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## ORAL PRESENTATIONS

### Shifts in Funding of Public Value for Higher-Education Engagement: Extension Administrator Perspective

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Key Words: Public Value, Organization Adaptation, Evaluation, 4-H, Extension

#### Abstract

The dominant narrative communicated in the literature is that in order to improve Extension's public support, Extension needs to measure impacts and more effectively communicate value to stakeholders (Kalambokidis, 2011; West, Drake, & Londo, 2009). Improving evaluation efforts have been aimed at supporting the narratives shared with legislators to increase public funding (Conone, 1991; Cummings & Boleman, 2006; Fetsch & Bolen, 1989; Graf, 1993; Franz, 2013). The promise of this narrative is that if Extension does a better job of documenting and communicating the economic and public impact of Extension programs then more financial resources will be appropriated (Davis, 2012; Franz, 2013; Stup, 2003; Zotz, 2004). In order to build support for Extension, "public value stories and statements" (Chazdon & Paine, 2014) or "public good" (Franz, 2015) are terminologies that have been used synonymously with "impact." This is a movement occurring across the not-for-profit sector. The United States is experiencing a societal change that has removed the contract of public support for public services. The trend reflects a strengthening of neoliberalism in the political discourse in the United States. Neoliberalism is commonly referred to as an economic theory. Yet, it is comprised of values, ideologies, and practices that work as a "cultural field." Giroux (2004) makes the argument that neoliberalism's cultural dimensions erode public participation, which is the very nature of democratic life. Under neoliberal policies, the symbolic, educational, and economic capital necessary for engaged citizenship is being increasingly undercut (Giroux, 2004). The changing nature of public value was discovered as an emergent theme as a part of a larger descriptive qualitative study on Extension and 4-H's organizational environmental factors. The research question of the larger study was: What environmental factors do Extension administrators perceive as being challenges for their Extension organization and the 4-H program? The objective of this project is to share State Extension Directors and 4-H Program Leaders perspectives on the changing public value contract. Twenty Extension administrators (State Extension Directors (n=7), State 4-H Program Leaders (n=13)) volunteered to be interviewed. Participants represent 15 states and all four APLU administrative regions. Participants completed a SWOT Analysis for both Extension and the 4-H program in their state. A SWOT Analysis is a management assessment tool (Pickton & Wright, 1998). Data were prepared and analyzed by transcribing audio recordings verbatim. During data collection and analysis memoing occurred. Open-coding with Atlas.ti was conducted and then themes were developed (Charmaz, 2014). Member checking was conducted to support transparency (Creswell & Poth, 2017). Triangulation was supported

by using two separate populations to give perspective on the same phenomena (Corbin & Strauss, 2008). Administrators have experienced the downward shift of resources and have accepted that the downward shift will continue from government funding sources. In response they have turned toward a wide array of other funding streams: competitive grants and contracts, fundraising, and fees. Administrators confirmed that Extension and 4-H need to communicate research impacts better to sure up public funding. Administrators recognized the need for evaluation and for putting resources behind evaluation efforts. They relayed that when they were able to communicate *specific* impacts and outcomes, then the legislature can be positively responsive. Administrators highlight that the outcomes need to be communicated by stakeholders, so that those messages are being communicated from multiple directions to legislators. 4-H specifically discussed measures that were important to support 4-H program messaging. An emphasis was placed on conducting large scale research projects. For example, on the impact of camp, the impact of volunteers, the impact of being a 4-H alumni. However, these studies are complex and they take time to complete. Particularly with 4-H many impacts were recognized as occurring many years after the program was completed, and there was excitement about starting to implement studies that would generate those results even if they wouldn't reap rewards for decades. When funding increase successes were discussed, having relevant impacts were important. However, strong and consistent relationships were also vital. The emphasis on empirical evidence is both a threat and a significant strength. If Extension is able to generate research-based outcomes that support a viable return on investment then there is room to change the budget trajectory. The need for evaluation is emphasized due to its connection to financial strings. However, those financial strings are causing researchers to focus on the bigger research questions of program outputs. Extension and 4-H's relationship to research capacity within the university should help make Extension highly competitive in this environment. The administrators recognized that should be the case, and they were striving to set their own programs up to conduct significant and impactful research.

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### **Evaluating New Agent Program Evaluation Training and Support Needs: A three tiered-approach to identify regional priorities**

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#### **Abstract**

Cooperative Extension utilizes a competency development model focusing training activities around core competencies (Brodeur, Higgins, Galindo-Gonzalez, Craig, & Haile, 2011). Lucia and Lepsinger (1999) defined competency as "... a cluster of related knowledge, skills, and attitudes that affects a major part of one's job (a role or responsibility), that correlates with performance on the job, that can be measured against well-accepted standards, and that can be improved via training and development (pg. 2)." Program evaluation is one area in which Extension agents are expected to be competent. Typically, program evaluation is a skillset that many of these educators build once hired (Radhakrishna & Martin, 1999). McClure, Fuhman, and Morgan (2012) found newer Extension agents struggled with: (a) writing about questionnaire findings in an impact statement, (b) writing clear questions for a questionnaire intended for youth less than 12 years old, and (c) analyzing the questionnaire data collected. Lamm, Israel, and Diehl (2013) found the majority of Extension agents only used post-tests administered following an educational activity to evaluate success. According to Lamm et al. (2013), Extension agents may lack the competency to develop plans that measure long-term change or conduct advanced statistical analysis resulting in focus on participation and participant reaction. Understanding the challenges that newer agents face ensures in-service training can effectively develop needed evaluation competencies. The purpose of this study was to identify and describe the most pervasive challenges and obstacles that newer Extension agents (1 to 3 years from hire date) face in their program evaluation efforts. We utilized a three round Delphi study approach (Warner, 2015) to identify the most important challenges and obstacles faced by early career Extension agents. The study was approved by

the Institutional Review Board and conducted in the spring/summer of 2018. We developed an expert panel of Extension agents from various program areas with one to three years of experience working in three different states (10 from each state). The expert panel was selected by Extension directors and program leads. The first round consisted of two open ended questions asking the participants to list program evaluation challenges and obstacles faced as a newer Extension agent. The constant comparative method (Glaser, 1965) was used for data analysis, resulting in the identification of 36 challenges and 13 obstacles in the first round. The subsequent rounds narrowed down the list of challenges and obstacles utilizing a Likert-type scale for importance. We utilized the definition of consensus to be 2/3 of the group identifying extremely or very important in regards to addressing each program evaluation challenge and obstacle (Warner, 2015). The expert panel demonstrated consensus on 26 challenges and 7 obstacles. Over 90% of the panel agreed that the following challenges are extremely or very important to address: (a) determining program impacts and how to measure those (b) development of accurate evaluation instrument for a given situation and (c) evaluating newly developed programs. Most of these challenges mirror those found by Radhakrishna and Martin (1999) as well as Lamm et al. (2013) in their respective studies. Early-career Extension agents struggle with developing plans and instruments measure and analyze the long-term impacts of their programs. Additionally, over 80% of the panel agreed that the following obstacles are extremely or very important to address: (a) lack of evaluation mentorship, (b) lack of clear expectations and guidance from supervisor for evaluation and (c) lack of evaluation training. These findings provide more of a structural and system level understanding of the impediments that may prevent Extension agents from developing the appropriate evaluation competencies. A better system of support and guidance is needed to help early career agents build their confidence and skills. There is also the need to facilitate the collection of longer-term impact data with validated and/or standardized tools to overcome the initial lack of expertise outlined by Lamm et al., (2013). The challenges outlined in this study do not differ greatly from those already outlined in the literature, bringing to question the persistence of these issues. One may point to the structural and systematic obstacles that exist for Extension agents as a starting point for change. The findings of this study should serve as a reminder for promoting meaningful discussions that move toward meaningful program evaluation support to Extension agents. Additionally, the process utilized and outlined for this study can be adapted locally for any competency to provide needs based professional development.

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## **Exploring Extension & Our Volunteer Opportunities - Development of Online Tools**

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Keywords: Digital learning, volunteer recruitment, multimedia principles, program planning, instructional design

### **Abstract**

Cornell Cooperative Extension (CCE) staff work with some 45,000 volunteers annually. Each year new volunteers are recruited and trained in local county associations. In a survey of local CCE Associations (2016) staff indicated that there are needs for:

1. Volunteer orientation resources
2. A system to help orient potential volunteers
3. A way to bridge resources across county lines

Exploring Extension & Our Volunteer Opportunities (EEVO) was developed to meet these needs as an online orientation for those considering volunteering for Cornell Cooperative Extension. It is intended to prepare potential volunteers by providing basic training about our complex organization. EEVO offers information about Extension, the land grant university system, opportunities to volunteer, how to get involved, and what to expect as a volunteer. The resource is completed on line and potential volunteers are connected with their local opportunities. The full training is expected to take 3 hours or less and is intended to familiarize potential volunteers with our system, volunteer review, and opportunities. EEVO is currently in a pilot phase. The project uses a number of multimedia principles to manage cognitive

load for potential volunteers. The intent is to not discourage or frustrate the learners by a complicated process or any lack of clarity. If the resources have too much extraneous information or feel overwhelming, potential volunteers might be lost or turned off in the process. Additionally if the experience does not encourage potential volunteers to think through important concepts, the resource will serve as only something to check off the list and not as a method for preparing adults to serve Cornell Cooperative Extension. The topic of volunteer orientation could be overwhelming to anyone in any organization. In the case of Cornell Cooperative Extension, the programs and the structure are complex, even to veteran volunteers – so the risk of overloading volunteers with too much extraneous information is high. Special care was taken to not provide extraneous resources or experiences. For example in the initial log in pages – the requests for information were minimum. While the potential volunteer will eventually be asked to complete a more thorough application, the initial intake page applies the coherence principle. It has very few questions and simple instructions so as to minimize extraneous load. This resource was developed to give the learners as much control as possible in their learning and ensure that what is offered is relevant to the learner. Research about volunteers indicates that most adults volunteer for a specific reason and that their experiences as a volunteer help them decide whether to/or not to continue volunteering with an organization (Caldarella, 2010). Research about volunteer motivations correlates well with what we know about adult learning theory (Pappas, 2013). We want to give the learners as much control as possible in their learning and ensure that what is offered is relevant to them. This resource will be a first step for volunteers. Volunteer screening and initiation into a specific CCE program of choice will take place once the onboarding is complete. Given this, it will be critical to not lose the interest of potential volunteers in the process of training. Instead, the resource is intended to encourage potential volunteers further in their desire to be involved with Cornell Cooperative Extension. Cornell Cooperative Extension also has a growing digital community of learning, called Volunteer Matters, for staff to share, ask, and get news about CCE Volunteer Management. Volunteer Matters grew from extension staff who were asking for a better way to support one another and the system. The site is built in Moodle and includes a peer support network that has divided topical focus areas. The resource encourages interested staff to register to become a part of the community and then encourages discussion, promotion of upcoming events, and links to resources. Both of these resources were developed based on theories of instructional design of digital resources. Staff member Celeste Carmichael, Program Development and Accountability Specialist for Cornell Cooperative Extension Administration completed the work on these projects while working on a degree in Instructional Design of Digital Environments at Quinnipiac University. Celeste worked with colleague Kim Fleming, Professional Development and Volunteer Involvement Specialist, and others who are leads in volunteer management for CCE to assess the needs, review the research and strategies, schedule implementation plans for development, pilot, and train on these projects. This workshop will provide history of the development of these resources including research done about volunteer training, and a tour of the resources themselves. Consistent, simple to understand, systematic resources that are made available to audiences beyond our traditional volunteers and clients will assist our organization in reaching new audiences, and give our staff the tools needed to move ahead.

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## **Mindful Utilization of Social Media for Extension Programs**

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### **Abstract**

Social Media platforms have provided organizations, companies, and programs the ability to reach diverse global audiences, connect and collaborate with other programs and provide a place for communication of similar ideas. The major platforms are holding strong and continuing to grow in their audience and capabilities. With so many people actively using social media, many Extension programs and professionals have created online presences to use as a tool to widely distribute educational resources, provide connections and raise awareness of key issues. These Extension presences on social media platforms have the opportunity to establish themselves as reliable sources of information to their audiences (Gharis, Bardon, Evans, Hubbard, & Taylor, 2014). These platforms have also been used as an alternative to more traditional educational formats, with online learning opportunities (Mains, Jenkins-Howard, & Stephenson, 2013) being offered and specific groups created. With the ever changing platforms, it can be difficult to keep up with best practices, and algorithm changes for the different platforms can end up working against Extension accounts. The purpose of this presentation is to provide updated information about social media platforms and how Extension professionals and programs can further increase their reach and optimize their selected social media accounts. One of the biggest appeals for social media is the engagement opportunity between people, brands, companies, and organizations. This engagement fuels the account and reinforces the connection between account and audience. Extension professionals and programs can encourage audience engagement by being mindful about what is posted, encouraged and reacted to on the account. Having a daily routine of posting and interacting with audiences and other accounts can encourage improved engagement (Gharis, Bardon, Evans, Hubbard, Taylor, 2014). Tailoring your posts to your audiences' preferences (Gharis, et al, 2014) and encouraging others to share, connect and react can also improve engagement and reach of accounts (Pikalek, 2010; Gharis, et al, 2014). Quantity of posts onto an account is not necessarily as

important or helpful for improved engagement as the quality of a post is. Often times marketing the post to appeal to your audience (Mains, Jenkins-Howard, Stephenson, 2013) takes time and effort to establish reputable sources and visuals that will appeal to audiences but also reinforce the Extension account as a source of researched educational information (Gharis, et al, 2014; Doyle & Briggerman, 2014). It is also advised to consider branding when posting, so that users are able to easily identify content for Extension accounts. Since social media platforms are constantly changing to improve user experience as well as remain competitive with other platform, it is important that Extension programs and professionals stay informed of changes. When working around or with the algorithm of each platform, it often comes down to rolling with punches, as the algorithm is constantly evolving. It is suggested to utilize the analytics for the platforms that you are active on to make your time and effort reap the most benefits (Gharis, et al, 2014). Daily posting rather than scheduling weeks out in advance can help keep up with the changes and your audience's reaction. Additionally, since each audience is unique, it is advised that you follow your analytics to see how your specific audience reacts (Doyle & Briggerman, 2014). Social media has a lot to offer Extension professionals and programs. With the ability to reach a large and diverse audience, build professional networks, and provide educational opportunities, it is important for Extension professionals to make the most of their social media accounts. Choosing the best platform for each audience and following some suggested best practices increases the chance that Extension programs and professionals will increase their reach, innovative education, and networks through the use of social media platforms.

Through different types of testing, our program's social media accounts have been able to determine different types of wording and images that consistently have further reach and the potential for increased engagement. These different methods will be shared and explained throughout the presentation. Since social media platforms are constantly changing and evolving, some change and basic algorithm information will be shared for four prominent social media platforms: Facebook, Twitter, YouTube and Instagram.

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Keywords: Social Media, Engagement, Analytics, Best Practices

## Using Evaluation to Clarify, Unify and Move Forward: The Journey of an Extension Team

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### Abstract

As a result of round table discussions hosted by Purdue Extension in 2012, a statewide conference was created to address the needs of small-scale farmers in Indiana. Annually, an Extension planning team of specialists and educators, each with their own specialization in agriculture, help organize the conference activities and support a program evaluation. The Indiana Small Farm Conference now hosts annually over 400 attendees, 50 exhibitors, and several national speakers. After five years, the annual conference planning team reached a critical point regarding the direction of the program. Is the program a success? Is it achieving its goals? How can the program evolve to meet the emerging needs of small-scale farmers? Our evaluation group was tasked with answering these questions through a formal evaluation process, and development and refinement of several strategic planning documents. In the process, several issues emerged including the use of inconsistent and simultaneous evaluation approaches, tools, and reporting, a lack of clarity in program goals and direction for the conference, a disconnect with the larger agriculture discipline and logic model structure, some uncertainty about how conference attendees were experiencing the conference, and the sense of overwhelm from the efforts expended to plan, market, implement, facilitate, evaluate, and report on the conference. The evaluation group composed of an Extension evaluator and an American Evaluation Association Graduate Education Diversity Internship (GEDI) program intern, took on the challenge of evaluating the progress of the Indiana Small Farm conference annual program. Through a case study, this presentation will examine the process, explore the key activities and planning tools, and share findings from the program evaluation. The evaluation group reviewed conference records including five years of existing data, reporting, annual conference agendas, and website documentation. Based on the information gathered, and with input and direction from the conference planning and agriculture teams, the program logic model and outcomes were refined for clarity, feasibility, and alignment to the established program goals. Beyond existing data, a 2017 nine-month attendee follow-up survey was administered. Data collection was conducted over a seven-week period during which the participants received an email invitation with a web survey link followed by up to three email reminders. Results from the evaluation were cleaned and then analyzed using STATA 14.2 software. Overall, a total of 111 participants completed the survey for a 27.41% response rate. To enhance the survey data, in 2018 a set of 24 interviews were conducted with returning conference attendees to better understand their networking experiences at the Indiana Small Farm conference. Review of existing data from the first five years showed that efforts were focused primarily on program improvement and lacked alignment to the program goals. Results from the 2017 attendee follow-up evaluation revealed that in the nine months after the conference: 85% reported they had used information to help them start a farm or improve their farm operation; 81% reported having passed on relevant information to other individuals; and 53% reported having used information to develop or make changes to their farm business plan. Findings from the qualitative interviews revealed that attendees are networking at and after the conference, and have benefited greatly through peer-to-peer learning, increased social and emotional support, and through strengthening the network of small-farmers. This is based on the definition of “networking” at the conference which was described by attendees as: 1) a connection with others with similar values and interests, 2) a give and take situation as information is shared among participants and with others in families, neighborhoods and counties, 3) a way to learn from others, and 4) made possible at the

conference, but extends to other times and connections during the year, and is made stronger by returning to the conference and taking part in other beginning farmer activities. Using an updated logic model and set of outcomes, a nine-month attendee follow-up survey, and networking interview results, a set of evaluation questions were identified and recommended for use at future conferences. Recommendations were to: 1) capture multiple perspectives in the evaluations (e.g., attendees, exhibitors, and Extension personnel), 2) use registration and other online systems for efficient gathering of data, 3) gather more information from new and emerging small-scale farmers to connect them with others, and 4) continue to explore networking to build, strengthen, and expand attendee experiences.

