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Developing Extension Professionals to Develop Extension Programs: A Case Study for the Changing Face of Extension

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Development of Cooperative Extension programs depends upon the skills and abilities of competent Extension professionals. The most effective manner of building program development competencies in these Extension professionals is through professional development. A wide variety of competencies are necessary for Extension professionals to develop programs, including strong interpersonal skills. Differences exist between the professional development efforts of Extension institutions and are highlighted herein. Major challenges to delivery of professional development include time and budget, but these can be overcome through planning and innovation and use of online or hybrid methods. Professional development for program development is essential to furthering Extension's mission, especially during times of rapid change.

Keywords: Cooperative Extension, Extension, learning, onboarding, professional development, program development, training

The Importance of Professional Development for Program Development

Delivering high quality, locally relevant, and research-based educational programs is the central mission of Cooperative Extension (Extension). The basis of this mission is the ability of both agents and specialists to plan, implement, and evaluate a local program (Cooper & Graham, 2001; Radhakrishna, 2001). The Program Development Model is the centerpiece for the development and delivery of educational programs within Extension (Seevers & Graham, 2012).

Competent Extension professionals are critical for the future of the organization and its Program Development Model. Organizations are only as strong as their human capital. Extension can be transformed into a more successful 21st Century organization by improving the quality and skills of the professionals who develop educational programs (Extension Committee on Organization and Policy, 2007; Garst, Hunnings, Jamison, Hairston, & Meadows, 2007; Seevers & Graham, 2012). The preparation of Extension professionals to accomplish their roles through professional development is essential to the development of quality Extension programs (Garst, Baughman, &

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Franz, 2014). However, the design of professional development for educators is rarely straightforward, rarely measured for effectiveness, and the impact is rarely demonstrated (Rienties, Brouwer, & Lygo-Baker, 2013).

Professional development, the advancement of skills or expertise to succeed in a particular profession through continued education, provides the opportunity for employees to strengthen their practice throughout their careers (Mizell, 2010). Professional development improves staff retention, reduces stress, assists in leadership succession, allows for better use of resources, improves program quality, increases job satisfaction, reduces hiring and orientation costs, and allows for more successful organizational change (Garst et al., 2014). As a knowledge organization, Extension must continually develop the intellectual capital of its workforce to remain relevant in an ever-changing context (Conklin, Hook, Kelbaugh, & Nieto, 2002; Van Buren, 2001).

Extension professionals must be able to successfully execute the Program Development Model in their work, which requires an increasing number of competencies (Brodeur, Higgins, Galindo-Gonzalez, Craig, & Haile, 2011; Conklin et al., 2002). Professional development may be the most accessible way for Extension professionals to develop competencies for the execution of the Program Development Model (Garst et al., 2014).

Professional Development in the Extension Context

Most Extension institutions provide professional development opportunities for new employees, as well as continued education for experienced employees. These opportunities focus on subject-matter expertise (e.g., livestock, crops, health, families, youth development) or core skills (e.g., time management, conflict resolution, use of technology). An important component of professional development for all Extension professionals is the strengthening of competencies in areas related to program development.

Several terms are used interchangeably with professional development, including training, workplace learning, and employee development (Garst et al., 2014). Stone and Bieber (1997) define *competencies* as “the application of knowledge, technical skills, and personal characteristics leading to outstanding performance” (para. 2). Competencies are the building blocks for performing advanced and complex functions, such as program development.

Career Continuum of Professional Development

Although professional development is important throughout one’s career, professional development related to the Program Development Model is especially critical during the first 6 to 36 months on the job (Baker & Hadley, 2014; Brodeur et al., 2011; Kutilek, Gunderson, &

Conklin, 2002). Extension professionals arrive on the job with a set of experiences, skills, and knowledge, and competencies are developed throughout the career stages (Benge, Harder, & Carter, 2011). Competency levels of Extension professionals are correlated with years of experience, suggesting that professional development occurs continually, although perhaps not consistently, throughout the career (Lakai, Jayaratne, Moore, & Kistler, 2012).

