United States joined the effort to give the initial pilot project a more national scope.¹ The initial pool of resources was merely a starting point to help extension faculty share expertise with colleagues, get an overview of the types of resources available, and to identify gaps in both

workforce development research and programming. Another outcome of this work was the realization that efforts could be initially clustered in two areas: 1) as broad systems approaches, typically with a community focus; or 2) as a more specific and targeted education and training that typically concentrates on the needs of a key audience (Sherin and Burkhart-Kriesel 2017).

To illustrate these two areas, several examples are shared. The first two are systems approaches to workforce development. The first, from Arkansas/Missouri, proposes a framework to look at issues at a community level. The second, from Nebraska/South Dakota, outlines a community engagement process that can support discussions around workforce issues to help move a community forward. Following these two system examples are a diverse sampling of audience-driven efforts: youth, adult, new populations, vulnerable populations, and specific sectors. These examples begin to share the size and scope of the extension's involvement at the national level.

CURRENT EXAMPLES OF A SYSTEMS APPROACH TO WORKFORCE DEVELOPMENT

The extension systems at the University of Arkansas and University of Missouri have approached workforce development using an education and workforce pipeline framework. The broad framework “does not provide answers to communities facing education and workforce issues. But what it does do is to provide a comprehensive, strategic approach to education and workforce development that enables a community to recognize the good things they already have underway and identify the greatest opportunities and issues that they can then address” (Peterson et al. 2017, p. 21). The framework provides a broad look at how the community interfaces with workforce issues. It also can help identify data points where more information can be needed, locations where changes in the economy have greatest influence, the logical development point of stakeholder networks and targeted audiences, and issues where strategies and actions can be developed.

A community-centered process to bring together a broad base of stakeholders around workforce issues was the goal of the extension sys-

tems at the University of Nebraska and South Dakota State University (Burkhart-Kriesel et al. 2016). Key components of the process included the following:

- Identification of the local workforce development stakeholders, casting the net widely to promote social and economic inclusion
- Recognition of the importance of local employers' stepping up to the plate to become full partners in the community planning process as they expand in-house and on-the-job training programs
- Leadership in the development of local outreach and training initiatives based on the most competitive industry clusters in the regional economy
- Partnership with institutions and actors in their supply chains and industrial clusters to collaboratively address workforce and training challenges

Embedded in the process were four core components of action planning: 1) reviewing the current situation, specifically looking at the identification of assets; 2) evaluating data in the decision-making process; 3) exploring opportunities, and then; 4) deciding on a path and recognizing the steps that ultimately lead to the implementation of actions (Burkhart-Kriesel et al. 2016).

CURRENT EXAMPLES OF AN AUDIENCE-DRIVEN APPROACH

Youth Audience

Purdue Extension: The purpose of Purdue Extension's INWork – INnovate, INvest, INspire – Skills for Tomorrow's Workforce program is teaching the life skills necessary to increase the number of qualified applicants for Indiana job openings. INWork lessons are flexibly designed to fit multiple situations and are available individually or in multisession increments. Optional activities are available to custom fit the program for the audience. The target audiences for this curriculum are high school students and displaced adult workers.

University of Missouri: “Hometown Gap Year” helps young adults who are 16–24 years old, not in school, and not working. The six core principles of the program focus on civic engagement, career planning, financial education, college preparedness, community service, and character development. Students also receive training in diversity awareness, résumé and cover letter creation, job search tutorial, entrepreneurship, and pharmaceutical technician and production technician certifications. They are exposed to resources such as shared workspace for start-up tech, shared creative art space, and retail storefronts.

Adult Audience

Fort Valley State Extension: “Extension Works” is a workforce preparedness/development program designed to bring professional and educational opportunities and technological resources to communities whose unemployment rates surpass state and national averages. The program targets rural Georgia’s unemployed population and gives special attention to those classified as discouraged workers.

University of Wisconsin: “Participants in Prosperity” is a community strategy that addresses costs of living and helps expand access to living-wage jobs. Research consists of facilitated group discussions among workers and job seekers struggling to live on limited incomes, employers, staff of support organizations, and people holding economic development and other leadership positions within the community. Topics include the following:

- How people help themselves or others earn enough to support their families
- Significant challenges and consequences of earning less than what it takes to support one’s family
- Anything that prevents people from being in jobs that pay enough to live on
- What it may take to expand opportunities for people living in or close to the poverty level

New, refined, or adapted solution ideas that emerge could be shared by interested local participants.

University of Minnesota: “At Your Service: Working with Multicultural Customers” addresses the nature of customer service and provides practical ideas and exercises to help service providers create win-win experiences in dealing with diverse customers. Program participants

- explore how culture affects perception and behavior;
- gain skills to identify and address customer needs and expectations;
- learn how to control their own attitudes—even in trying situations; and
- develop actions to consistently deliver great service.