### **Breaking Down Barriers to Reaching Underserved Audiences**

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Keywords: civil rights compliance, underserved, diversity

#### **Abstract**

One of the barriers that prevents Cooperative Extension systems from reaching their full potential is that of ineffective approaches to underserved audiences. NIFA civil rights compliance expectations are often considered confusing and burdensome. However, effective organizational systems and staff development can reduce the confusion and result in improvements in compliance and in engagement by underserved audiences. A process for internal civil rights audits was put into place which engages 108 VCE Unit offices, six 4-H centers and 11 ARECs. This process includes on-site internal reviews in Unit Extension offices that are conducted each year. Peer reviews of civil rights compliance files has been conducted in all four districts, and with all six 4-H educational centers. The peer-review and on-site internal audits help units to better understand and comply with civil rights expectations that impact VCE's inclusion efforts. When these renewed civil rights compliance efforts began in 2011, it had been four years since any substantive work had been done on civil rights compliance at the local Extension office level. Many Units' civil rights files were out of date. The civil rights files guidelines were updated to ensure that all USDA and CALS documentation expectations were being collected. All of the civil rights compliance content pertinent to Extension and research was reorganized and placed on the VCE Policies Intranet site. More than 80 signed Equal Access Assurance (EAA) forms were acquired from state and national organizations with which VCE and VAES partners. These forms are signed by organization representatives to document that their organization does not discriminate when collaborating with VCE in programming or when they receive programming assistance from VCE. Local units were provided templates and sample letters to use to acquire EAA forms from local groups with which they partner. Another emphasis were efforts to address the needs of Limited English Proficient (LEP) clients. CALS Extension and research faculty and staff learn about what LEP is and what their compliance expectations are through the civil rights training modules. They have been provided with US Census data on the number and percentage of LEP persons and the prominent languages spoken by LEP clients. An LEP reporting tool was developed for Unit offices to track LEP contacts and accommodations, which are USDA compliance requirements. A survey of all field-based Extension faculty and staff was conducted to determine the needs of LEP clients and the extent of contact VCE has with LEP audiences. The results of this survey found that Spanish speaking clients are the largest LEP audiences for our Unit offices. The survey identified specific publications that needed to be translated into Spanish to meet local demands.

Beginning in 2014, VCE first began to set aside funds to specifically translate a set number of its publications into Spanish on an annual basis. With the finding that Hispanic clients are VCE's largest LEP audience, Spanish language distance education classes were initiated for VCE faculty and staff across the state beginning in 2013. The classes have been provided through a partnership that he developed with the VT Language and Culture Institute. Agents and staff have reported that they have been able to more effectively interact with Hispanic clientele. Recognizing a need to assist LEP walk-in clients, an existing state contract with the Virginia Court system was tapped into that provides toll-free phone-based language interpretation services for over 100 languages. Now clients that come in to Extension offices who speak a language other than English, can communicate with Extension staff through this phone-based interpreter. All of these efforts have resulted in faculty and staff that are much better informed about their civil rights compliance responsibilities. But beyond that, they understand now how those expectations actually help them to understand better who their underserved audiences are and how they can expand their outreach.

### **The Virtual Conference as Learning Arc**

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#### **Abstract**

The Military Families Learning Network (MFLN) provides online professional development and networking opportunities for service providers and Cooperative Extension professionals serving military families on installations and in communities. The MFLN is funded in part to contribute to the success of the Department of Defense's (DoD's) Family Readiness System, or FRS (see <http://snjreic.org/Military-Family-Readiness-Factsheet.PDF>). The FRS is an approach to service provision reliant on a collaborative connection across agencies, programs, services, and people to provide comprehensive support to service members and their families via multiple access points. Inherent to the success of the FRS is the notion that service providers themselves are connected to one another in order to provide robust and targeted referrals across departments, agencies, and professions. As the FRS has become increasingly emphasized at DoD, we saw an opportunity to innovate our programming and more directly support this endeavor. In 2017, we began offering an annual issue-based, multi-day virtual conference. The primary goal of the virtual conference is to support conversation, connection, and learning across MFLN concentration areas by focusing on an issue common to all service providers and educators. This approach has required an entirely unique way to plan and execute our programming. In this session we review the program planning and learning strategies we employed to deliver a highly interactive, three-day virtual conference around the issue of cultural competency. In this session, we will provide an overview of the unique planning and learning strategies we have employed to execute our virtual conferences. Attendees will gain insights into strategies for potent adult learning strategies, engagement, social learning and sharing, and ways to mobilize participants into professional social

learning networks. This session will be helpful to anyone currently providing or planning to provide online or in-person informal learning modalities. We also hope to leverage this session to connect with and hear from other NEAPSDP professionals working to push the boundaries of informal adult learning and the possibilities of social learning collaboratives. A key aspect of our work has been to help our participants help themselves to create, maintain, and develop professional connections and networks within and across their fields (see Plastrik et al., 2014). One approach we are adapting is the learning arc, in which learning happens in purposeful and scaffolded experiences before, during, and after the programming itself. (See, for example, <https://events.tamarackcommunity.ca/community-change-festival-resources>). Examples of learning arcs can be seen and leveraged in multiple disciplines (Aldred, 2018; Stewart et al., 2013), and appear to be particularly useful in the problem-based learning environments the MFLN utilizes. The MFLN's 2018 virtual conference (September 18–20, 2018) was planned with the learning arc model in mind. Beginning one month prior to the start of the conference, we employed learning strategies such as storytelling, reflective journaling, the working out loud process, newsletters, and targeted blog posting. Conference sessions were planned alongside the pre-conference activities and then will build on those activities as the conference unfolds. Enhancements to our web site built specifically for the virtual conference will enable additional opportunities for participants to build trust with and form connections with others at any point along the learning arc journey. We hope these linkages in program planning, delivery, and engagement will ultimately prepare conference participants to engage in the creation and maintenance of a working advocacy group after the conference. We will share complete evaluation results at NEAPSDP 2018. Our first annual conference evaluation showed that participants represented every concentration area, and preferred an interdisciplinary virtual conference to a discipline-specific experience. Extension was the highest reported employer affiliation, and participants leveraged the direct messaging tool in our Adobe Connect learning platform as a primary mode of interaction with other participants, second only to chat box participation. Our first virtual conference was a success in areas of participation, engagement, potential impact, and as a meaningful contribution to the spirit and mission of the FRS. We anticipate extended positive outcomes in 2018 given our increased usage of the learning arc framework. We expect evaluation data to continue to demonstrate that attendees are looking for and finding ways to connect with one another, and are seeing the value of doing so with professionals outside of their disciplines. As Extension continues to break down barriers to informal education, there is palpable benefit to consider implementing programming methods that transcend the typical Extension programming delineations.

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## How to Improve Our Work with Virtual Teams

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Keywords: virtual teams, capacity building, leadership, teamwork

### Abstract

As technologies and distant collaborative projects advance, we are called to engage with teams and groups in new ways. The advantages of virtual meetings are many, but they require us to think and work differently. If we attempt to apply face-to-face practices to a virtual setting, we will be met with frustration, missed opportunities, and diminished returns for our efforts. However, by adopting new ways of working together, we can reap new benefits. A multi-disciplinary team of Cooperative Extension Professionals examined promising practices for virtual groups, and developed a set of training tools to strengthen our skills in working in these new virtual environments. A three part web-based series of sessions were developed and pilot tested. The purpose of the materials is to help virtual teams learn and practice skills that have been shown to increase virtual team effectiveness. In this session, presenters will showcase and demonstrate tools useful to Extension to support the leadership of virtual project groups and teams. Evaluations demonstrated growth in knowledge as well as skills for participants. Additionally, the participants were tracked over time to explore long-term impacts.

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## Working around barriers: A practical solution for statewide indicators

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Keywords: statewide indicators, impacts, behavior change, infographics, data visualization

### Abstract

Each year, land grant universities are required to complete a federal report that demonstrates the impact our work funded through Smith-Lever and Hatch dollars. Additionally, there is a growing expectation to demonstrate the economic or public value of our work to funding agencies. Historically, many land grant institutions have struggled with showing statewide impact and focused on smaller

projects and programs located in a single county or region. But this is not ideal for telling and selling the Extension story. After years of trying to work with individual faculty and teams of faculty to develop shared surveys and evaluation methods, this large research university, with hundreds of faculty across the state, concluded that it needed to gather more statewide data more quickly and efficiently. As a result, 87 statewide indicators were developed, with input from the faculty, in months not years. In designing the indicators, the focus was on creating broad measures focused on behavior change. This provided flexibility to the faculty who use multiple methods to collect evaluation data as well as the analyst who develops the infographics and impact statements for federal reporting. Ideally, the indicators should be reasonably tied to research demonstrating the significance of the results, or what has been referred to as the “golden spike” (Urban & Trochim, 2009). The credible evidence framework provided by Donaldson, Christie & Mark (eds., 2015) guides our deliberations about this streamlined, contextual and pragmatic process and its resulting end products. A pilot study was conducted in 2017-18 using Qualtrics survey software. The data were analyzed and evaluated at the close of the reporting cycle and results sent to the appropriate state and county faculty and Extension administrators for review and edits. Data analysis and visualization was done with SPSS and Tableau software to evaluate the pilot project as well as distributing results to the organization. For the 2018 reporting cycle (beginning in November 2018) the revised statewide indicators will be collected through our in-house, online faculty accountability/reporting system. This case study outlines a practical approach to gathering statewide data for the purposes of showing the impact of our Extension work to stakeholders, political leaders, funders, and even our own university and Extension administrators. It will demonstrate how "good enough" statewide data can be collected and used without great expense and effort.

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### **The influence of transformational middle leaders on work-life balance in Extension: Key findings from the 2018 nationwide Extension survey**

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#### Abstract

In Cooperative Extension (CES), employees are expected to work irregular schedules among diverse clientele while achieving documentable impact. Employees face the additional requirements of government reporting and sizable performance expectations associated with large universities. With

such high stakes, it is of little surprise that new CES agents are only somewhat committed to CES and moderately satisfied with their work (Martin & Kaufman, 2013). Given the broader trends associated with turnover intention among Millennials (Thompson & Gregory, 2012), much work remains to entice CES employees toward retention. Cooperative Extension became concerned with the overwork and imbalance of its employees as early as 1981 (Ensle, 2005). Since then many self-help seminars and work-life policies have been offered to reduce this phenomenon (Fetsch & Kennington, 1997). As Kutilek, Conklin, and Gunderson (2002) discovered, Extension's organizational culture remained unsupportive of work-life balance (WLB). This led the team to assert the importance of leader-level culture change and they posited that transformational leadership was the appropriate framework to generate this long overdue change. Greater understanding of the role leaders play in forging a more supportive organizational culture could empower Extension decision-makers to mitigate the negative effects of work-life imbalance. Employees alone are unable to drive positive WLB culture forward. Leaders play a critical role. As Rossiter (1997, p. 177) reminds, the supervisor "must promote [WLB] policies for them to be effective." A supportive supervisor who promotes and models effective strategies is essential to this cultural transformation (Mazerolle, Goodman, & Pitney, 2015; Ward & Wolf-Wendel, 2005; Lewis, 2001). Positive WLB has been associated with numerous benefits to organizations and employees. For organizations, positive WLB correlates to stronger job satisfaction and retention while mildly strengthening productivity. Employees experience reduced job-life conflicts, improved health outcomes and more ethical behavior (Jedlicka, 2007). Despite these broad ranging positive outcomes, widespread use of WLB policies remains limited. A major reason why WLB policies have not become more mainstreamed is the failure to consider the effects of organizational culture. As Feeney, Bernal, and Bowman (2014, p. 761) summarized the literature on this point, "no matter how many formal policies and programs are offered, the culture of the organization is critical for predicting policy utilization and effectiveness." Though much research has described this discrepant phenomenon, little research has been conducted on the WLB cultural support provided by supervisors (Kossek et al., 2010). This research study reduces the size of this knowledge gap. The purpose of this study was to add to the knowledge base on WLB organizational culture, specifically the influence of transformational middle leaders in CES. The absence of a positive WLB culture is detrimental to both organizations and employees. This survey study assessed WLB culture and factors in CES and the role transformational middle leaders play in forging a positive WLB culture. Using three research hypotheses, this survey study assessed WLB culture and factors in CES and the role transformational middle leaders play in forging a positive WLB culture. Within the 13 participating CES institutions, all county-level agents were invited to participate in a 10-minute electronic survey. From this original pool of 2620 agents, 1390 agents completed the February 2018 survey resulting in a 53% participation rate. The participation rate ranged from 29% in Kentucky to 80% in Indiana [Purdue]. Further, the agent demographic categories of gender (female=69%), career stage (0-10 years=61%) and generational distinction (Millennial=35%) were appropriate representations of the broader CES population. Following the survey, a confirmatory factor analysis (CFA) was conducted in preparation for the structural equation model (SEM). According to global fit parameters established by Hu and Bentler (1999), this CFA indicated acceptable fit (CFI = .917, RMSEA = .060, SRMR = .062). Finally, SEM was conducted using a design-based approach. Note: item level missing data was negligible—ranging from 0 to 4.7%. This study found that transformational middle leaders significantly and positively influence work-life balance culture in Extension. The rated levels of transformational leadership among Extension district directors exhibited less direct influence on agents' WLB factors, suggesting organizational culture is the more effective avenue for improving WLB in Extension. A mediation analysis verified this important indirect effect influence of organizational culture. Descriptively, several WLB indicators (e.g. vacation usage, sleep patterns, work interference) remain moderately weak in Extension, despite a mildly supportive WLB organizational culture. This study suggests the need for further study of specific ways leaders, co-workers, and broader cultural

factors influence positive work-life balance and culture in Extension. This conference presentation will briefly recap the study and discuss key findings and implications in more detail.

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### **Adapting Existing Curriculum to Meet the Needs of Clients on the Autism Spectrum**

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Keywords: Autism Spectrum Disorder

#### Abstract

Research suggest that 1 in every 59 children are on the Autism Spectrum. These children become 4-H'ers and eventually adult clientele of Extension. *Advancing Futures for Adults with Autism* suggest that 500,000 teens with autism will age into adulthood over the next decade. However, Extension professionals have few opportunities to learn how to adapt curricula and resources to reach this unique population. This presentation will focus on practical ways to adapt existing curriculum to meet the needs of those on the autism spectrum. Participants will evaluate a standard lesson plan and then share ways

to modify the plan based on best practices for teaching youth on the spectrum based on what they have learned in the presentation. Picture cards with best practices will be placed on the table for participants to select from. Once they have selected what modifications (using the cards) they would implement, participants will be asked to share why they picked that card and how it could be practically implemented across other curriculum. Participants are encouraged to share their experiences so that all participants leave the presentation with new tools to use as they adapt programming. Knowledge gained will allow participants to remove barriers these learners face when engaging in Extension programming.