Table 1. Benge, Harder, & Carter's (2011) Professional Development Model

Career Stage	Motivators	Organizational Strategies
<i>Pre-Entry</i>	Pre-Entry competencies needed: Self-management, program development process, communication skills, interpersonal skills, technical/subject matter expertise, and teaching skills.	Pre-service examination of competencies before entering the Extension organization; and Pre-service training before starting the job.
<i>Entry</i>	Understanding the organization, structure, and culture; Obtaining essential skills to perform job; Establishing linkages with internal partners; Exercising creativity and initiative; and Moving from dependence to independence.	Peer mentoring program; Professional support teams; Leadership coaching; and Orientation/job training.
<i>Colleague</i>	Developing area of expertise; Funding for professional development; Becoming an independent contributor in problem resolution; Gaining membership and identity in professional community; Expanding creativity and innovation; and Moving from independence to interdependence.	In-service education; Specialization funds; Professional association involvement; Formal educational training; and Service on committees or special assignments.
<i>Counselor and Advisor</i>	Acquiring a broad-based expertise; Attaining leadership positions; Engaging in organizational problem solving; Counseling/coaching other professionals; Facilitating self-renewal; and Achieving a position of influence and stimulating thought in others.	Life and career renewal retreats; Mentoring and trainer agent roles; Assessment center for leadership; and Organizational sounding boards.

Pre-entry and entry. Benge et al. (2011) listed program development as one of the most important pre-entry skills identified by Florida Extension agents (Table 1). Many new employees in Extension lack sufficient background in program development. Therefore, competencies in this area must be developed during the first few years post-hire through professional development (Brodeur et al., 2011; Gibson & Brown, 2002). Kutilek et al. (2002) stated, "Extension wants new employees to develop skills quickly to a level at which they can perform their work efficiently and effectively" (para. 6).

Onboarding of new employees generally spans two to three years during the entry stage, and may last up to five years if the process extends into the early career of an employee. Early stage professionals need to develop competencies in professional development in order to increase the likelihood of delivering successful educational programs.

The early stage is a formative time to learn or establish best practices in program development and in competencies such as interpersonal skills, collaboration, and communication (Kutilek et al., 2002). Without a solid foundation in the beginning of their career, Extension professionals may develop less-than-effective habits or may not be able to move on to more advanced stages.

Colleague stage and beyond. In the colleague stage, professional development provides the opportunity to increase efficiency and effectiveness in program development, as well as expand creativity and innovation (Rennekamp & Nall, 1994). Keeping current on technology, demographic shifts, the needs of stakeholders, and global issues for all employees can increase the effectiveness of educational efforts, thus helping the communities they serve. Those in the counselor and advisor stages are in coaching, mentoring, and sponsoring roles (Rennekamp & Nall, 1994), and therefore must keep current in program development to be effective in developing entry stage professionals.

Major Challenges and Barriers

External and internal factors influence Extension's ability to carry out program development. Ladewig and Rohs (2000) found that the changes in society's social, economic, and environmental conditions, including globalization and technology, have created numerous challenges for Extension:

- Accelerated rate of technical change;
- Accessibility of knowledge to whomever has the technology to access it;
- Becoming fast and flexible to meet changing customer needs;
- Becoming more customer driven;
- Changing demographics of the people to be served;
- Continuing to improve to satisfy customer expectations;
- Ensuring cost-effective approaches to make the most of limited budgets;
- Increased competition for public funding; and
- Shifting sources of support for teaching, research, and Extension.

As society experiences major shifts in funding, expectations of stakeholders, technology, and the rate of change, barriers and challenges occur for the Extension professional.

Time. One of the greatest limitations to acquiring or strengthening core competencies is time, especially time out of the office (Baker & Hadley, 2014; Lakai et al., 2012). Mincemoyer and Kelsey (1999) found that many of the major factors preventing educators from attending professional development revolved around time: difficulty taking time away from the office or conflict with previously scheduled events. Conklin et al. (2002) confirmed these findings and listed four barriers to professional development:

- Difficulty taking time away from the job;
- Distance to training sites too far, requiring too much travel time;
- In-services viewed as irrelevant to the job; and
- Scheduling conflicts.

Budget. Budget constraints can also limit professional development opportunities. During periods of reduced resources, professional development is often discontinued. Budget reductions can negatively impact how Extension professionals perform their jobs (Baker & Villalobos, 1997). Budget crises may be the best time to increase – or at least hold steady – professional development opportunities to retain quality educators and increase effectiveness and efficiency in delivering programs (Safrit & Owen, 2010). Funding limitations, however, may mandate the use of new delivery methods for professional development (Conklin et al., 2002).