New Population Audience

South Dakota State Extension: The case of Huron, South Dakota, was highlighted during the pilot project in Nebraska/South Dakota that focused on community engagement, research, and development. In Huron, a new turkey processing facility needed workers. On a recruiting trip to Minneapolis, the human resources director met some Karen refugees who had fled political persecution in Burma (Myanmar), and he realized that they might help fulfill the labor shortage. Unlike some other emigrant populations who are more transient, approximately 175 Karen families have purchased homes since 2007 and now total approximately 2,500 in population.

Opportunities existed to draw from this population to meet workforce demands beyond entry-level meat processing jobs. For example, the turkey processing facility has promoted 10 Karen workers to management-level positions. After only a few years, Karen individuals were holding one of every nine jobs in Beadle County, and about 30 companies employed Karen workers.

University of Minnesota Extension: Rural Workforce and Entrepreneur Recruitment and Retention is a three-year research and extension project funded by National Institute of Food and Agriculture/Agriculture and Food Research Initiative starting in 2017. Research will be conducted to inform local efforts to attract and retain a rural workforce. The research will focus on three questions:

- 1) Who are newcomers to rural areas?
- 2) To what extent do different categories of newcomers to rural communities integrate well into rural community economies and civic structures?
- 3) What private strategies and public policies are communities currently using to attract newcomers to their area?

The research will lead to new curricula and programming that informs communities and community leaders.

Vulnerable Population Audience

University of Kentucky: Youth Engagement and Support (YES) provides life skills programs for homeless and unstably housed youth in Jefferson County, the largest, most urban county in Kentucky. The primary goal is for target youth to exhibit an increase in critical life skills they possess (communication/conflict resolution, decision making/goal setting, stress/anger management, self-responsibility/boundaries, teamwork, personal safety, healthy lifestyles, workforce preparation) to become more self-sufficient.

University of Missouri Extension: SkillUP pays for short-term certification programs for high-demand jobs for Supplemental Nutrition Assistance Program (SNAP) recipients between the ages of 16 and 59.² SkillUp provides these participants with soft-skill or employability skill training and life coaching with the plan to follow up at regular intervals for four months after employment to ensure successful work careers. SkillUP offers a variety of services to participants based on an Individual Employment Plan that is created between the participant and SkillUP staff.

Penn State Extension: The Community Bridge Project was an effort initiated by Penn State Extension and Mellon Financial Corporation Foundation. The two entities collaborated to bring together local businesses, Penn State Extension educators, the Department of Public Welfare, PA Careerlink, and local workforce development agencies to create a support and training network for individuals seeking to gain successful and lasting employment.

The Bridge Project continues to serve at-risk, detained, adjudicated, and underserved youth. The project is financially sustained through educational training contracts, with youth centers administered by a school district and county agency.

The educational training continues to utilize the curriculum “Skills for Taking Control of Your Future” and supplemental education in customer service, social and business etiquette, and careers and postsecondary education.

Montana State University: Children, Youth, Families At-Risk (CYFAR) is a program that works with vulnerable populations to connect community-identified resources. The Montana CYFAR project works with youth in two schools on the Crow and Flathead reservations to increase their STEM skills and to prepare them to enter the workforce when they finish high school or university. The program is called Linking Youth to Agricultural and Environmental Practices Using STEM Technologies. The middle school and high school youth have been taught how to build and program robots and use drones for a number of commercial applications, including in the agricultural industry. Students have also learned computer-aided design and have designed renovations to local parks.

They have also learned about aerial photography and how flying kites, balloons, and drones can be used to monitor their landscapes. In addition, they are learning critical-thinking, problem-solving, and communication skills that are essential for success in the workforce.

Sector-Specific Audience

Montana State University: Sector partnerships are partnerships of businesses, from the same industry and in a shared labor market region, who work with education, workforce development, economic development, and community organizations to address the workforce and other competitiveness needs of the targeted industry. Montana State Extension participated in a sector partnership developing a 10-module manufacturing curriculum for high schools helping to increase collaboration and training among employers. Many of the firms noted increased competitiveness and profitability. The extension helped translate state-of-the-art models from the Next Generation Sector Partnership to the community.

Purdue: Defense Manufacturing Assistance Program (DMAP). The purpose of the DMAP was to minimize the impact of lost jobs and disruption to firms and communities by exploring and implementing economic and workforce planning and revitalization efforts. By fostering economic stabilization, growth, and diversification, DMAP seeks to maintain and enhance manufacturing infrastructure and capacity to meet national security priorities across Michigan, Ohio, and Indiana, a region that is vital to our nation's defense and security. Since Purdue began working with defense-related communities across the state, 20 companies have completed 31 projects. The Purdue Center for Regional Development was recently awarded funding to continue this work.