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### **Evaluation of a youth environmental education program using mixed methods design**

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Keywords: environmental program evaluation, youth camp, mixed methods evaluation design

#### Abstract

There is a growing realization about the importance of evaluating extension programs using mixed methods evaluation design. However, lack of evaluation support, inadequate budget and staff support, and time constraints result in less rigorous evaluations (Bailey & Deen, 2002; Ghimire & Trechter, 2012 [as cited in Ghimire & Martin, 2013]; Jayaratne, Lyons, & Palmer, 2008; Koundinya, Klink, Deming, Meyers, & Erb, 2016) that rely mostly on quantitative surveys. Quantitative summative evaluation often results in insufficient evaluative evidence about the effectiveness of the program in terms of educational outcomes and engagement. This paper presents the details of a youth environmental education program evaluation that employed a mixed methods design. The program was summer camp offered in 2018 to 6-11-year-old children by a county extension office. The primary users of this evaluation were the County Extension program staff. They will use the results to illustrate program impact to prospective funders, showcase the uniqueness of their program from similar environmental programs, and improve future camp educational offerings. The purpose of the evaluation is three-fold: 1) to measure the extent of independence, responsibility, positive peer and adult relationships; 2) satisfaction of camp participants; and, 3) youth's understanding of the human-environment interrelatedness and

environmental stewardship. The evaluation plan was developed collaboratively by the Evaluation Specialist, County Extension Co-Director, program educators, and a graduate student evaluator. Such a participatory approach enhances the applicability, ownership, and utilization of an evaluation (Cousins & Whitmore, 1998). The evaluation plan included: two separate surveys for 6-7 and 8-11-year-old participants adapted from Neelon et al (2017) and Baranowski et al. (2000), having participants reflect on the science lessons and answer a question related to those lessons, participant-observation (Observation Guide adapted from Carlson et al. (2009); Klink (2014)), and a parent survey. Surveys consisted of 5-9 Likert-type items and an open-ended question that asked the participants to draw or write about one thing they would tell a friend about the day. The older participants were also asked two open-ended questions that related to their camp enjoyment and environmental stewardship. The lead graduate student evaluator and three other students attended the camp, observed the events systematically using the observation guide, recorded the answering session data, and administered the surveys. Data were collected from multiple days at the camp and from programs that had slightly different content. However, the evaluation was designed to measure the overall understanding, attitudes and general life skills, not the specific subject matter. All the programs from different days had the same goals, which were measured through this evaluation. Older participants (8-11-year-old, n= 54) attended camp for 1.8 days on average (range= 1-5) and had mean scores between 3.91 and 4.98 on a 5-point Likert type scale on the items that measured independence, responsibility, positive peer and adult relationships, and satisfaction with the camp experience averaged over multiple camp visits. The mean scores related to the same concepts for younger participants (6-7-year-old, n= 43) ranged from 2.69 to 2.93 on a 3-point Likert type scale with younger participants attending camp for 2.1 days on average (range= 1-7). We chose to decrease the variance in the scale points for the younger participants to make it easier for them. We used principal component analysis (PCA) to investigate the older participants' responses to four environmentally-focused Likert-type items. Two axes were identified that explained 66% of the total variation in responses. In addition, the Word Clouds processing of the open-ended survey answers generated words like animal, free time, goat, chicken, cleaning, playing, bunnies etc. for favorite things and don't, trash, recycle, pick, can, plant etc. for the environmental actions. Participant-observation indicated that many students started camp with substantial knowledge of environmental topics and that the lessons were successful at helping students to make new connections between past knowledge and new topics. Preliminary results indicate that the camp resulted in increased understanding of the human-environment interrelatedness among the program participants. Results are still forthcoming from the PCA analysis, as well as analysis of qualitative data from the reflection and answering sessions and open-ended survey questions. We believe that the mixed methods design helped us gather comprehensive evidence to show the impact of this program on the long run and to attract more participants in the future.

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### **Identifying Core Program Evaluation Competencies for Extension Educators: Evaluation Specialists' Consensus for a National Professional Development Checklist**

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#### **Abstract**

Cooperative Extension competency models include program evaluation as a core competency for Extension agents (Brodeur, Higgins, Galindo-Gonzalez, Craig, & Haile, 2011). These professionals are expected to conduct meaningful evaluations to measure the success of their educational programs allowing for data-driven programmatic improvements and the demonstration of impact. Competency models were first popularized when psychologist David McClelland (1973) challenged the idea of using intelligence tests. Ghore, King, Stevahn and Minnema (2006) developed an initial competency model for evaluators that was later adapted by Rodgers, Hillaker, Haas and Peters (2012) specifically for Cooperative Extension. The model outlines 41 specific program evaluation competencies for Extension agents ranging across three domains including situation analysis, systematic inquiry, and project management. According to Lamm, Israel, and Diehl (2013), underdeveloped evaluation competencies influence the evaluation activities conducted in Extension. In their national study, they found most Extension agents only administer post-test following an educational activity, focused on measuring participation and customer satisfaction. Agents' lack of expertise limits their ability to measure long-term impacts and demonstrates a significant need related to evaluation planning, data collection and analysis (Lamm et al., 2013). The purpose and objectives of this study were to identify what Extension evaluation specialists believe are core evaluation competencies that should be taught to Extension agents, the challenges they face in evaluation competency development, and the strategies that help them to overcome those challenges. A three round Delphi technique (Warner, 2015) was used for the study. It was approved by Institutional Review Board and conducted in the spring/summer of 2018. We used university websites and the American Evaluation Association database to purposively select the panel of 46 evaluation specialists. The panel averaged more than 12 years of experience and represented 31 states. The first, open-ended round resulted in a list of 97 unique competencies, 75 challenges, and 63 strategies. The subsequent rounds utilized the definition of consensus as 2/3 of the group choosing extremely or very important regarding developing the evaluation competencies and

addressing the challenges (Warner, 2015). We utilized that same definition regarding the perceived usefulness of the each strategy with consensus being 2/3 of the panel choosing extremely useful and very useful. The group achieved consensus on 38 competencies, 24 challenges, and 21 strategies. The panel demonstrated the highest agreement on the following competencies: develop appropriately framed questions/measures to effectively assess program outcomes and needed improvements, develop a list of evaluation questions that will guide the evaluation design, use evaluation results to improve either an existing program or future programs and utilize evaluation results to effectively develop and disseminate tailored messages to key stakeholder groups. There were several overlapping competencies with the Rodgers et al. (2013) model including instrument and question development, interpretation and communication of evaluation results and developing a program logic model. The panel agreed that the most important challenges to address included: Extension administration priorities result in lack of support, investment, and buy-in for evaluation; insufficient resources to facilitate systematic evaluation and evaluation capacity building; building capacity among a very large group of educators; and the value administration places on accountability and programming rather than program improvement and impact evaluation. These results create the perception that evaluation needs to become more of a priority within Extension and mirror structural and cultural impediments to Extension program evaluation success (Franz & Townson, 2008). The most useful strategies for addressing the major challenges were identified as providing the needed technologies to help with evaluation, remove expectation or the misconception that everything must be evaluated to get credit for programming efforts, leadership serve as program champions for evaluation and Extension administration must provide a clear message of their expectations. These strategies focus on promoting a culture change within Extension through appropriate support, resources and expectations. These findings provide important data to help guide professional development among extension educators in program evaluation. Local judgements should be made to whether the competencies in this study represent a realistic range to develop among Extension agents with the balance of responsibilities they hold. By developing consensus at a national level, it provides an opportunity for evaluation specialist to develop a national competency checklist that they can work in collaboration to developing among the breadth of Extension agents. It also provides the opportunity to develop an evaluation competency assessment similar to that of Rodgers et al. (2013) to measure competency development at a national level. The results also represent an important foundation for discussion of policy and structure to ensure the evaluation capacity building is effective and can be sustained. It is apparent that a culture change is necessary to promote the effective evaluation of Extension programs. Addressing the challenges that range from resource availability to administrative support can help enhance evaluative capacity building across the country, regardless of system structure.

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## **An Extension Culture Check-Up**

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### **Abstract**

An organization's culture is the number one influence when it comes to organizational performance and effectiveness. The purpose of assessing the culture of your organization is to identify the many moving parts that make up large, fragmented organizations like Extension. The way in which Extension does work is changing as rapidly as our clientele seeks out educational information in the 21<sup>st</sup> century. This session will look at how to give your organization a culture check-up by identifying what "culture" means, how to measure culture, and what to do with the results as you look ahead to building synergy, increasing productivity, and problem-solving as an organization.

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## Streamlining Podcasting for Professional Development

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### Abstract

The popularity of podcasts has grown steadily among U.S. educated, smart-phone users (Edison & Triton, 2018). Apple podcast currently has over 550 active shows and 18.5 million podcast episodes available (Apple 2018). According to Edison Research and Triton Digital survey data, 44% percent of Americans ages 12 and older have ever listened to a podcast, an increase of 26% since 2008. This same report indicates 26% of listens occurred in the past month and over half of those occurred at home or in a vehicle (Edison & Triton, 2018). The Military Families Learning Network (MFLN) has begun offering podcasts as a method of program delivery to meet the professional development needs of military family service professionals (MFSPs) and Cooperative Extension educators. Through interviews with MFSPs, some have revealed they experience long commutes to work and enjoy listening to podcasts on their commute or in their spare time (Majerle & Hering, 2015). MFLN webinar evaluations, annual evaluation surveys (Scott & Cassels, 2017), and informal social media conversations reveal other professionals have expressed interest in connecting with a broader community of support professionals. Additionally, views of MFLN webinar recordings and blog posts, indicate a growing interest in asynchronous learning opportunities. Popular marketing advice touts podcasting as a powerful way to build credibility and authority through routine knowledge sharing, while also building a stronger connection with a particular audience. In 2010, Hendrickson et al., recommended Extension educators might consider podcasting as part of existing program offerings through a blended learning approach (Hendrickson et al). For these many reasons, along with the desire to serve a globally distributed workforce of service providers and educators, MFLN has experienced a podcasting boom as part of its program delivery. MFLN's seven programming teams have experimented with a variety of podcasting formats, recording and editing tools, and production platforms. Each team has also chosen different types of podcasting formats to meet the professional development needs of each of their targeted audiences. One-on-one interviews, non-fiction narrative storytelling (often combining snippets of several interviews), and how-to podcast series have been created and published. The very first podcasts were recorded and posted to blog posts using the native capabilities within the WordPress blogging platform. Eventually, audio file size limits and the need for wider distribution channels, pushed some teams to look at using alternative hosting platforms, such as Archive.org and SoundCloud. As a virtual organization and production network distributed among several universities, each having access to different technologies, MFLN collectively experimented with a wide variety of recording and editing tools. Web conference and phone conference call recording applications such as Google Hangouts, Zoom, Skype, and free conference call were used to record audio, especially those involving interviews. For one team, a physical MP3 recorder was used for recording Skype web conference calls. Teams edited and enhanced digital audio using Audacity and Adobe Audition, frequently sharing sound editing tips, tricks, and best practices to reduce the time associated with learning these new technologies. One team contracted an editing service to enhance and edit the audio file. Distribution and marketing efforts have been made by sharing podcast opportunities through the MFLN website newsfeed, social media and email newsletter update. Most recently, an application called Seriously Simply Podcasting has been used to both organize podcasts in the WordPress environment and also make podcast distribution compatible and ready for iTunes or Google Play. Podcast reach for all podcasts is monitored and evaluated using built-in WordPress podcast statistics,

Google Analytics, and social media analytics. As a result of MFLN’s collective podcasting experimentation, MFLN teams have learned new insights about the time, technology and skills required to produce podcasts and have increased their understanding of how different hosting platforms function. Teams have also learned how to produce podcasts in a wide range of formats to provide added value to webinars, engage in narrative storytelling to explore topics related to personal and professional growth, and to engage participants in direct skill-building activities. In this session, the presenters will look forward to sharing MFLN’s collective knowledge and experiences associated with producing podcasts for professionals development, focusing on what educators and production teams can do to streamline their own podcasting efforts to better connect with targeted audiences in a growing, and competitive podcasting landscape. Recommendations will include sharing key considerations and strategies participants can use to help break down production barriers and learning curves associated with choosing and implementing podcasting as part of a professional development solution.

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### **Evaluating Core Competency Areas of Florida’s County Extension Agents**

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#### Abstract

The Extension Faculty Development Academy (EFDA) was created to provide new Extension faculty in Florida the necessary foundational competencies required to perform their responsibilities effectively. A competency is “a set of observable performance dimensions, including individual knowledge, skills, attitudes, and behaviors ... collective team, process, and organizational capabilities linked to high performance providing the organization with sustainable competitive advantage” (Athey & Orth, 1999, p. 216). The EFDA enhances the program development and evaluation competencies of new Extension faculty. Harder, Place, and Scheer (2010) found nineteen core competencies entry-level Extension agents should possess including: program planning and evaluation, program delivery, teaching skills, volunteer development, cultural sensitivity, problem solving, interpersonal, leadership, and communication skills, and subject matter expertise. The program consists of two synchronous 2.5 day in-person trainings one month apart. Participants complete pre-requisite work prior to attending each

training via online modules. During the trainings, presenters use a variety of methods of instruction, as well as innovative activities such as the Big Blue Wall and a teaching practicum experience. Professional development programs are important because they provide individuals an opportunity to learn new skills for improving job performance, obtain new knowledge for addressing challenges in the workplace, and engage in techniques to carry out effectively job responsibilities (Mizell, 2010). Extension program evaluation involves “gathering evidence about program outcomes and impacts (Israel, 2015, p. 1) to determine whether the program succeeded or failed. Evaluating programs also communicates the value or worth of the program to stakeholders and other interested parties (McClure, Fuhrman, & Morgan, 2012). Given the importance of professional development programs and the benefits provided to participants, this study sought to determine the effectiveness of the EFDA Program. Specific objectives were to describe any changes in self-perceived competence in program planning and evaluation because of the EFDA. The target audience for this study was past participants of the EFDA. One hundred and sixteen participants enrolled in the EFDA received and completed a researcher-developed questionnaire via an online survey after program completion. Data collection included five surveys conducted in 2016, 2017, and 2018. There were two core competency areas highlighted in the surveys: program planning and development, and program evaluation. Statements included under both core competency areas asked participants to indicate their perceived level of skill at the end of the EFDA program using a post reflective survey. The scale for program planning and development, and program evaluation ranged from very low to very high. Data analysis included the use of descriptive statistics and dependent *t*-tests. Dependent *t*-tests indicated statistically significant improvements in all competencies under program planning and development, and program evaluation. The top three items with the greatest improvement for program planning and development were: develop medium-term (behavior change) program objectives with an effect size of  $d = 0.74$ ; develop long-term (social, economic, environmental) program objectives with an effect size of  $d = 0.74$ ; and develop long-term Extension program plans (extension beyond 2-3 years) with an effect size of  $d = 0.72$ . The top three items with the greatest improvement for program evaluation were: develop intended outcomes that relate to the measurable objectives with an effect size of  $d = 0.76$ ; establish measurable objectives for judging the success or failure of a program with an effect size of  $d = 0.74$ ; and align local impact data with Florida’s Extension Roadmap with an effect size of  $d = 0.73$ . Overall, the EFDA program was effective in improving program planning and development, and program evaluation competencies of Extension agents. New Extension faculty training and development is essential to creating a knowledgeable and effective workforce. Program and staff development professionals can use innovative teaching methods such as the Big Blue Wall and teaching practicums to enhance their state’s own training programs. Program instructors can focus professional development sessions on enhancing other competency areas to ensure agents are prepared to address challenges in the workplace. Evaluation of the EFDA needs to expand toward demonstrating that participants are not only gaining knowledge and skills but are making changes in the way they develop and evaluate their educational programs. Further research is needed to determine the most valuable skills agents should possess to address complex problems and changing client-needs.

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## **Educator Professional Development: Exploring Lesson Study in Multiple 4-H Contexts**

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### **Abstract**

Effective professional development is essential to help prepare 4-H staff and volunteers to deliver high quality programming with youth participants. However, findings from a recent study revealed that most state 4-H professional development opportunities are one-time, episodic events delivered by outside experts (Author et al., 2017) – traditional methods – which are often ineffective (Penuel et al., 2007). Thus, Author et al. (2017) argue that there is a demonstrated “need to introduce more reform-based professional development opportunities into the 4-H landscape...” Lesson study, an iterative and educator-centered approach to professional development, has proven to be effective in school-based settings. The lesson study model involves educators working in communities of practice to develop a reflective orientation on their teaching (Rock & Wilson, 2005). The lesson study process is constructivist-based, iterative, occurs over an extended period, and is data-driven (Lewis & Hurd, 2011). In the United States, lesson study has been used successfully by classroom teachers and pre-service educators (e.g., Doig & Groves, 2011; Marble, 2007); positive effects on educators include improved knowledge, skills, and confidence (e.g., Rock & Wilson, 2005; Wiburg & Brown, 2007). In 4-H, however, only one investigation involving lesson study with adult volunteers in rural, club-based settings has been published (Author, 2013). Results from this investigation provided evidence of the promise of lesson study in 4-H; however, the size and scope of the inquiry limited its generalizability. We utilized a qualitative case study methodology (Yin, 2013) to explore the use of lesson study in different 4-H contexts. We selected 4-H programs using a stratified purposive sampling process to provide maximal variation between sites (Patton, 2015): (a) geography (3 states); (b) 4-H delivery modes; (c) curricula; (d) types of educators; (e) meeting modes (in-person or virtual); and (f) meeting frequencies. The total number of educators was 18; the number of educators per site lesson study group ranged from 5-7; and the number of sites (clubs and classrooms) where curriculum lessons were implemented was 21.