Professional Development Delivery: Methods and Strategies

An Extension professional's needs for development can differ according to his or her career stage, and these needs can be mapped according to strategies and motivations that are important at each of the career stages (Table 2). Extension institutions provide several methods of professional development. A multimodule approach, utilizing different methods, has been proven successful by several institutions (Baker & Hadley, 2014; Garst et al., 2007). These methods take many forms, including formal and informal, as well as face-to-face and online approaches (Bowie & Bronte-Tinkew, 2006).

Formal. Formal professional development opportunities include but are not limited to certification programs or coursework for credit, guided individual skill development opportunities, mentor programs, one-on-one coaching, shadowing experiences, and training approaches such as workshops or simulations.

Informal. Informal professional development opportunities include a multitude of unstructured leaning opportunities, such as casual conversations within or outside the workplace, informal mentoring or coaching, observation of coworkers, self-directed learning opportunities, and support teams.

Table 2. Professional Development Description, Strategies, and Motivators by Career Stage

Description (Benge et al., 2011; Rennekamp & Nall, 1994)				
Pre-Entry	Entry	Colleague	Counselor	Advisor
Individuals actively seeking employment in Extension, such as students or individuals changing careers.	Individuals first entering the profession or a new job within the profession.	Individuals accepted as members of the professional community and independently contribute their expertise to solving problems and carrying out programs.	Individuals ready to take on responsibility, either formal or informal, for developing others in the organization.	Individuals playing a key role in shaping the future of the organization by sponsoring promising people, programs, and ideas.
Strategies (Benge et al., 2011; Kutilek et al., 2002)				
Pre-Entry	Entry	Colleague	Counselor	Advisor
Examination of competencies, and pre-service training before starting the job.	Peer mentoring, professional support teams, leadership coaching, and orientation/job training.	In-service education, professional association involvement, formal educational training, and service on committees or special assignments.	Life and career renewal retreats, mentoring and trainer agent roles, assessment center for leadership, and organizational sounding boards.	
Motivators (Benge et al., 2011; Rennekamp & Nall, 1994)				
Pre-Entry	Entry	Colleague	Counselor	Advisor
Self-management, program development process, communication skills, interpersonal skills, technical/subject matter expertise, and teaching skills.	Understanding the organization, structure, and culture; obtaining essential skills to perform job; establishing linkages with internal partners; creativity and initiative; and moving from dependence to independence.	Developing area of expertise, professional development funding, independent contributor in problem resolution, membership and identity in professional community, creativity and innovation, and moving from independence to interdependence.	Acquiring a broad-based expertise, attaining leadership positions, engaging in organizational problem solving, counseling/coaching other professionals, facilitating self-renewal, and, achieving a position of influence and stimulating thought in others.	

New Directions: Online and Hybrid Methods

Online professional development can replicate many activities traditionally performed face-to-face and has proven to be an exceptional tool for reaching a geographically dispersed audience (Coppernoll, Jahedkar, & Murphrey, 2006). Employee perspectives and professional connections are enhanced by bringing together people and experiences outside the normal reach of face-to-face professional development (Russell, Carey, Kleiman, & Venable, 2009). Online and hybrid methods also address the major challenges of time and budget through negating the need for travel (Franz, Brekke, Coates, Kress, & Hlas, 2014; Harwell, 2003).

A study by McCann (2007) on professional development in Extension determined that the success rate of professional development between online and face-to-face methods were almost equal. Even though online professional development has been successful, many Extension professionals still prefer face-to-face instruction (McCann, 2007). This preference may change as new generations native to online communication more fully enter the workforce. Slow Internet connections, especially in rural areas, may affect the effectiveness, adoption, and/or enjoyment of online methods (Thomas, 2009). Hybrid methods, which combine online modules with face-to-face educational sessions, may become more established for Extension professional development to enhance program development.

Competencies Required for Extension Program Development

Competency development is a participatory process linked to strategic decision making in training and development (Stone & Bieber, 1997). Thus, the development of competencies is also a strategic issue that has implications for the future success of Extension.