CONCLUSION

Historically, Cooperative Extension has shown a strong commitment in the area of workforce development. As societal needs have changed, so have the programs and resources deployed to address this national issue. One of the unique assets of the land-grant university's Cooperative Extension system is its flexibility to develop and deliver workforce development resources that match the needs of each state. What has been shared is a mere sample of the extension's efforts in workforce development. Using the current infrastructure of the land-grant system, Cooperative Extension is positioned to build on its current work and partner with other organizations to increase the depth and breadth of available resources to invest in the current and future workforce.

Notes

1. To see the results of this initiative visit http://www.canr.msu.edu/news/workforce_issues_collaborating_to_build_extensions_capacity (accessed September 11, 2018).
2. <http://skillup.missouri.edu/> (accessed September 11, 2018).

References

- Bailey, Liberty Hyde. 1917. *Report of the Commission on Country Life*. New York: Sturgis and Walton.
- Bowman, Sally, Margaret Manoogian, and Debra Minar Driscoll. 2002. "Working with Rural Employers: An Interagency Partnership." *Journal of Extension* 40(4): 4RIB1. <https://www.joe.org/joe/2002august/rb1.php> (accessed March 7, 2018).
- Burkhart-Kriesel, Cheryl, Carolyn Hatch, Kenneth Sherin, and Carroll Welte. 2016. *Bridging the Skills Gap: Workforce Development in Rural Communities in the Great Plains*. Lincoln: University of Nebraska, Rural Futures Institute. <http://ruralfutures.nebraska.edu/skills-gap/> (accessed March 7, 2018).
- Durden, Tonia, Claudia C. Mincemoyer, Jennifer Gerdes, and Kathleen Lodl. 2013. "Extension's Capacity to Deliver Quality Early Childhood Professional Development." *Journal of Extension* 51(5): 5FEA8. <https://joe.org/joe/2013october/a8.php> (accessed March 7, 2018).
- Elbert, Chanda, and Antoine J. Alston. 2005. "An Evaluative Study of the United States Cooperative Extension Service's Role in Bridging the Digital Divide." *Journal of Extension* 43(5): 5RIB1. <https://www.joe.org/joe/2005october/rb1.php> (accessed March 7, 2018).
- Gould, Frances I., Douglas Steele, and William J. Woodrum. 2014. "Cooperative Extension: A Century of Innovation." *Journal of Extension* 52(1): 1COM1. <https://www.joe.org/joe/2014february/comm1.php> (accessed March 7, 2018).
- Maher, Theodore H., and Michael P. Spencer. 1997. "Manufacturing Extension: A Role for CES?" *Journal of Extension* 35(5): 5COM2. <https://www.joe.org/joe/1997october/comm2.php> (accessed March 7, 2018).
- Muske, Glenn, Steven C. Shepelwich, and Mike Woods. 2007. *Partnerships to Enhance Community Building*. Kansas City, MO: Federal Reserve Bank of Kansas City.
- Peters, Scott J. 2002. "Rousing the People on the Land: The Roots of the Educational Organizing Tradition in Extension Work." *Journal of Extension* 40(3): 3FEA1. <https://www.joe.org/joe/2002june/a1.php> (accessed March 7, 2018).
- Peterson, Mark, John Gulick, Pat Curry, and Wayne Miller. 2017. *Creating an Education & Workforce Pipeline for Your Community/Region*. Little Rock: University of Arkansas, Cooperative Extension Service. <https://www.uaex.edu/publications/pdf/MP540.pdf> (accessed March 7, 2018).

- Rockwell, S. Kay, Roy F. Stohler, and Louie E. Rudman. 1984. "How 4-H Helps Career Development." *Journal of Extension* 22(3): 3FEA1. <https://joe.org/joe/1984may/a1.php> (accessed March 7, 2018).
- Sherin, Kenneth, and Cheryl Burkhart-Kriesel. 2017. *Workforce Issues: Collaborating to Build Extension's Capacity*. East Lansing: Michigan State University, North Central Regional Center for Rural Development. http://ncrcrd.msu.edu/uploads/files/Workforce_Issues.pdf (accessed March 7, 2018).
- Urbanowitz, Seth C., and Michael D. Wilcox Jr. 2013. "Examining Extension's Capacity in Community Resource and Economic Development: Viewpoints of Extension Administrators on the Role of Community Resource and Economic Development in the Extension Portfolio." *Journal of Extension* 51(5): 5FEA2. <https://www.joe.org/joe/2013october/a2.php> (accessed March 7, 2018).