**Educator and youth reflection tools.** Two formative assessment tools were used by participating educators: a plus/delta educator reflection tool (Fanning & Gaba, 2007); and a youth clover reflection (Arnold & Gifford, 2014). Data from these reflection tools were analyzed for outcome purposes in addition to their being used as a source of formative data by educators.

**Focus group interviews of educators.** Post-project focus group interviews were held with educators (three focus groups total; one per site). The purpose of the focus group interviews was to understand

educators' perceptions of and attitudes toward lesson study (Krueger & Casey, 2016). Focus group interviews were recorded and transcribed for analysis.

**Data Analysis.** Data from all three sources were analyzed inductively using the constant comparison method (Dye, Schatz, Rosenberg, & Coleman, 2000). Three primary themes emerged from the data:

1. Benefits of lesson study to 4-H educators.
2. Strengths of the lesson study process in 4-H.
3. Opportunities for improvements using lesson study in 4-H contexts.

### **Theme 1: Benefits of Lesson Study to 4-H Educators**

Educators shared their perceptions of the lesson study process pertaining to their own development. These included improvements to data-driven decision-making, content knowledge, lesson planning and implementation, and social connections.

### **Theme 2: Strengths of the Lesson Study Process**

Educators were asked during focus group interviews to reflect on what they experienced as strengths of the lesson study process as a professional development strategy. Emergent subthemes included: leadership and roles; lesson study group meeting format; role of content experts; and formative data tools.

### **Theme 3: Lesson Study Process – Opportunities for Improvement**

Educators were also asked to comment on areas of the lesson study process they thought could be strengthened. Three subthemes included: timing and frequency of meetings; lesson implementation schedules; and formative data tools.

This study provided additional evidence that the lesson study model of professional development has potential for use in 4-H. The study provided specific insights into the use of lesson study in different 4-H contexts with a variety of types of curricula. Furthermore, the investigation demonstrated that lesson study has the potential to work with varying types of 4-H educators, meeting schedules, and meeting formats. However, further research is recommended on the use of the model in additional 4-H contexts using varied content matter and a wider age range of youth.

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## **Extension Directors' & State 4-H Program Leaders' Perspectives on 4-H LGBTQ+ Inclusivity**

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Key Words: Extension, Organization Adaptation, LGBTQ Youth, 4-H, Inclusion

### **Abstract**

Lesbian, Gay, Bisexual, Transgender, Queer (LGBTQ+) youth have become a visible adolescent identity-based group in the United States (Russell & Van Campen, 2011). Contemporary youth are among the first to come out as LGBT in large numbers (Russell & Van Campen, 2011). Youth serving organizations, such as 4-H, have not had to understand, incorporate, or knowingly serving LGBT youth (Russell, 2002; Russell, 2005). Anti-LGBT harassment is a common experience for contemporary LGBT youth which is linked with significant health risks (Poteat & Espelage, 2007). In a study designed to explore the organizational environmental factors of Extension and the 4-H program, the issue of serving LGBTQ+ youth emerged. The research question of the larger study was: What environmental factors do Extension administrators perceive as being challenges for their Extension organization and the 4-H program? The objective of this project is to share State Extension Directors and 4-H Program Leaders perspectives on serving LGBTQ+ youth in the traditional 4-H club program and the current response. State Extension Directors (n=7) and State 4-H Program Leaders (n=13) were interviewed as a part of this descriptive qualitative study. These participants represented all four APLU administrative regions and 15 states. Participants were asked to complete a management assessment tool called a SWOT Analysis for both Extension and the 4-H program in their state. Semi-structured interview questions were asked after the initial SWOT Analysis exercise. Data were prepared and analyzed by transcribing verbatim, memoing, open-coding with Atlas.ti, and then developing themes (Charmaz, 2014). Member checking was conducted to ensure transparency (Creswell & Poth, 2017). Two populations were used to provide triangulation (Corbin & Strauss, 2008). Administrators discussed the challenges they are currently facing to be inclusive of LGBT youth and the need to be inclusive of youth in the 4-H program. Administrators recognized the societal shift of an increased presence of LGBT visibility because more youth are starting to publicly identify at earlier ages and are being more public about that identity. Administrators recognized that LGBT youth were present in the program, and that, if they are there, that they should be made to feel welcome. Inclusion efforts included addressing how to provide overnight housing at camps and events, training staff and volunteers, and supporting youth when they do "come out." Inclusion efforts have been inconsistently welcomed. While, many administrators identified their organization as currently being inclusive more administrators recognized that Extension and the 4-H program needed to do more to be inclusive. The need for continued improvement was in response to push back from local level stakeholders, the media, and at the national level. This topic emerged in the broader study because it was a timely topic. "A couple of the states have put out a memo about federal policy and how they

view those things and they turned out to be picked up by the press as being very, very negative” [Administrator A]. The response to this memo included “national 4-H headquarters [being] censored.” Administrators expressed great concern about USDA-NIFA’s response. Despite the internal and external pushback, the administrators remain committed to youth inclusion efforts. As David noted, it takes leadership to remain committed to the goal in face of pushback. Even in the face of pushback, it was recognized that the work continues because LGBT youth and families are present in the communities that Extension and the 4-H programs serve. It was emphasized that while the organization had adopted an embrace of serving LGBT individuals it was a response to those youth and families being in the organization, rather than an effort to recruit those individuals. However, the inclusion efforts in turn welcomed and promoted more participation. 4-H has found itself on a culture war fault line. The land-grant university is committed to serving all youth while being present in rural communities across the country that retain populations that are deeply uncomfortable with these efforts. All 20 administrators who were interviewed talked about serving LGBTQ+ youth without it being a specific area of questioning. It was clear that as leaders they were committed to serving the youth who are in their programs, and if they happened to be LGBTQ+ they wanted to continue supporting those individuals. The precarious social and political situation 4-H is in was recognized. Administrators remained adamant that as leaders their role was to stay committed to inclusion and that they would continue to advance efforts that may be unfavorable in the short term for the long-term benefit of LGBTQ+ youth and their families.

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### **Online Video Conferencing—More than Just a Webinar**

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#### Abstract

The use of video conferencing has become a more common delivery tool in reaching both internal and external Extension audiences. Online video conferencing can be a tool to improve the overall communication channels within the Extension organization. The main uses of video conferencing is through webinar presentations and one-on-one or group meetings. A better understanding of other potential uses of video communication would be important for Extension program and staff

development specialists, administrators, as well as instructional technology professionals. In an organization like Extension, with personnel located in remote offices across a state, improving communication lines using video conferencing can be valuable for employee engagement and morale. Online conferencing is important in the effectiveness and efficiency of Extension management and administration to build trust and foster engagement among staff. In an “Internet Trends 2018” report (Meeker, 2018), Mary Meeker reports the results of a survey conducted by the Zoom company of over 700 of their customers. The survey respondents indicated the following benefits of using Zoom video conferencing:

- 85% reported improved collaboration
- 71% reported improved productivity
- 62% reported that using video conferencing supported flexible work schedules
- 58% reported that using video conferencing built trust among remote workers
- 58% reported reduced meeting times
- 48% reported that using video conferencing helped remove company silos

Online video conferencing can also be a tool to improve the overall communication channels within the Extension organization. In a study of 2,000 UK and US office workers, as many as 64% of the office workers agreed that if they could see someone speaking they were more likely to trust the message being conveyed. As such, video communication can not only ensure that information is transmitted accurately, but can also help workers feel that they are being communicated with openly, further benefiting employer-employee relations (Kollective, 2017). In an organization like Extension, with personnel located in remote offices across a state, improving communication lines using video conferencing can be valuable for employee engagement and morale. The use of video conferencing has become a more common delivery tool in reaching both internal and external Extension audiences. The main uses of video conferencing is through webinar presentations and one-on-one or group meetings. A better understanding of other potential uses of video communication would be important for Extension program and staff development specialists, administrators (including middle managers), as well as instructional technology professionals. Video conferencing has become a valuable tool for Extension that has replaced or improved upon some of the traditional ways that Extension has conducted educational programs and handled internal communication and management activities. The identification of new and inventive ways to use video conferencing for these activities can result in more effective delivery of educational activities and increased communication across the Extension organization.

Implications and Application: Interaction with session participants will be used to discuss how the examples presented might be adapted for use in other states and also identify possible additional situations where video conferencing would be an effective delivery methodology for Extension.

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## Evaluating Extension Program Impact Using the Value Creation Framework

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### Abstract

Impact is a key metric for many Extension program evaluations. Yet, telling the story of how individuals have changed behavior, improved performance, and positively impacted their organizations and communities through program participation can be difficult. Given limited budgets, tight timelines, and numerous logistical challenges, capturing impact over time through Extension programs can seem out of reach for faculty and administrators who, in many cases, do not serve in full-time evaluation roles. In this session we offer a novel approach to breaking down the barriers associated with evaluating impact outcomes of informal education programs. The Military Families Learning Network (MFLN) provides online professional development and networking opportunities for service providers and Cooperative Extension professionals serving military families on installations and in communities. In this session we present the qualitative evaluation framework we are using to assess program impact outcomes over time. Historically, we evaluated *potential* impact through post-participation surveys. However, in 2016 we adapted and implemented the value creation framework (VCF) put forth by community of practice and social learning scholars Wenger, Trayner, and DeLaat (2011). With this approach we can now effectively track participants' application of knowledge, the integration of knowledge into professional service, and related performance and organizational changes. Session attendees will gain a theoretical and practical understanding of the VCF, as well as how we have adapted the framework to fit our Extension context. We will illustrate findings from two years of data, and explore the possibilities and limitations of the value creation concept for evaluating Extension programs. We will also share how the rich qualitative data lends itself to powerful reporting possibilities—even in settings where quantitative data is emphasized. This discussion will be significant for any Extension professionals challenged with evaluating program outcomes and impacts. Our adaptations and findings will be of particular interest for those working within the context of networks/communities of practice, informal adult learning, and online programming. The VCF involves questioning sequences that elicit a personal value narrative (PVN) as well as a significant activity (SA) experienced as part of that narrative. Indicators are developed along with the questions to easily code and locate answers on an analytical matrix. The matrix organizes the PVNs in order to more readily correlate value cycles with chunks of data, and ultimately assess the value created through network learning and participation. The SA indicators may supply different types of data that triangulate the PVNs, and can also act as proxies when looking at a respondent's narrative as it traverses value cycles. Together, the PVN and the SA form the value creation story, and provide extensive experiential data illustrating impact across cycles. Stories can span five cycles of value experiences: those with immediate, potential, applied, realized, and reframing value. MFLN's annual evaluation survey largely aligns with the authors' theoretical frame, but utilizes modified approaches to data collection, organization, and analysis. We modified this interview approach for use in a Qualtrics survey; created indicators and value cycles that aligned with our participants' context; used open, inductive coding; and added a modified constant-comparative approach for analysis. The annual evaluation shows that the network is delivering high-impact professional development that is supporting a workforce of skilled and professional service providers. Data indicating enhanced personal performance and improved service delivery affirm that MFLN programming is productively aligned with its mission. Program participants are experiencing the positive benefits of social and peer learning by sharing experiences, information, tools, and resources with each other both during and after live

programming events. Respondents indicate that MFLN programming is effective, timely, and needed, and provides such value to participants that it often exceeds their professional development expectations. Some respondents are participating in programming from multiple concentration areas, which appears to help support multidisciplinary knowledge gain and the potential for more holistic service provision for military families. The annual survey is an extremely productive evaluation tool that offers extensive evidence of program impact while also providing formative information that helps us to continuously adapt to the changing needs of our participants. The VCF and the data it provides is attractive to our funders as we are able to provide high-impact qualitative data in easy-to-digest formats. We have also created novel methods for visualizing the qualitative results, such that the formal reports combine narratives and data visualizations in an effective mixed-methods format. The VCF is an approachable and productive evaluation design that can help Extension educators gain new insights into their programming impact.

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### **Looking to the future: New competencies for the 21<sup>st</sup> century educator**

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Keywords: professional competencies, personnel development, skills

#### Abstract

Most program and staff development professionals work within McClelland's Competency Model that focuses on building individuals' capabilities to perform the tasks and processes that create a "sustainable competitive advantage" in for-profit organizations, meaningful improvements for clientele in not-for-profit organizations, and professional success for all personnel (McClelland, 1973; 1998). Extension organizations rely on the competency approach to help personnel to acquire, enhance, and implement the skills needed to realize our vision and mission for the citizens our states (Harder, Place, & Scheer, 2010; Scheer, Cochran, Harder, & Place, 2011; Scheer, Ferrari, Earnest, & Connors, 2006). Over the last few decades, extension organizations have been building their capacity to thrive as change has become constant, rapid, and even disruptive (Torppa & Smith, 2011). Having just celebrated our 100th anniversary, the time is right to ask: What does the landscape look like for the future of extension work and what are the skills our personnel will need in the future? Our purpose for study is to explore the competencies that will be needed by future extension personnel to ensure extension remains our nation's premier community partner in using science-based knowledge to improve the social, economic

and environmental conditions that affect quality of life. As a foundation for understanding needed competencies, we conducted a literature review of multiple scholarly publications, applied studies and professional essays, articles and public presentations representing a wide range of extension organizations across the county. We then conducted a comparative analysis which resulted in the identification of past, current and anticipated competencies. Looking first at previously recognized skills, we found that many categories of competencies remain central to extension's needs. Specifically, many competencies were consistently listed in nearly all studies, a few previously recommended competencies were absent from more recent lists, but some that were dropped reappeared in later works. Competencies that maintained priority status included: Extension Knowledge, Communication/Marketing/PR, Technology, Research Skills, Program Planning/Implementation/Evaluation, Interpersonal Skills, Leadership and Management. Competencies that appeared, disappeared and reappeared over time include Professionalism and Continuous Professional Development, Diversity Appreciation and Knowledge, Key Personality Attributes, Community Development Knowledge, Business Sense/Ability to Work with Funding and Grants, and Networking. Next, exploring competencies for future extension programming, we searched our sources for indications about the capacities that will underpin future success. Findings suggested most of the categories identified above will retain importance, but the operationalization of skills within those categories will evolve as extension professionals adapt to changing conditions. A few of the new capacities that will be needed include:

**Evaluation.** With information and misinformation readily available from similar looking sources, future extension educators will need to apply traditional evaluation skills to assessing the quality of the information they use and to help clientele distinguish between evidence-based information and spin (November, 2016).

**Teaching.** As Raison (2014) noted, the traditional model of information delivery must give way as extension educators help guide our audiences' interpretations and applications of the information they bring to a learning context. This will include abilities to help audiences to think complexly, make sense of disparate ideas, and reframe perspectives.

**Networking.** More than forming partnerships, extension educators will be sought by their communities to serve as the trusted leaders who can convene and facilitate groups of community partners as they develop plans to address local issues.

**Technology.** Rather than learning to use applications effectively, the skills necessary to harness the power of networks will be needed to overcome social group polarization and build customer relations management systems (Languster, 2015; Cummings, Andrews, Weber & Postert, 2015; Argabright, 2018).

**Urban Audiences.** With 80% of the U.S. population living in urban or metropolitan areas, necessary competencies to build connectivity among urban, suburban, and rural communities will be critical (Fox, Ruemanapp, Proden & Gaolach, 2017).

**Relevant Experience.** We can no longer assume that our new professionals will begin their extension careers with on-farm or other in vivo experience to bolster their theoretical knowledge; training and development support for fundamental skills will be necessary and expected (Crawford, Lang, Fink, Dalton & Fielitz, 2011).

Extension organizations will continue to evolve as the communities we serve evolve. As program and staff development professionals, awareness of the ways these changes will profoundly affect our personnel's ability to perform their duties effectively will be critical to our ability to provide the training and support necessary to ensure the continued success of extension organizations across the nation.