Literature on the core competencies and essential skills required for Extension professionals consistently lists program planning and development (Baker & Hadley, 2014; Cooper & Graham, 2001; Radhakrishna, 2001; Scheer, Ferrari, Earnest, & Connors, 2006; Stone & Coppernoll, 2004). The list of required core competencies expands greatly when viewing program development through (1) the lens of Boyle's (1981) comprehensive definition of a program; (2) the Seevers, Graham, and Conklin (2007) concept that stakeholders play a critical role in program development; and (3) the idea presented by Ripley et al. (2010) that volunteers must play a role in all parts of a program.

Not only must Extension professionals have mastery over the Program Development Model, they must possess a variety of program development skills, including evaluation, promotion, instruction, use of technology and media, interpersonal skills, volunteer management, and more (Gamon, Mohamed, & Trede, 1992; Hibberd, Blomeke, & Lillard, 2013). Extension professionals have placed equal importance on program planning, implementation, and

evaluation; public relations; personal and professional development; and faculty/staff relations (Cooper & Graham, 2001). Core interpersonal skills and an understanding of the program development process may go hand-in-hand (Scheer, Cochran, Harder, & Place, 2011). Therefore, training on the Program Development Model alone is not sufficient to prepare an Extension professional to successfully develop effective programs.

The case could be made that almost any Extension core competency could be directly related to program development, given the range of skills necessary to develop a comprehensive program in collaboration with stakeholders. Extension professionals have identified leadership skills, human (interpersonal) skills, and emotional intelligence skills as being the most important factors in implementing successful educational programs in their communities (Bruce & Anderson, 2012). Scheer et al. (2006) listed ten core competencies for Extension professionals, almost all of which play an important role in program development:

- Applied research;
- Communications;
- Community development process and diffusion;
- Diversity and pluralism;
- Extension knowledge, leadership, and management;
- Marketing and public relations;
- Program planning, implementation, and evaluation;
- Risk management;
- Technology; and
- Theories of human development and learning.

As the world becomes more interconnected and Extension audiences become more diverse, Deen, Parker, Hill, Huskey, and Whitehall (2014) suggest the need for cultural competency training to deliver relevant programs for a variety of audiences. Extension professionals have an increasing need to understand how global issues affect local communities, as well as how to operate in a world with global technology connections (Ludwig, 1999). Furthermore, successful Extension professionals must be able to work in teams, communicate effectively, oversee performance, manage tasks, and lead people to further the mission of delivering educational programs (Ladewig & Rohs, 2000).

Case Study: Texas A&M AgriLife Extension Service

Setting the Stage

Employee development has long been a focus of AgriLife Extension, including new hires and experienced employees. In the late 1990s, AgriLife Extension embarked on a significant effort

to identify competencies needed by employees for successful program development (or performance) (Stone & Coppernoll, 2004). This effort led to the creation of a comprehensive strategy to ensure all employees received strategic professional development. Since this time, numerous adaptations and modifications have been made to the strategy. Environmental changes such as budget reductions and organizational changes were the primary factors guiding this change.

Prior to 2011, AgriLife Extension employed one faculty and one staff position specifically focused on employee professional development. These individuals developed and implemented strategies for employee professional development, including programs for new employees such as orientations, trainings, mentoring, and instructing existing employees on new ideas or refresher trainings. In 2011, as a result of budget cuts, these positions were eliminated and the responsibilities assigned to other employees within the organization. Professional development efforts have continued at levels equal to or greater than those prior to these changes.

Internal analytics have shown the demographics of AgriLife Extension employees have changed. The workforce has continued to get younger, and the needs, work styles, and learning styles of these employees has altered the approach to the professional development strategy. In addition, rapid changes in technology have led to the use of online courses for basic level content of program development and content related to teaching, the use of video conferencing for some training, and the development of short videos for the diffusion of less detailed information.

The activities described below focus on the professional development efforts within AgriLife Extension. This work includes topics such as program development (planning, implementation, and evaluation), teaching effectiveness, facilitation skills, and specific subject matter skills, such as animal science, crop science, nutrition, community development. Professional development opportunities for other skills, such as time management, conflict resolution, and personnel management, fall under the responsibility of the human resources unit.