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### **Empowering Volunteers as Agents of Change through Adaption and Innovation**

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#### **Abstract**

We often have very gifted, motivated, skilled and capable volunteers assisting us in our programs, but sometimes these volunteers still seem to lose interest or fail to see eye-to-eye with the main goals associated with their volunteer work. There may be many personal and professional reasons for this, but loss of great volunteers may also be linked to differences in our problem-solving styles. According to adaption-innovation theory, we each have a stylistic preference to solving problems, which is unrelated to intelligence, skillset, motivation, age, culture, ethnicity, and situation. Problem-solving style is inherent and stable, which means that if two highly intelligent and motivated individuals are disagreeing on how to solve the problem, it may simply be that they prefer solving it differently. One's problem-solving style can be delineated as more adaptive or more innovative, as measured on a 128-point

interval scale using Kirton's Adaption-innovation Inventory (KAI; Kirton, 2011). A precise score of an individual becomes useful in predicting team performance as Kirton (2011) has found that a 20-point gap, or more, between two individuals along the adaption-innovation continuum may lead to conflict. Because we all solve problems (Kirton, 2011), we are all agents of change; each of us wanting to move from the current state to a desired state, which requires a solution (Lewin, 1947). As an agent of change, we can move from the current state by either refining the current system to improve efficiency (evolutionary change), or transform the current system to make it different (revolutionary change; Kuhn, 1970). The more adaptive prefer evolutionary change and prefer more structure to be enabled to solve problems, while the more innovative prefer revolutionary change and prefer less structure to be enabled to solve problems (Kirton, 2011). Because volunteers do not want to be micro-managed, but do want clear expectations of their responsibilities (Fuller & Friedel, 2017), the volunteer manager must provide the adequate amount of structure for volunteers to complete their work while having a feeling of autonomy. Kirton's Adaption-innovation theory provides a framework which we may utilize to manage more adaptive volunteers who prefer detailed structure and readily see problems within the organization, as well as more innovative volunteers who prefer little structure and find the most significant problems outside the organization. Extension agents managing volunteers should be aware that their personal problem-solving style biases the amount of structure given to volunteers and direction to the problems needing solved. Further, a 20-point problem solving style gap may contribute to difficulty in communicating, impediments to working together, and inhibited trust of each other. While many KAI practitioners have anecdotal evidence supporting the application of adaption-innovation theory to volunteer management, more research is warranted. While many in volunteer management have used psychometric inventories to better manage teams, the KAI has a distinct advantage by having a theoretical backing to predict how differing scores will interact with each other (Kirton, 2011). Extension agents who have roles in managing volunteers may learn adaption-innovation theory to better understand how people prefer to solve problems, and how a diversity of problem-solving styles may improve the successfulness of the volunteer team.

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## Extension Mid-Career Workshop Cultivates Growth, Inspires Action

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Keywords: Extension, mid-career, professional development

### Abstract

Mid-career Extension Educators/Agents often get caught in the middle of professional development opportunities. Extension spends many resources on new staff and provides strong leadership and mentoring opportunities for senior staff. As a result, staff with 5 to 10 years of experience often lack the development and training they deserve. This session will showcase a successful professional development workshop that was tailored to meet the needs of mid-career Extension Educators/Agents. Participants will learn about the planning process, content, design, and results of the workshop. Several of the activities from the workshop will be demonstrated as part of this interactive session. The needs assessment conducted prior to the development of the workshop was critical in determining learner objectives and served as a foundation for workshop content. Topic areas for the workshop included connecting and engaging the audience, creatively delivering content to reach a variety of learning style preferences, soliciting and responding to feedback, applied learning, creating actionable take-away messages, and promoting goal-setting. Post-workshop evaluations captured the top three things participants learned, a reflection statement about the progress they made on their pre-workshop goals, and an action step they would commit to achieving within the next three months. Workshop participants reported learning new techniques for engaging with audiences, techniques for goal-setting, ideas for marketing programs, creatively delivering content to reach a variety of learning style preferences, and how to evaluate learning. The majority have incorporated one or more new teaching approaches into their programming. Participants have used the skills from the workshop to enhance their marketing efforts using technology and expand their programming through web-based learning with one participant sharing, "The workshop helped me change how I thought about program planning and development." Help your Extension Educators/Agents take their educational programming to new heights and achieve greater job satisfaction by implementing an interactive mid-career workshop.

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## Examining workplace learning in the Extension profession

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Keywords: workplace learning, agency, adult learning

### Abstract

Learning is required to sustain current and future employability and insure competitive advantage (Billet & Choy, 2013; Le Clus, 2011). Competence is in need of constant updating and renewal (Illeris, 2003). Informal workplace learning is an effective, yet underappreciated, method of improving work performance (Billet, 2004; Illeris, 2011) that takes place during and as part of the process of doing work (Marsick & Watkins, 2001; Billet, 2004). Cunningham and Hillier (2013) define informal learning as, "Any learning activity related to the pursuit of understanding, knowledge, or skills that is outside the curricula of educational institutions or the course or workshops offered by educational or training agencies (p. 38)." Learning from doing work is often not seen as a legitimate or recognized form of professional development, (Billet, 2002; Eraut, 2011) yet learning and participating in work are inseparable (Billet, 2004). Cunningham and Hillier (2013) found that it is informal learning that individuals choose to participate in more often than formal learning. This study will explore how individuals learn informally in the workplace (Billett, 2004; Eraut, 2007; Illeris, 2011). This understanding can allow for an intentional effort to learn by the individuals. Formal education and formal workplace training are not currently adequate in providing timely competency development needed for employees to maintain their skill level (Billett & Choy, 2013; Illeris, 2003). Technology and information needed in a job changes rapidly. Individuals cannot expect to be employed at one job for the duration of their careers due to constant change. Individuals need to be competent and prepared for future opportunities. Research shows that formal training is not as effective in transferring learning to the workplace as is informal learning (Eraut, 2011; Illeris, 2011). In addition, Marsick and Yates (2012) indicated that through their examination of multiple research studies, 70 to 80% of learning by individuals in the workplace is informal learning. Informal workplace learning provides in-the-moment learning opportunities. Learning is more relevant to the job at hand (Cunningham & Hillier, 2013). Ongoing learning is important because of the aforementioned constant changing of skills needed in the workplace. Informal learning can be adapted more readily to job tasks. Berg and Chyung (2008) found that more learning was obtained by individuals from informal workplace learning than from formal training. Improving capability, someone's sustained ability to perform (Bryson et al., 2006), is the goal of workplace learning. Workplace learning is a relevant theory to the Extension profession. Both individual learning and social learning are concepts we can better understand. Learning in the workplace is a theory that extension can benefit from as resources for and effectiveness of training are limited. Extension professionals will benefit from this discussion and presentation as there will be a better understanding of how others learn in their workplace. Learning professionals within Extension will gain an understanding of learning in their profession. This will enhance their ability to create learning plans that will strengthen the professionals' ability to deliver a successful Cooperative Extension program.

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## **Design Thinking: An Innovative Approach to Program Design**

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Extension's roots were born from innovation. Yet, creativity and the art of experimentation have been lost in our current culture of efficiency. Design thinking, born from research by Tim Brown (IDEO) and the Stanford D School, provides an actionable step-by-step process for creative design that can help Extension professionals develop creative solutions to current complex challenges and opportunities. This innovative approach includes five stages of design – empathize, define, ideate, prototype, and test – and is ideal for Extension because it offers a human-centered approach to issues identification and program planning. While traditional models of program planning, like the Logic Model, are still very much relevant to how we plan and identify resources and objectives, design thinking offers a more robust and agile method to plan engagement opportunities by moving evaluation up in the planning process and guaranteeing a higher level of impact. Design thinking leans heavily on empathy and incorporates ways to actively engage clientele in the program planning process. Even more, design thinking encourages failing early and pivoting where necessary to ensure every idea will be met with success.

This session will provide participants with an introduction to design thinking, examples of how it is currently being implemented in Extension, and an introduction to hands-on design thinking activities for an immersive experience. Participants will leave the discussion with a better understanding of the non-linear process necessary for designing solutions to complex challenges and opportunities. Participants will be armed with daily habits and activities they can utilize right away in their work and with colleagues. Additional information will be provided for further design thinking collaborative learning opportunities for continued learning and development.

## IGNITE PRESENTATIONS

### **Using mixed methodology in assessing community needs**

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Keywords: mixed methodology; needs assessment, asset-based approach to needs assessment, market research

#### Abstract

Mixed methodologies in research and evaluation have been widely accepted for the last decade in the social and behavioral sciences (Creswell, 2014). We are recommending the use of a modified, adapted from Creswell (2014), sequential exploratory methodology. Creswell's method includes exploring a phenomena quantitatively first and then uses single or mixed method of data collection and analysis as a second phase. The second phase may include asset-based to needs assessment approach which builds on the positives of the communities and encourages communities to utilize their assets and not extensively rely on external aid (Altschuld, 2015). The purpose of this pilot study is to overcome the weaknesses of a traditional or single-approach research method by using an integrative methodology in assessing community assets and needs. The research objective is to identify future demand for Extension programming. We offer a two-phased approach; Phase I is a market analysis approach, while Phase II is an asset-based approach to needs assessment. The market analysis approach focuses on a unique service market segment (i.e., non-formal education) through the comprehensive examination of local community resources, assets, and trends. Phase II utilized qualitative research strategy discussion group. An urban county in the state was selected as a pilot project for identifying the demand for the future Extension programming. For Phase 1, the market report for the county (Phase I) included secondary data analysis (analysis of existing data) of the following major areas: demographics; health; agriculture; business and industries; local county Extension resources; recent Extension programming efforts; non-formal (community) educational opportunities outside of Extension; and world, national, and local trends. The data has been gathered from the U.S. Bureaus of Census, Labor Statistics, and Economic Analysis; administrative records and local historical records were used. For the Phase 2, discussion group with county Extension advisory committee was utilized. Based on the results of the market analysis (Phase I), we identified the following possible future Extension programming for the pilot county: workforce development programs, assistance with federal, state, and local benefits, assistance with single-parenting issues, chronic disease management, challenges in the changing family structure, and urban farming. In September 2016, the discussion group with county Extension advisory committee was conducted. A summary report was generated from the qualitative data. There were major themes identified for the community's assets and needs. Defined community assets included: cultural attraction, active millennial/citizens, unique demographic, education, community resources, food access, and community programs addressing poverty. Defined needs comprised of the following: education, housing, employment, safety, and social norms. The findings from this study and the proposed theoretical framework contribute to an integrative theory of evaluation. Analyzing community needs is one of the key step in program planning. We recommended the use of a mixed methodology approach to needs assessment that will complement a traditional Extension needs assessment. Mixed methodology will help to mobilize community's assets, resources, strength, and opportunities available

to address the identified needs. The findings will be used by Extension educators to design future programs.

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### **Using the Community Readiness Model to Restructure Local Food Systems Programming**

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Keywords: Community Readiness, Local Foods

#### Abstract

Purdue Extension's Local Food Summit program is intended to help communities to engage people, businesses, and other institutions in networking around the issue of local foods. The goal is to inspire communities to build or rebuild a local food system to combat the problems of food insecurity and struggling agribusinesses. The program began in 2015 and at least nineteen counties will have hosted their first summit by the end of 2018. Review of program documents revealed that there is a period of three to 24 months of preparation that occurs prior to each summit and Extension did not have a uniform manner in which to document these activities, or to correlate these activities with program outcomes. For over two decades, the Community Readiness Model has been used as a theoretical framework for developing and implementing substance abuse prevention programming (Edwards et.al. 2000, Plested et.al., 2006). Since that time, the model has been applied to community-based efforts in a number of areas (Plested et.al., 2006). This presentation explores the model's utility in helping Extension learn which communities would be best suited to host a Local Food Summit, which ones may require support in hosting a summit, and what post-summit follow-up steps and programming would most benefit communities across the state. Evaluation of this program utilizes a formative component to help program planners better understand the outreach, planning, and educational activities that need to take place for a community to host a Local Food Summit. The evaluation team conducted interviews with 13 Extension staff who had hosted at least one Local Food Summit between 2015 and the first half of 2018. Information was collected on the process used to plan and host a Summit. The team also documented characteristics of the communities that had hosted a Summit, and each was assigned one of the stages of community readiness listed in the model. There are nine stages of community readiness ranging from "No Awareness," where a community does not recognize that a problem exists at all, to "High Level of Community Ownership," where much of the community understands causes and effects of an issue, and have developed and implemented relatively sophisticated ways to monitor and combat the problem at the local level. A community can move along this model in either direction, depending on changes in local events, the national mood or levels of cohesion among local groups. For purposes of this evaluation, the nine Stages of Community Readiness were collapsed into three categories: Low (No Awareness, Denial/Resistance, Vague Awareness), Medium (Preplanning, Preparation, Initiation) and High (Stabilization, Confirmation/Expansion, High Level of Community Ownership). Ultimately, the

evaluation team will compare staff perceptions of the success of the local food summit with placement of each community on readiness level, summit attendance information, and responses to program satisfaction surveys administered on-site. Results were used to develop recommendations for Extension Leadership regarding (1) targeting implementation of Local Food Summits to communities in the middle readiness stages that were receptive to the event, (2) developing new programming for communities scoring on the early lower stages of community readiness, indicating the need for information about and awareness of local foods issues, and (3) offering concrete guidance for post-summit activities, efforts and organization for Extension staff to continue the work with communities and develop strategies and activities to further the community along the later stages of community readiness. Of the counties represented in the interviews, two are considered to have lower levels of readiness, two are considered to have high levels of readiness, and the remainder are in between. Counties in this medium category tend to have successful summits, but are hindered in their followup efforts, and do not appear to be able to move into higher stages of readiness without significant support. Counties in the lower category may need to receive targeted information and awareness campaigns before hosting another local food summit, and counties in the high category may be in need of more intensive supports as they work toward self-sustaining local foods systems. Both the use of systematic formative evaluation feedback and the application of the model itself represent an innovative approach to informing, developing and refining programs that Extension offers in Diversified Farming and Food Systems. This approach will help the program to best fit the needs and the readiness of communities for successful development of local food system programming, coordination, or expansion.

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### **Thriving in a Multi-Generational Workplace**

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University of Arizona

Keywords: Multi generational, generational, ages in the workplace

#### Abstract

With 5 generations in the workforce, each generation has different ways of communicating, different ways of working, and different expectations from their employers for compensation, benefits, and advancement. These differences between generations often result in tensions and misunderstandings, but differences can provide opportunities for new ideas, unprecedented growth and meeting the needs of our clientele like never before. While not everyone has the title of “Director”, everyone in Extension manages people and programs and we can all benefit by learning how to help each employee reach their potential. It’s also critical that as an employee, we learn how to ensure that our own needs are met in the workplace, even more so in a multi-generational workplace. It’s important to meet everyone where they are initially in order to engage employees. The generation we belong to is one of the many differences we may have with our co-workers. And while these differences can cause stress, misunderstandings, conflict and frustration; it can also be a source for creativity and productivity!

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## ROUND TABLE PRESENTATIONS

### Can you believe it? Credible and actionable evidence in Extension

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#### Abstract

Since its inception, Extension's mission has included transfer and generating science-based knowledge and practice, engaging and improving communities, promoting economic opportunity, and fostering access and equity, among other priorities. Given the diverse expectations, from parents of 4-Hers to farmers investing millions in next-generation technology hybrid crops or livestock feed and pharma, what is/are the standards for credible and actionable evidence (CAE)? Although evaluation practice has improved in the past generation (Rennekamp & Engle, 2008) as has evidence for best practices and rigorously-tested outcomes, where some evidence *is* documented, it reflects the whole range of Weiss' Five Levels of Evaluation (1998). Better understanding and application of standards and strategies for generating credible and actionable evidence can help Extension programs evaluate their impact and tell their story and more effectively to a wide range of stakeholders. Because Extension systems are complex organizations in the midst of ever-more complex and changing cultures, recent work by evaluation expert Stewart Donaldson and colleagues, *What counts as credible and actionable evidence* (Sage, 2015) provides great insight on how Extension units understand who they are, how they pursue their mission, and how they gather data to answer critical stakeholder questions. This roundtable defines the terms and describes the Extension landscape for *What counts as credible evidence* that will be featured in the June 2019 special edition of the *Journal of Human Sciences Extension*. Participants will be invited to offer questions and comments for authors, and equipped for ongoing discussion and action to select, generate, and utilize more credible and actionable evidence.

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## **A critical analysis of the evaluation capacity building in the cooperative extension system: Needs, issues and practical solutions**

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Keywords: Evaluation Capacity Building, Cooperative Extension

### **Abstract**

Evaluation is an integral part of Extension programming. It helps educators assess programming processes, engagement, and outcomes, improve practices, and meet reporting and accountability needs. Over the past two decades, evaluation capacity building (ECB) has received increasing attention in the Cooperative Extension System. The goal of ECB is to strengthen and grow organizational capacity to create and use evaluative knowledge and skills, and cultivate a culture of organizational learning, improvement, and accountability (King, 2007). Despite the continuous improvement, ECB is facing challenges and has not yet reached its potential. Measuring program impact in the vast scope of Extension work can be a monumental task. In addition, disparity among Extension educators' academic preparation for evaluation creates challenges to identify appropriate ECB programs that meet the needs of all. Extension administrators are compelled to respond to the Government Performance and Results Act (GPRA, 1993) that emphasized "return on investment." Subsequent to passage of the GPRA, many educators view evaluation as additional programming work to meet administrator's accountability demands rather than a means to improve educational processes. We recognize the complexity of ECB and offer some practical solutions to improve ECB through the proposed session. Elements that yield effective and sustainable ECB include:

- Aligning with university policies, strategic plans, and desired outcomes
- Resourcing ECB leadership and expertise,
- Scaffolding ECB comprehension and skill acquisition among faculty and staff, and
- Commitment from administrators to create a positive organizational environment for ECB.

Administrators must view a primary role of evaluation as program improvement that parallels emphasis on accountability. Moreover, when outcome assessment is part of the promotion criteria, Extension educators are motivated to seek more ECB opportunities. Involvement of evaluation specialists with educators in planning and implementing educational programs facilitates collaborative learning that leads to user-friendly evaluation tools for data collection and analysis. Encouraging educators to include evaluation as an important item in their annual professional development plan, providing learning resources and training opportunities, and educating them to integrate evaluation into their programming are important strategies to ECB. Identifying evaluation champions scattered throughout

the organization and supporting them to build a cadre of key advocates to practice, mentor, and communicate the value of evaluation are vital to ECB success (Taylor-Powell & Boyd, 2008).

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### **Increasing employee engagement**

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Keywords: staff development, engage, staff engagement

#### Abstract

Finding great employees is difficult, but an even more difficult is to keep great employees engaged. Employees should be viewed as an investment that needs ongoing training and development. Although this may be time consuming, employers will end up back at square one in search of the perfect talent time and time again if they don't engage their employees. A 2013 Gallup Poll found that only 30% of US employees are engaged at work. Most Universities depend on hardworking managers to keep employees engaged in the workplace. The problem lies in that a number of managers lack the skills to help their employees achieve success. Gallup research suggests that only one in ten people have the existing talent to manage. Some manager's possess boss type skills such as decision making and budget oversight, but those skills don't often translate to finding what motivates each employee and bringing out those qualities. The good news is most of these talents can be learned and honed. Therefore it's critical for organizations to have a plan to develop their employees and train their next crop of managers.

## Using a Blended Technique to Train New Extension Educators

Scott Cummings

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Katy Gottwald

Michelle Payne

Texas A&M AgriLife Extension Service

Keywords: Training, online, modules, in-person

### Abstract

As technology evolves, Texas A&M AgriLife Extension Service seeks to expand, serve, and train educators in the most efficient and timely manner. Currently, Texas generally has from 40 to 60 vacant educator positions, which, when filled, can be trained in a timely manner. However, Texas A&M AgriLife Extension Service hires year around. Previously new educator trainings were hosted every six months. This encouraged a problematic gap in time where some educators were hired. Although some training took place at the regional and district levels, many new educators had no state onboarding for more than five months. This time discrepancy encouraged Texas A&M AgriLife Extension Service to convert new educator trainings from two, 5-day training workshops, to a blended training technique. We define blended technique as a series of online and in-person training experience; meaning new educators are required to complete online learning modules and engage in in-person (i.e., state and regional) applied training. Recent conversion from strictly in-person training to mixed methods training has permitted more streamlined training and has allowed Texas A&M AgriLife Extension Service to get earlier strategic wins in terms of training. Additionally, this blended approach allows for new educators to: learn the lecture-type content on their own time, obtain consistent information, be quizzed on content learned, and opens the door for greater communication between educator and regional program leaders. Upon completion of the online training modules, new educators attend in-person training to apply learned material through exercises and in-person teaching methods. The in-person trainings are broken up into four sessions, and teach educators to apply the online content and develop critical thinking skills necessary for their position. The four in-person trainings will include experiential learning exercises that focus on, program development, effective teaching in Extension, office management, and working with people.

## **Aaaand Action! Take action with action learning**

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University of Minnesota Extension Center for Youth Development

Keywords: action learning, action learning project, staff development, cohorts, cohort learning

### **Abstract**

Action learning is a practical and high-impact way to enhance staff development within an organization. Action learning invites participants to own their learning experience by weaving personal experience, individual professional needs, and developmental training into a concentrated focus. In Extension, it is vital to offer tangible learning experiences that can be easily applied to one's position in real time while also building competence for future work, and action learning appeases this need. This presentation will describe action learning in practice within an Extension program and will detail the necessary components to effectively execute an action learning project (ALP). University of Minnesota Extension's Center for Youth Development created a cohort training for employees who have been onboard for six to eighteen months. The facilitators incorporate pertinent and timely topics into online and face-to-face meetings to provide continued staff development and enriched colleague connections beyond initial onboarding. Participants then immediately apply relevant training and experiences to a pressing issue of their choice by developing an action learning project (ALP). The ALPs act as the cohort's nucleus by connecting relevant research and best practices to each individual's project. Forty-five staff members have participated in the ALP process over three years at the University of Minnesota. Each participant learns to experiment with solutions, recognize constraints, and develop alternative resolutions (Sandford & Gerdes, 2016). They all make some level of progress towards their expected outcome, even if they do not reach their final goal by the end of the cohort. Examples of individual ALPs are as follows:

- Increased outreach efforts to new audiences
- Modified organizational policies and procedures
- Collaborative work on communication materials for families and partners
- Modification to and creation of programming that best supports the changing needs of a particular community

These projects address social, economic, and demographic changes occurring throughout Minnesota, and each participant takes a thoughtful, intentional look at issues they are uniquely positioned to impact. Cohort participants have shared the following on the ALP process:

- 100% believe the ALP pushed them to work towards a goal.
- 92% found the ALP to be beneficially challenging.
- 78% believe the ALP process enhanced their ability to lead in their community.
- 100% found the ALP process to be useful in their work.
- 67% noted that participation in the ALP was the single greatest takeaway of the cohort experience.
- "The ALP was a great learning tool for programming and presentation skills. I may not have focused on this work on my own but the cohort made it happen for me."
- "It was nice to have the opportunity to intentionally focus on a project. Having more intentional planning will hopefully set our programs up for long-term sustainability and success."
- "The work of my ALP made me set concrete goals to work on beyond the cohort."

ALPs are a tangible and concrete component of staff development for navigating change. Incorporating action learning into your organization's staff development plan, especially in conjunction with cohort

experiences, will create a community of practice in which participants engage in experiential learning. The practice of action learning in Extension is an especially valuable and practical option for professional growth.

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### **New Employees' Preferred Method of Learning Arkansas Reporting System- Four Years Later**

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Keywords: Accountability, Training, Onboarding, Reporting, Technology

#### Abstract

Arkansas Information Management System (AIMS) is the University of Arkansas Division of Agriculture Cooperative Extension Service's reporting and accountability system. All employees in the UACES system who conduct educational programming are required to report within the AIMS system. Issues encountered when training personnel about the AIMS system include computer and technology capabilities, equipment and internet connectivity issues, attitudes and perceptions of reporting, and emphasizing the need for accountability. To address these issues, training materials have been developed taking into consideration various learning styles. These materials currently include: screen capture videos, print materials, tutorials, one-on-one training sessions, screen share sessions, a website page, workshops, and in-service training. Training UACES personnel utilizing the AIMS system starts on day one. Since November 2012, University of Arkansas Cooperative Extension Service has implemented monthly training sessions, referred to as Mentables, for first year County Agents as part of the New Employee Onboarding process. Topics cover basic information identified by previous first year agents

and district directors as important to learn as a first year agent. In 2014, training related to reporting in AIMS was expanded to a one-on-one Zoom online training conducted within the first month of employment. In order to meet the demands of our agents and reporters, a survey of preferred learning styles and materials was conducted in 2014 to find which tools and resources related to the reporting process are being utilized the most by first year agents participating in the Mentable sessions (monthly onboarding web conferences for County Extension Agents). As a result of the initial survey findings, reporting resources were updated and additional reporting trainings were implemented, including merging of materials into one easy-to-locate website and one-on-one Zoom web trainings on reporting with every new Extension employee with reporting responsibilities within the first month of hiring. Utilizing the same survey questions, with new training opportunities being added into question options, a 2018 survey of preferred learning styles and materials is being conducted. Changes in preferences and effectiveness of current training opportunities will be examined.

### **Professional Development for Extension Staff: Is Online the Answer?**

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Keywords: online learning, blended learning, instructional design, professional development

#### **Abstract**

What is the best method for offering professional development for Extension staff? Budget constraints and limited time for traveling to a face-to-face training may make online professional development an attractive delivery model. This session will focus on steps taken to develop professional development for staff in the areas of educational technology (online course development), technology, and program evaluation at Michigan State University. In this session, participants will be able to discuss the advantages and disadvantages to online professional development for Extension staff. They will receive an overview of a course development model, which participants can apply to their own topic areas. Several Michigan State University Extension online courses will be demonstrated, including highlights of common instructor features in a learning management system such as notifications, grading, reports, and certificates/badges. In addition, participants will learn about different methods such as videoconferencing, online courses, and webinars including pros and cons of each method. Strategies for creating quality online experience will be emphasized. Participants will receive instructions for registering for several free professional development courses, developed specifically for Extension staff, which they can share with colleagues at their own institution.

## Adopting a traditional marketing mix strategy (the 4Ps model) for Extension

Suzanna Windon  
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Keywords: 4P's Model, Extension programming, Product, Price, Promotion, Place

### Abstract

Marketing strategies can be effective outside of the business world (Kotler & Bloom, 1984). Marketing strategies go beyond promotion and selling. Previous research related to marketing in the Extension field primarily focused on promotion of Extension programs, which is one of the components of modern marketing mix strategies. For example, social media as a marketing tool helps reach and engage many in the extension audience (Doyle & Briggeman, 2014; Rickenbach, 2017; Sangorski, 2014; Schilling & Marxen, 2013; Skelly, 2005). However, it is essential to view marketing strategies as a set of tools that help Extension professionals effectively marketing from the research stage to program idea, program development, program price, target audience, and promotion.

Philipp Kotler, the father of modern marketing, emphasized that marketing is about identifying and meeting human and social needs (Kotler & Armstrong, 2010). He popularized the marketing mix strategies concept as a model of 4P's, which include product, price, place, and promotion. Use of the marketing mix strategies is an old concept for business; however, it is a new concept for Extension. We view Extension education marketing as a tool that helps translate and share new knowledge for practical application with the aim of building trust among Extension clientele and improving their quality of life.

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## Core Competencies for County Extension Agents: Bridging Competencies across State Lines

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Key Words: competencies, core competencies, program development, onboarding

### Abstract

It is broadly accepted that county Extension agents require knowledge and skills in their technical areas of expertise related to program areas such as agriculture, youth development, or family and consumer sciences. In addition to an agents' technical expertise are a set of competencies associated with the course of action of Extension work; these competencies are sometimes called core competencies and they have often been the focus of Extension research (e.g., Brodeur, Higgins, Galindo-Gonzalez, Craig, & Haile, 2011; Fox & LaChenaye, 2015; Stone, 1997). A competency is "a set of *observable* performance dimensions, including *individual* knowledge, skills, attitudes, and behaviors, as well as *collective* team, process, and organizational capabilities, that are linked to *high performance*, and provide the organization with *sustainable competitive advantage*" (emphasis in original) (Athey & Orth, 1999, p. 216). Psychologist David McClelland (1973) facilitated this competency approach becoming widespread by postulating that intelligence alone was not an accurate predictor of workplace achievement. The measurement of competencies was presented as a beneficial way of assessing employee potential. Four major assumptions are the foundation of the competency approach: (a) observable performance measures, (b) criteria should be related to realistic outcomes, (c) competencies should be clearly described and practically defined, and (d) competencies development should be clearly shared with the public (McClelland, 1998). The program and staff development (PSD) units within the Southern Region Program Leaders Network (SR-PLN) conducted a survey of the core competencies that PSD units throughout the Southern Region used to guide the onboarding process for new agents. Commonalities across states were identified. Competencies were contributed by Clemson University, Mississippi State University, North Carolina State University, Texas A&M University, University of Arkansas, University of Florida, University of Georgia, University of Kentucky, and Virginia Tech.

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## Leading Virtual Teams

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Virginia Tech

### Abstract

Virtual teams are geographically distributed teams of professionals working together primarily through electronic means with little face to face interaction (Malhotra, Majchzak & Rosen, 2007). Increasingly, Extension professionals are participating in and leading virtual teams for both state and national programs and committees. Research has shown that leading virtual teams is more difficult than leading traditional face to face teams (Liao, 2017). Despite the challenges, virtual teams can be efficient ways to bring together geographically dispersed people with specific expertise (Alsharo, Gregg & Ramirez, 2017; Hoch & Dulebohn, 2017; Liao, 2017; Malhotra et. al., 2007). The benefits of virtual teams include increased efficiency, increased diversity, flexibility for team members, and decreased travel costs. The challenges of virtual teams include building relationships among team members and stakeholders, maintaining trust, monitoring work cycles and establishing communication norms. Virtuality refers to the continuum of virtual work from co-located teams incorporating tools that enhance virtual communication to completely geographically dispersed teams. Nationally, examples of Extension virtual teams abound including the Military Families Learning Network, the Extension Disaster Education Network, and eXtension CoPs and Impact Collaboratives. At the state and local level, it is not uncommon for programmatic groups to engage in some level of virtual work even when some or all of the team members are co-located. It's hard to imagine an Extension professional who does not participate in a virtual team whether it's a short-term search committee or a longer-term state-wide program. Leading virtual teams presents unique challenges including the technological competency, new types of work patterns, decision making styles, relationship building, and conflict management (Alsharo et. al., 2017; Hoch & Dulebohn, 2017; Sobrero, 2008). Virtual teams are embedded in how we work making it essential to examine and understand best practices for leadership.

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## POSTER PRESENTATIONS

### **Does the quality of faculty relationship with department heads influence career commitment to MSU Extension?**

Steven Siegelin  
Montana State University Extension

#### Abstract

This research increased the understanding of the relationships between early career Montana State University Extension field faculty's leader-member exchange level (LMX) for their supervisor (Graen & Uhl-Bien, 1995, Gerstner, Day, & Murphy 1997) and their commitment to the organization. The gathering of leader-member exchange values for early career faculty when combined with faculty members' years to intended separation from MSU Extension provided clarity for issues that might be addressed administratively. The sustained success of Extension faculty has been a concern that has been documented over the past 50 years (Baker & Hadley, 2014; Clegg, 1967; Forstadt & Fortune, 2016; Fourman & Jones, 1997; Harder, Gouldthorpe, & Goodwin, 2014; Hyatt, 1966; and Morrill & Morrill, 1967). A common theme throughout recent decades has been one of what to do about the newest generation of Extension faculty. Some raise concerns about performance, others about maturity, but most important is how to develop, and retain new faculty. Fourman and Fortune stated "certainly one of the key issues faced by all human resources professionals, including those in Extension, is motivating the 90's workforce" (1997, para. 1). The workforce of the 90s was not unique. These sentiments have been repeated continually over the past 50 years. Similar observations are made in presentations and conversations at relevant professional meetings today. Research, meta-analysis, and commentary in Extension related journals has focused on employee motivation, satisfaction, and characteristics; the managerial and leadership roles of supervisors; insights from those who have left Extension as a career; and the roles of human resource programs to support new faculty (Baker & Hadley, 2014; Clegg, 1967; Forstadt & Fortune, 2016; Fourman & Jones, 1997; Harder, Gouldthorpe, & Goodwin, 2014; Hyatt, 1966; and Morrill & Morrill, 1967). One of the possible causes for premature separation of faculty members is the quality of the relationship between the faculty member and her or his immediate supervisor. This research addressed the question: What is the relationship between faculty satisfaction with his or her immediate supervisor and career commitment to MSU Extension, for faculty in their first five years on the job? The research utilized the Recommended Measure of LMX (LMX 7) (Graen & Uhl-Bien, 1995) to establish a leader member exchange score based on the faculty member's responses to the seven questions. The LMX cumulative score served as the independent variable. Faculty were asked to indicate his or her years to desired separation from MSU Extension and years to desired retirement; the percent of a person's career they plan to serve in Extension was defined as the dependent variable. Additional questions were asked to characterize the person's job satisfaction with MSU Extension, their current job seeking status or intentions, and the reasons she or he perceives will influence her or his decision to leave extension. The survey provided full anonymity to the respondents. It was important to understand the reason the faculty member intends to separate (retire, focus on personal priorities, improve her/his employment situation, leave as a dissatisfied employee, etc.). Establishing whether there is a relationship between the independent and dependent variables will help administration develop efficacious strategies to better retain faculty. The results of this research will influence onboarding, formal and informal faculty development, peer-to-peer mentoring, and hiring strategies. The survey was distributed to 36 faculty members via Qualtrics email service on March 28, 2018 with three

automatic email reminders over a two-week period and one supporting email from the Executive Director of MSU Extension. Responses were received from 24 people, for an overall response rate of 67%. Three respondents did not provide information required for the correlation for an effective response rate of 58%. The correlation between Leader-Member Exchange Score and planned separation from Extension is weak or very weak. The relationship of a field faculty member is not the primary factor influencing decisions to leave MSU Extension. Two of 21 respondents specifically listed lack of leadership as reasons they will leave MSU Extension. Eleven of 21 early career field faculty predict they will spend half or more of their career or more working for MSU Extension. Possible future research includes: Expanding the population of this research to include all field faculty; implement research or administrative procedures that include field faculty and supervisor use of the LMX 7 instrument to understand similarities or discrepancies in faculty and supervisor perceptions in the leader-follower relationship; implement longitudinal use of the LMX 7 instrument to quantify the progression of scores and Leadership Making Phases; assess the effectiveness of leadership strategies for the purpose of emphasizing what is working and strengthening that which is not working; or further develop research partnerships with other states.