Onboarding New Employees

New employees for AgriLife Extension are defined as those within the first three years of employment. AgriLife Extension data indicate that new employees retained for three years generally stay with the organization. The goal of the onboarding process is to get 'early wins' for a new employee, thus increasing the chance they stay with the organization.

District Extension Administrator/Regional Program Leader agendas. Specific orientation and training agendas have been developed for use by regional leadership teams consisting of District Extension Administrators (DEA) and Regional Program Leaders (RPL). The specific roles of the DEAs are hiring and supervising county agents. The RPLs provide professional

development and support for program development. The professional development agendas cover a wide range of topics. These agendas are implemented the first day of employment and continue through the second year of employment. Agendas are used by both DEAs and RPLs for specific employee competency development. For example, a DEA will cover information on working with a county Leadership Advisory Board and other committees. An RPL will cover how an agent works with specialists in program development and delivery. This strategy is specifically designed for new county agent hires.

FirstStep program. All county agent hires, except those in an urban county, go through a process called FirstStep in their first month of employment. The FirstStep program places a new agent in a county similar to their own for their first 30 days of employment. This allows a new agent to shadow and learn from successful experienced agents. During this time, new agents are exposed to programming efforts, committee meetings, visits with producers and other clientele, and the general county office environment.

Program Excellence Academy. The Program Excellence Academy is comprehensive and intensive face-to face professional development for all new agents in their first 12 to 15 months of employment. The academy consists of two weeklong sessions aimed at providing in-depth knowledge and skills on the program development process. The first session focuses on an organizational overview, issue identification, program planning, and program design. The second session focuses on program implementation, teaching effectiveness, evaluation, and program reporting. These sessions contain both classroom and hands-on educational experiences. Educators participating in these sessions include organizational development faculty, Extension administration, DEAs, RPLs, specialists, and agents. Agents can earn up to six graduate credit hours towards a graduate degree with approval from an institution of their choice.

101 trainings. At the end of the first academy session, new agents attend one of two 101 trainings. One session focuses on 4-H livestock education and the other focuses on 4-H family and consumer science education. These sessions provide in-depth understanding and skill development for various aspects of the 4-H program. These offerings contain both classroom and hands-on educational experiences.

Online training. New agents are required to take several online courses to assist them in obtaining a basic framework for the more in-depth training at the academy sessions. Topics for online courses include the history of Extension, basic program development concepts, professionalism, and use of the Extension planning and reporting system.

Mentoring. All new agents are involved in a formal mentoring program. Mentors and mentees are assigned to each other based on geographical proximity, knowledge and skill sets, and

subject-matter expertise. The mentor program lasts for 24 to 36 months, based on the needs of the mentee. All mentors undergo initial and other periodic trainings to ensure they understand the mentoring strategy and concepts and to ensure their skills are kept up-to-date.

Specialists' Foundations. A specific training for new specialists is conducted. These trainings are held as needed based on the number of new specialists hired. The focus of this professional development includes topics such as program development, working with agents and county programs, grants and contracts, and the promotion and tenure process. Specialists' Foundations is usually a two-to-three day program held on-campus at Texas A&M University.

Professional Development for Experienced Employees

Experienced employees for AgriLife Extension are those who have completed the onboarding process. Several development opportunities described below are made available for these employees.

ExtensionU. ExtensionU (or Extension University) provides continued training for experienced agents. This opportunity is voluntary, and both agents and specialists can register for courses that they and their immediate supervisor believe will enhance their growth. Intermediate and advanced courses focus on program development related skills. ExtensionU topics include program development, teaching effectiveness, evaluation, online learning development, grant writing, volunteer management, and use of social media.

Regional/District offerings. Regional and district trainings are planned throughout the year based on the needs of the agents in each district. These trainings are identified, developed, and implemented by regional and/or district teams. These offerings can be organizational or subject matter-related. They may include all agents in a geographic area or target a specific group such as new agents.

New Ideas and Concepts

Peer mentoring. This effort provides a team of mentors instead of focusing mentoring efforts on a one-to-one relationship. In this strategy, mentors can be co-workers, agents with similar job responsibilities, agents with similar interests, or any other relationship to enhance the mentee's success. Mentor teams are generally small with up to five employees working with a new employee.