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## Field Experiences with Extension Agents in Florida

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### Abstract

Cooperative Extension's mission is to "help people improve their lives through an educational process which uses scientific knowledge focused on issue and needs" (Rasmussen, 1989). Extension agents gain professional competence and technical expertise in a variety of ways: on-the-job training, professional development, formal coursework, and consumer experience (Conklin, Hook, Kelbaugh, & Nieto, 2002; Stone & Coppernoll, 2004). Some graduate extension education degrees (e.g. Colorado State University agriculture extension education) integrate internships into the curriculum providing students with invaluable experiential learning opportunities (Simons, Fehr, Blank, Connell, Georganas et al., 2012). Internships can be beneficial in academic programs influencing learners': (a) personal and civic engagement in the community; (b) level of professional development; and (c) cultural diversity (Simons et al., 2012). Graduate extension education programs in land-grant universities included only 4% of internships programs (Harder, Mashburn, & Benge, 2009). There is an opportunity to create authentic experiences for students (Curtis & Mahon, 2010), bridging extension courses with experiences at the grassroots level. Kolb's experiential learning theory (ELT) asserted learning occurs when knowledge is created through interactions and experiences (Kolb, 1984). Learning is a process where learners engage with the content, assimilating new experiences and accommodating existing knowledge into new experiences (Baker, Robinson, & Kolb, 2012). The ELT (Kolb, 1984) has four stages: a concrete experience, reflective observations, abstract conceptualization, and active experimentation. Extension education programs at University of Florida does not offer field experiences as part of the curriculum. This study sought to understand the importance of field experiences, which can inform internship inclusion in extension education curricula at University of Florida. Specific objectives were to: (a) identify Extension agent responsibilities, (b) explain the program planning process, and (c) identify on-the-job challenges facing Extension agents. This study used a basic qualitative research design to provide an overview of field experiences with Extension agents in Florida. Through observations and informal interviews, the researcher learned about on-the-job experiences of Extension agents in Florida. The researcher shadowed four participants over the course of two months observing the program development and implementation process and attended a variety of educational programs: workshops, 4-H camps, site-visits, and field days. The researcher compiled field notes based on four areas aligned to professional competencies of Extension agents (Harder, 2015): agent interaction with clients, agent interaction with program audiences, program development and evaluation methods, and overall work challenges. Information obtained from these categories highlighted differences in knowledge learned in classes and knowledge constructed from social engagement in the field. Reflection on field experiences can strengthen experience-based knowledge and professional development (Beijaard, Stellingwerf, & Verloop, 2007). Extension agents have a range of responsibilities: (a) conduct site-visits, which included responding to voice-calls, client walk-ins, emails, and texts; (b) plan, deliver, and evaluate programs; (c) record activities for yearly reporting; and (d) network with others in their program area to keep up with innovations. Site-visits conducted with a commercial horticulture Extension agent included assisting growers, managing the diagnosis process with the Plant Diagnostic Clinic, finding site locations, and communicating clearly with clients. Program planning and evaluation included skills such as: (a) knowledge of program design and learner theories, (b) experiential activities that support learner objectives, (c) sourcing grants to fund programs; (d) community collaborations; (e) program logistics, and (f) statistics (program evaluation). Program planning activities included setting early dates to avoid

scheduling issues with other Extension programs, organizing content and other printed materials for participants, and organizing program logistics – venue, transportation, insurance, and signs. Detailed planning and evaluation activities support successful completion of the yearly Report of Accomplishment document. However, time constraints prevent detailed documentation of all activities, as “it is difficult to record every single thing you do” (participant one). For example, site-visits are not always scheduled, and unintended setbacks such as bad weather, finding clients’ field location, and language barriers all consume additional time and energy. Learning new skills like statistical tests for data analysis can be overwhelming and time-consuming when trying to balance other responsibilities. Experiential learning through field experiences promoted a deeper understanding of the role of Extension in Florida. Experiences gained from involvement with Extension at the local level proved invaluable, omitted in the classroom. Challenges Extension agents experienced were only observable from being present in the field. The benefit of an extension education internship could provide students with a unique learning experience. Graduate extension education programs should offer a field practicum as part of the overall coursework to provide students with hands-on learning. Future research can focus on assessing the success of field practicums in graduate extension education programs.

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### **Lessons Learned from Female and Underrepresented Youth Members Participating in 4-H STEM Projects**

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Keywords: STEM, 4-H, education, female, underrepresented

#### **Abstract**

Science, Technology, Engineering, and Mathematics (STEM) fields have an average projected growth of 6.5% for all STEM occupations from 2014 – 2024 (Fayer, Lacey, & Watson, 2017). Currently, females and minorities – especially blacks, Hispanics, and American Indians or Alaskan Natives – are underrepresented in STEM fields (National Science Foundation, 2017). Increasing female and minority youths’ interest and confidence in STEM-related careers is key to meeting the employment needs and increasing the presence of underrepresented populations in STEM fields. The objective of increasing youths’ interests and confidence in STEM have resulted in the creation of after-school STEM programming. Science, Technology, Engineering, Math (STEM) fields are continuing to grow at a steady rate; yet, most STEM-related occupations have a gap in female and minority presence. Creating and promoting educational youth programs that support underrepresented populations’ growth within the STEM field is crucial to the success of our collective future. Through a positive youth development framework, the 4-H Youth Development Program (YDP) has the capability to increase female and minority youths’ confidence and interests in the STEM fields in order to meet this future employment gap. A seven-session lesson plan was created that touched on several areas of STEM. Each lesson contained a 15-minute lesson (utilizing interactive worksheets and career snapshot videos), a 40-minute hands-on activity, and a 5-minute debrief session. An explanatory mix-methods research design was used to assess project impact. The survey used consisted of ten statements with a 1-5 Likert scale; the first five statements assessed a youths’ interest in STEM and the second five assessed a youths’ confidence in STEM. A post qualitative evaluation was used at the end of the seven-session lesson. The informal verbal evaluation qualitative questions consisted of four open-ended questions; two inquired about how the seven-week 4-H project impacted their interest and confidence in STEM and two inquire if other outside programs and activities impacted the observed outcomes. In reviewing the quantitative findings from this study, the research found that most of the overall mean increase of youth agreement occurred in the “confidence” set of statements. Both female and male youth unanimously responded “strongly agree” to statements supporting female success in STEM after the seven-week STEM project.

Female responses post-survey suggest that females confidence/interest in STEM increased. Male responses post-survey suggest males felt more confidence/interest in STEM than females. A reflection of these findings show that female youth experienced larger short-term impacts from the 4-H STEM project, especially in increased interest, than male counterparts. Overall, the data suggest that exposure to STEM through 4-H increases youth confidence in STEM for male and female youth. The quantitative data suggest that program participation strengthened male and female youth perception that females can be competent and can make a significant impact in STEM. One interesting observation that was discovered in qualitative data was that youth perceptions of STEM were impacted by their in-school experiences, afterschool experiences, and home experiences. Future research should examine outcomes of participating in longer 4-H STEM programming, such as an annual program, with a control group and larger sample size. This study design would enable researchers to consider additional positive outcomes from multiple points of STEM education contact. There is also a need to understand if STEM exposure received in elementary school impacts youth's interest and confidence in STEM in middle school and high school. Overall, this study shares how 4-H delivery modes, such as the after-school model, can be utilized as a way to deliver STEM programming to female and underrepresented youth.

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### **Users' Content Preferences on the UF/IFAS Extension Program Development and Evaluation Center Facebook Page**

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#### Abstract

Extension agents are critically important to the success of Cooperative Extension (Harder & Zelaya, 2017; Seevers & Graham, 2012). As such, most states offer professional development opportunities for their agents, including new agent training and in-service training. However, agents are challenged to find time to engage in professional development given a schedule that is already highly demanding (Enslie, 2005). Providing agents with access to resources through Facebook may be one practical alternative to providing on-demand professional development, if they are willing to use Facebook for that purpose. The uses and gratifications (U&G) approach (Katz, Blumler, & Gurevitch, 1973) theorizes about the needs of people, types of media used to meet those needs, and gratifications from usage. Raacke and Bonds-Raacke (2008) used U&G to examine users' expectations of Facebook, finding popular uses and gratifications tended to focus on social and informational needs. Papacharissi and Mendelson (2011) identified professional advancement as one of nine possible motivations for using Facebook. The existing Extension literature has primarily focused on agents' use of Facebook as a tool for connecting

with clientele (e.g., Mains, Jenkins-Howard, & Stephenson, 2013). Therefore, this study examines a gap in the literature. The purpose of this study was to ascertain the content preference of Extension professionals in their use of Facebook. The primary objective of this research was to determine the most popular posts on the UF/IFAS Extension Program Development and Evaluation Center (PDEC) Facebook page. Content interest within different thematic categories was explored and the best performing posts were described based on source of the resource, type of resource, and category of resource. A mixed methods approach was used for the study. Measures were comprised of metrics from Facebook analytics, namely Reach, Clicks, and Reactions. Posts were grouped according to different measures including the thematic category, source of the resource, and type of resource. Categorical themes included Leadership Development, Personal Development, Time Management, Tools of the Trade, Extension information, Volunteer Management, Program Development, Program Evaluation and Teaching and Learning. Resource types included Articles, Countdown (numeric identification of sections), Research (empirically or theoretically based resources), and Interactive (webinars). Resource sources included websites such as EDIS.IFAS.ufl.edu, JOE.org, INC.com, HBR.org, and Extension.org. Descriptive statistics were used in this analysis. Posts ( $N = 50$ ) to the PDEC Facebook page between January 1, 2018 and March 26, 2018 formed the data set. The constant comparative method (Merriam & Tisdell, 2016) was used to identify themes. Leadership Development was the theme with the highest average Reach (85.68) and Reactions (1.74). Time Management posts had the highest Clicks on average (5.67). Countdown articles lead in terms of Reach (average = 86.06), but general read articles had higher average Clicks (4.11) and Reactions (1.74). INC.com was most popular source, reaching 107.75 individuals and receiving 5.83 average clicks per resource. HBR.org had the highest average Reactions per resource on average (1.75). The poorest performers among the thematic categories were Teaching and Learning (48 Reach and <1 Click over 6 posts) and Program Evaluation (<1 reaction over 2 posts). Leadership Development as the most popular theme aligns with U&G theory given Extension professionals' leadership positions in the community. The popularity of Countdown articles also aligns with the theory as resources with numeric identification of sections can be especially inviting (Álvarez & Bassa, 2013). Extension professionals were interested in resources beyond those offered by the organization. This study has the potential to refine the offerings of social media platforms to best suit Extension professionals. Content should be matched to users' preferences. The evidence suggests Extension professionals have a willingness to engage with Leadership Development content, implying a motivation to use Facebook for professional advancement as suggested by Papacharissi and Mendelson (2011). The leadership content posted to the Facebook page tended to be from non-academic resources (e.g. INC.com); resources from the private sector should be selected carefully from reputable providers. Further, PDEC plans to work with its own leadership faculty to encourage them to provide research-based content in an appealing format for the Facebook page, reducing reliance on external resources. Future research should be conducted over a longer time period and added variables, like demographics, is recommended. Finally, examining the analytics of similar Facebook pages, and/or other social media platforms used to reach Extension professionals will expand the profession's understanding of how to use social media as an effective internal tool for capacity development.

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## **Advisory Councils in Mississippi State University Extension**

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Keywords: Advisory councils, Extension advisory councils, focus groups, interviews

### **Abstract**

Extension advisory councils are a way for Extension professionals to link to the public they serve. Specifically, advisory council members often identify community needs to be met through Extension programs. Working with advisory councils in Extension is a rewarding experience but at times can be challenging for Extension professionals. Many changes have occurred over the last few decades, therefore a need to explore how advisory councils and Extension agents perceive the purpose, role and scope of advisory members was needed. For this particular study two theoretical perspectives were used as a guide. Cole and Cole's functionalist-integrationist approach provides a theory that particularly relates to Extension advisory councils. McClelland and Atkinson's social motivators' theory was used as a theory for the study as well. Their theory proposes three distinct motives which affect people's work behavior-need for affiliation, the need for power, and the need for achievement. The literature review for this study talked about an advisory council needs a sense of purpose, praise and recognition, and a belief that its input is valued. Advisory councils are a great way to bring together different views and ideas among the community. The literature review focuses on the different types of advisory councils, characteristics of advisory council members, motivation of advisory council members, and recruitment and retention of advisory council members. There is less research on advisory councils within Extension. The purpose of this study was to explore the current state of Extension advisory council development and maintenance from the perspective of advisory council members and county-based Extension professionals (agents). Several research questions were addressed in the study to learn more in-depth information about the current state of Mississippi State University Extension advisory councils. For instance, some of the questions that were asked of both advisory council members and Extension professionals was to tell about what they understood to be the purpose(s) of the Extension advisory

council and share their experience of working with Extension advisory councils or serving on a council. A qualitative approach using a combination of focus groups and telephone interviews were conducted with MSU Extension county-level advisory council members and selected agents to answer the research questions. A qualitative approach was used to obtain in-depth responses from two perspectives, advisory council members and agents. The approach was selected because qualitative methods allow researchers to capture in-depth information focused on documenting real life experiences. Agents in this study recognized that advisory members have a certain purpose and roles. Both agents and advisory members identified that council members had the general purpose of strengthening Extension programs. Council members achieve this overall purpose through specific roles, such as providing general advice and supporting the delivery of Extension programs. Secondly, Extension agents in the study recognized the importance of providing positive feedback to council members, which in turn makes for a more productive group of people and increases retention rates. Achievement and affiliation were present in advisory members responses, which included helping the young people in the community and seeing others succeed from being involved in Extension programs. Finally, Extension agents expressed concern about providing training to advisory members, and new agents. Members and agents both felt that training would be beneficial to Extension and their programs. A recommendation is to develop and provide professional development to agents on working with advisory councils. This could be accomplished by: (a) continuous in-service training, and (b) developing a handbook that can be updated easily. Training could focus on the purpose and role of advisory council members, their role in program planning, as well as formation of leadership roles for council members. A well-developed advisory council has a special awareness of the needs, attitudes, and perceptions common among people within their communities. Advisory councils are an important building block in the development of effective Extension programs. Extension advisory members should be a priority in Extension agents' work where we motivate, empower, and train council members.

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## 4-H engagement of non-4-H faculty

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### Abstract

Each UF /IFAS county extension agent, regardless of assigned program area, is expected to contribute to 4-H youth development programming. A minimum of 5% (11 days) of each agent's professional time is to be spent 4-H youth development programming within the agent's area of competency or subject matter. Many of these agents have no previous youth development education or experience, and sometimes little desire to spend their time further. To bridge the gap, all new UF/IFAS extension agents are required to participate in a My 4-H 5% training designed to address 4-H basics, positive youth development theory, and the professional and programmatic benefits of 4-H programming involvement among non-4-H agents. The UF/IFAS Extension 4-H 5% training is part of the larger Extension Faculty Academy attended by all new UF/IFAS Extension hires. This in-person program provides faculty an overview of 4-H history, principles and practices of positive youth development, and encourages the development of mutually beneficial programmatic partnerships among 4-H and non-4-H agents.

Targeted Outcomes for this Program were:

- 1) Faculty can articulate the purpose of 4-H youth development programs.
- 2) Faculty can identify specific skills and content they can offer their local 4-H program.
- 3) Faculty can identify ways in which partnering with the 4-H program can benefit their own professional and programmatic development.
- 4) Faculty create an abbreviated 4-H Plan of Work to implement in their respective counties.

All new UF/IFAS Extension agents complete two three day sessions of Extension Faculty Development Academy at the University of Florida. The H 5% training was designed as a component of the Academy and covered:

- 4-H history, purpose and vision
- 4-H facts and figures (e.g. enrollment statistics)
- State and regional 4-H faculty and staff
- Theories of positive youth development
- Professional benefit of partnership with 4-H programs
- Developing an abbreviated 4-H Plan of Work

Evaluation results demonstrated increases in knowledge gain/aspiration change among participants with regard to the following statements:

- I understand the purpose of 4-H youth development programs
- I understand the Targeting Life Skills wheel
- I understand the 4-H Essential Elements of Youth Development
- I know who to ask if I have more questions on 4-H
- I believe that contributing 5% of my time to 4-H youth development programming is beneficial to me as a professional
- I believe that contributing 5% of my time to 4-H youth development programming is beneficial to my assigned program area (non 4-H).

Selected participant responses included:

- "I have the opportunity to contribute positively toward my program goals (i.e. sustainable agriculture and conservation of natural resources) if I expand my program to 4-H youth and influence the younger generation."

- “Programming made available to the youth will definitely attract interest for my program as well, especially as parents learn of all the other programs that are available to them too.”
- “Community Resource Development can benefit from the perspectives of youth in helping to identify trends and markets that will resonate with this upcoming generation.”
- “Involving youth in programs helps to increase sustainable behavior, which can ultimately benefit the environment.”

Early evaluation results demonstrate knowledge gain in understanding of basic positive youth development models. The evaluation results further demonstrate increased believe among participants in the value of 4-H work to not just helping the local 4-H program, but for their own program areas. Perhaps most importantly, participants have indicated behavior change (e.g. seeking out increased and improved collaboration opportunities) since completing the “4-H 5%” training.

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### **Finding the Diametric Solution: Open MOODLE Content and Accountability**

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#### Abstract

As Extension Program and Staff Development Specialists we often struggle with keeping educational modules relevant, current, and easily accessible while maintaining the ability to track and measure learner competency. This poster will explain the University of Georgia Extension’s solution to providing open online classroom resources while protecting the integrity of online assessments and gradebooks. Malcolm Knowles (1984, p. 11) tells us that adult learners are self-directing, use their life experiences for context, and “become ready to learn when they experience a need to know or do something in order to perform more effectively in some aspect of their lives.” County Extension Agents are hired with varying degrees and types of subject matter knowledge and are often placed in very diverse work situations requiring quick access to information. So, in effect their jobs create the desire to learn as Knowles described. Beginning in 2013, construction of five online classrooms were built for new County Ag and Natural Resource Agents in the areas of: weed identification, plant diseases and disorders, insect identification and control, and urban forestry. The initial classroom design included pre- and post-tests and restricted study resources that became available after the pre-test was completed. The intent was to measure learning gained due to access to the study materials. The initial classrooms also required a multi-step account creation and authentication process that was confusing to the new employees. In 2018, administration realized that there were significant resources that were being held captive by our classroom fortress. They wanted the materials duplicated and made available on the faculty intranet. Not wanting to create two sets of learning materials to maintain a better solution was sought. The solution entailed creating a new MOODLE classroom on a privately hosted server to allow content

access to anyone with the hyperlink. No account creation was necessary. The classroom structure was improved by utilizing a collapsible topic format which allowed all five classrooms to be combined into one. Participants can access all of the study and reference materials but quizzes and discussion forums are restricted until they set up an account. Account creation is only required if a person wants to take the exams and get credit for the course. A single weblink will now provide faculty access to the combined contents of the five separate classrooms. Monitoring completion rates and grades for faculty members has been streamlined into one gradebook to check. A single web instance of the course content reduces the likelihood of outdated or inaccurate information. As the demand grows for new subject matter classrooms we feel we have a more sustainable open access structure to follow.

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### **Professional Development Increases Educator Confidence to Teach Nutrition**

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Keywords: Action Inquiry, Professional Development, Self-Efficacy, Nutrition Education

#### Abstract

There are many barriers associated with integrating nutrition education into K-8 public schools. Previous studies have identified self-efficacy to teach nutrition and other health-related topics to be strongly linked to educator effectiveness, teaching competence, curricular implementation, and student outcomes. [1] Providing professional development opportunities to educators is a common method of improving self-efficacy to teach nutrition. In recent years, self-efficacy beliefs have received an increasing amount of attention in educational research. Self-efficacy is a context-specific assessment of competence to perform a specific task. [2] Each year, various educational institutions allocate a significant amount of funding to professional development opportunities for their educators with the intention that these activities will enhance their knowledge, skills, and professional capabilities. However, they often do so without a comprehensive professional development program, and without consideration of the effectiveness of the opportunities being offered. [3, 4] The current study proposes the use of action inquiry as a framework for professional development. The use of this pedagogy as a framework for professional development is somewhat of a recent phenomenon, which has generated the need for researchers to evaluate its effectiveness. The action inquiry process asks three types of questions, which concern, 1) the first-person dynamics of individual awareness, 2) the second-person dynamics of the immediate group with whom one is interacting, and 3) the third-person dynamics of the larger institution within which one's actions are situated.[5, 6] During the action inquiry process, individuals form a community of practice (COP) in which they interact with others to make revisions to

tasks, actions and behaviors, and engage in a collective learning process with the normative aim of improving their overall effectiveness.[6, 7] Previous studies show that professional development models that involve the use of COP are effective in advancing educators' knowledge and skills as well as identifying and eliminating barriers.[7, 8] Action inquiry is an approach that uses ongoing learner-centered cases to link inductive experience with deductive theorizing. It involves the use of personal cases to explore the negative impact of existing individual and group level perception of a current problem. [9] It has also been proven to achieve outcomes, and to increase meaning-making and awareness for individuals and groups. [6] Employing action inquiry as a framework for professional development can provide individuals the opportunity to recognize that everyone has their own limitations and abilities to make assumptions in all situations. During the action inquiry process, individuals have the opportunity to test their assumptions with others, potentially learn something new, and make their actions more consistent with their intentions. [10] The objective of the current study was to determine if there was a difference in educator self-efficacy beliefs after participating in a 10-month professional development program designed for the Shaping Healthy Choices Program (SHCP) which utilized the action inquiry process. The SHCP is a multicomponent school-based nutrition intervention. [11, 12] During the 2012-2013 academic year, a nutrition education curriculum was developed and pilot-tested in 4th grade classrooms. [11, 12] Following the initial pilot testing, an intervention was held over the next four years with a primary focus on evaluating student outcomes in 4th, 5th and 6th grade classrooms. [13] During the 2013-2014 academic year, the intervention was implemented primarily by 4th grade teachers who indicated that there was a need for more rigorous professional development opportunities. [14] As a result of the identified need, for the aforementioned professional development model was designed to prepare nutrition professionals (such as nutrition educators, supervisors, and teachers) to implement the SHCP, as well as understand and adopt an inquiry-based approach to learning and teaching. During the professional development activities, participants engaged in a COP where they were encouraged to exercise active leadership, move among their peers in a community of inquiry, receive direct feedback on program implementation, and learn together in practical ways. The objective of the study was to evaluate educator self-efficacy beliefs after participating in a program that utilized an action inquiry approach to provide extensive professional development to nutrition educators. Data were analyzed after administering the single time point, retrospective (post-then-pre) self-efficacy questionnaire. A paired-samples t-test was conducted to compare responses. Statistical significance was set at  $p < .05$ . Statistical analyses were conducted using SPSS Statistics 24 (IBM Corp., Armonk, NY, 2016). The survey link was open for a total of three weeks with a total response rate of 30.3%. Among the 15 questions included in the Retrospective Survey About Teaching Inquiry-Based Nutrition, 11 exhibited statistically significant increases from pre-to-post (Table II). Of the 11 questions, three of the questions assessed educator confidence that student abilities would produce changes in nutrition-related behaviors and knowledge of students. There was a statistically significant increase when comparing mean scores from pre to post (pre = 3.60; post = 4.80;  $p = .003$ ) in educators' ability to increase students' knowledge about nutrients, as well as educator confidence to increase students' knowledge about recommendations for a healthy diet (pre = 3.80; post = 4.70;  $p = .019$ ). However, this was not the case for educator belief that increased teaching time in nutrition produces significant changes in nutrition-related behaviors of students, as there was no statistically significant difference (pre = 3.90; post = 4.60;  $p = .066$ ). There were also three questions that assessed educator confidence to teach nutrition-related topics, such as consumerism and nutrients. There was a statistically significant increase in educator confidence to teach students about consumerism (pre = 3.90; post = 4.80;  $p = .001$ ) and nutrients (pre = 3.20; post = 4.40;  $p = .044$ ). However, there was no statistically significant difference in educator confidence to teach students about nutrition (pre = 3.60; post = 4.50;  $p = .054$ ). The questionnaire contained two questions that assessed educator confidence to utilize inquiry-based learning approaches. The first question demonstrated that

there was a statistically significant increase in educator confidence to lead a group of students through the inquiry-based learning process when comparing pre to post (pre = 2.70; post = 4.70;  $p = .001$ ). The second question demonstrated that there was a statistically significant increase in educator belief that using an inquiry-based approach is an effective way to learn and teach (pre = 3.50; post = 4.70;  $p = .003$ ). A statistically significant increase was also observed in educator ability to stimulate students enough so they ask thoughtful questions about nutrition (pre = 3.10; post = 4.40;  $p = .002$ ). Educator self-efficacy to evaluate improvements in nutrition skills also increased significantly from pre = 3.70; post = 4.60;  $p = .019$ ). Additionally, a statistically significant increase was identified in educator confidence to act as a facilitator for youth as they work on their activities when comparing pre = 2.80; post = 4.40;  $p = .001$ ). After participating in the intensive professional development program and ongoing learning opportunities, a significant increase in educator confidence to ask youth open ended questions was identified when comparing pre = 3.00; post = 4.80;  $p = .001$ ). A significant increase was also identified in educator belief that participating in a COP is an effective way to strengthen skills (pre = 3.80; post = 4.60;  $p = .037$ ). Questions regarding educator ability to teach youth through direct instruction such as lectures and demonstrations (pre = 3.90; post = 3.30;  $p = .217$ ), and educator ability to encourage youth to apply concepts that they learn to new situations did not yield statistically significant changes (pre = 3.80; post = 4.30;  $p = .052$ ). Future directions for research in this specific area as it relates to the SHCP should include the evaluation of student learning outcomes as result of a comprehensive, sustained, and intensive approach to improving educators' effectiveness through collaborative learning and participation in an ongoing continual professional development program. It is suggested that research be conducted to investigate how educator self-efficacy is associated with student achievement and academic performance.

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### **Moving Beyond Silos to Reach Traditionally Underserved Audiences: A Look at 4-H SNAC Clubs Integrated 4-H and SNAP-Ed Programming**

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Key Words: youth development, nutrition, inclusion, integration, diversity

#### **Abstract**

The UC Cooperative Extension Youth, Families and Communities (YFC) team in San Luis Obispo and Santa Barbara counties has developed integrated and comprehensive school wellness programming in order to cultivate environments where local youth, families, and community members have access to research-based resources and knowledge in order to be the creators of a healthy, inspired, active, & connected Central Coast. Building on the comprehensive nutrition education service delivery model developed by the UC CalFresh Nutrition Education Program, the YFC team has developed two innovative school-based programming models to meet the needs of various school communities served by the integrated programming. The two new program models include 4-H SNAC (Student Nutrition Advisory Council) Clubs and UC Garden Nutrition Extender Program. Collectively, the goals of this integrated programming are to facilitate changes in school policies, systems and/or physical environments in support of improved nutrition and physical activity behaviors and overall wellness among students and parents in underserved communities. The goal of SNAC Clubs is to create innovative, integrated 4-H and UC CalFresh Nutrition Education (UC CalFresh) programming that efficiently and effectively supports nutrition education efforts and youth development programming in historically underserved low-income and Latino communities. SNAC Clubs combine the positive youth development expertise from 4-H staff and programs with the existing partnerships and community health expertise of the UC CalFresh program. Objectives of SNAC Clubs are to build youth leaders and advocates for health and increase access youth leadership programming in Latino communities. Purpose and Objectives:

- Annually, complete three to four 4-H projects at a minimum of three 4-H SNAC club low-income school sites that engage youth in assessing, identifying and advocating for at least one change in their school or community that promotes increased access to physical activity and/or healthy foods or beverages.

- Enhance communication between parents and UC staff in order to promote greater understanding of youth participation as co-creators of healthier school communities.
- Provide training through SNAC Club school sites to increase parent & student involvement in countywide 4-H events to promote increased access to physical activity and/or healthy foods or beverages, and/or PSE changes in their communities.

The goal of the UC Garden Nutrition Extender (UC GNE) program is to develop a community-based network of trained school garden nutrition education advocates, experts and leaders in order to support, enhance and maintain gardens in schools in San Luis Obispo and Santa Barbara Counties. The UC GNE program depends on the expertise of the UC Master Gardeners, Master Food Preservers, 4-H and UC CalFresh Nutrition Education staff to provide annual training, continuing education and networking and support opportunities to trained volunteers. Objectives of the UC GNE program are to: Annually, train and support at least 10 school-based volunteers in providing evidence-based garden enhanced nutrition education curricula, sustainability planning and hands-on support for gardens in low-income school settings. The target audiences for the YFC integrated programming are Latino youth and families in low-income school settings. SNAC Clubs are currently operating in 5 schools across both San Luis Obispo and Santa Barbara counties serving a total of 4100 elementary age youth. Schools are at least 80% Hispanic or Latino and 88% to 93% of students in these schools are economically disadvantaged according to the 2016/17 school accountability report cards. The UC GNE program serves a broad range of pre-K through elementary school students in both counties. There are currently 17 trained volunteers working in both low-income and high income settings delivering garden enhanced nutrition education, coordinating school garden committees, partnering with teachers and food service to create opportunities for food literacy and farm to school. SNAC Clubs operate on an academic calendar. The clubs meet weekly for 60-90 minutes after school on the day and times that are appropriate for the school site, students and UC staff schedules. At the beginning of the year, much of the meeting time is focused on relationship building, nutrition training and skill building. Content for club meetings is developed based on UC nutrition and physical activity education curricula, USDA MyPlate recipes, evidence-based food safety resources and garden curricula. As club meetings are established and trust is built between the youth and adult allies, youth club officers are elected and youth begin to take on leadership roles. In addition to the after school club meetings, SNAC youth leaders are offered opportunities throughout the year to attend trainings hosted by UC staff including a 6-hour youth leadership training (see media stories about the event here), half-day culinary academies over Spring break, and end of the year celebration and team building event. Content for these trainings include 4-H Cooking 101-401, USDA MyPlate lessons, CATCH physical activity curricula and Learn, Grow, Eat & Go! Curricula.

Matched pre and post youth surveys (n = 30) from academic year 2016/17 showed that after participating in SNAC for an entire school year, youth leaders found it easier to engage in healthy behaviors. At the end of the 16/17 program year, 56.67% of SNAC Club youth leaders indicated that they felt it was “not at all hard” to eat smaller servings of high fat foods like French fries, chips, and snacks (compared to 49.3% of 4-H youth statewide). After program participation, a higher percentage of youth indicated that they engage their families in healthy behaviors, including encouraging their families to eat meals together, asking their families to buy fruits and vegetables, and to keep fruits and vegetables in easy to reach places (behavior change). At the end of the 16/17 program year a higher percentage of SNAC Club youth leaders indicated that they endorsed the following program outcomes: citizenship, leadership, and positive youth development. For example, in the post surveys a higher percentage of youth indicated they (behavior changes) like to learn about new things, make good decision, manage their emotions, think it is important to be a role model of others, take an active role in their community, like to work with others to solve problems, treat everyone equally and fairly when they are in charge of a group, and gained skills through serving their community that will help them in

the future. Integrated programming between YFC programs has increased access to 4-H Youth Development programming in underserved communities. This represents significant systems and programmatic change that may have implication for state and nationwide programming. Students from 4-H SNAC clubs are beginning to interact and integrate with larger 4-H community club systems. For example in FFY17 five SNAC youth entered 4-H competitions at the County Fair or in the Annual Food and Arts Celebration. Two of these youth leaders won awards for their work in photography or healthy food demonstrations for their divisions. This experience will have positive impacts in these youth's lives beyond what is measurable in a healthy living or nutrition knowledge survey as this integrated programming works to create more equitable access to UC and government resources. Broader and more long-term impacts that we are not able to assess within the scope of this project include the effects of increasing youth access in underserve and under-represented communities to positive youth-adult partnerships, career pathways in Science, Technology, Engineering and Math; cultivating leadership and advocacy skills for the promotion of community health; and providing access to 4-H youth development opportunities to youth that have not traditionally been involved in 4-H. Additionally, through the UC GNE program, YFC has worked to build community capacity and expertise in growing, teaching and maintaining school gardens. Training adult volunteers to lead school garden programming provides community-level expertise and extension of UC resources deeper into the community than we could reach with staff alone. UC GNEs work in a variety of school settings and bring a broad range of expertise and interest to the program from backgrounds in teaching to floral arranging. UC GNEs work in their communities to provide evidence-based education and create sustainable school change. "I am very grateful because I have had so much support through [the UC GNE] program for the school garden. The support has been the difference between a struggling garden program and a thriving one." – UC GNE

Integrated programming between UC CalFresh and 4-H has increased access to 4-H Youth Development programming in underserved communities. This represents significant systems and programmatic change that have significant implications for state and nationwide programming. Students from 4-H SNAC Clubs are beginning to interact and integrate with larger 4-H community club systems. For example, in FFY17 five 4-H SNAC Club youth leaders entered 4-H competitions at the County Fair or in the Annual Food and Arts Celebration. Two of these youth leaders won awards for their work in photography or healthy food demonstrations for their divisions. This experience will have positive impacts in these youth's lives beyond what is measurable in a healthy living or nutrition knowledge survey as this integrated programming works to create more equitable access to UC and government resources.

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