Modifications to FirstStep program. Modifications to the FirstStep program (described previously) are currently being tested within the state. The primary modification utilizes multiple counties in the process. By observing Extension in two or more counties during the first month

of employment, it is believed that the new agent will get more exposure to programs and activities, as well as insights into working with a wide variety of clients.

Regional onboarding. A regional onboarding effort is being developed to supplement the skills and practices learned in the Program Excellence Academy. These sessions, three in total per region, will focus on skill sets not fully developed during the Academy, such as a deeper focus on developing relationships.

Agent certification. An agent certification program is currently in the planning phase. This effort will help agents gain advanced knowledge, skills, and practices in key areas of their current position or a desired future position. Each certification effort would have a similar format to ensure consistency. The certification process would incorporate a ‘degree plan’ approach to an overall employee development effort including an employee development plan and an associated academic transcript. The proposed plan would include core strategies and personal competencies to reach each agent’s needs. Beyond the core requirements, agents will select elective training opportunities focused on their goals. A modified version of this certification process will also be designed for specialists.

Major Challenges

Several challenges face AgriLife Extension’s professional development efforts including the financial and personnel resources needed to train employees across a large, diverse state. Also, as technology and the workforce continue to change at a rapid pace, challenges to how professional development opportunities are delivered will continue to be an issue. These challenges will impact how we identify, design, deliver, and evaluate programs in a timely and relevant way.

Extension Professional Development Across the Country

University of Arkansas Cooperative Extension Service

The University of Arkansas Cooperative Extension Service (UA CES) uses a blended learning approach to professional development delivered through various platforms, methods, and products (R. Poling, personal communication, March 27, 2015). This strategy includes periodic comprehensive assessments of employee needs across program areas, organizational roles, and years of service. A full range of training efforts includes online courses, fact and tip sheets, videos, webinars, distance coaching, classroom instruction, and field training. These resources are made available to both new and experienced employees. Onboarding webpages and semi-annual *Check-In and Tune-Up* workshops are also available to all new employees at UA CES. Structured onboarding and mentoring efforts are also part of the support for new employees. Both district directors and program and staff development personnel provide these efforts.

Onboarding new employees. UA CES has specific professional development targeted at county agents. This includes a formal onboarding and mentoring program, with the responsibility of this effort shared among the new agent, the new agent's direct supervisor, mentor, district director, and program and staff development personnel. Training resources include an onboarding notebook that identifies key information and activities each new employee should experience within the first year of employment, as well as a self-guided competency assessment tool. A companion notebook is provided to each supervisor and mentor. In addition, online courses are available for the new employee, supervisor, and mentor that outline the onboarding process. Monthly videoconferences are conducted with new agents on topics relevant to the new agents' roles and responsibilities. A formal evaluation process is also used to assess the onboarding and mentoring program. To assess the mentor/mentee relationship, 30-day follow-up telephone interviews are conducted with both the new agent and the assigned mentor. Evaluation data for the overall onboarding and mentoring process is collected from the new agents, the direct supervisors, and the mentors using online surveys at 3-, 6-, and 12-month intervals during the new agent's first year. The new agent onboarding process is currently being modified for other UA CES job categories.

Several efforts described above (e.g., online and face-to-face courses) have a strong focus on the program development process, including program implementation and evaluation. Informal feedback provided by new employees, mentors, and supervisors suggests these efforts have led to a greater understanding of the program development process and better designed programs.

Professional development for experienced employees. Professional development opportunities for experienced UA CES employees include traditional face-to-face in-service training classes and workshops, online courses, webinars, and blended classes with online materials integrated with face-to-face classes. These opportunities are also available to new employees.

In-service training offerings are categorized based on a set of core competency areas identified as important knowledge and skills needed by Extension employees. These competencies include subject matter expertise, organizational knowledge, program development, technology, communication, and professionalism. Ideas for in-service training topics are identified through periodic needs assessment surveys and consultation with district directors and department specialists. Prior to the beginning of each training year, the in-service face-to-face classes, online courses, and webinars are identified, approved, and scheduled for the coming year.

Another professional development opportunity available to experienced employees, as well as new employees, is an annual three-day professional development conference sponsored and conducted by four Arkansas Extension professional associations. This *Galaxy Conference* offers educational sessions, guest keynote speakers, and a poster session for sharing ideas.

New ideas and concepts. UA CES is focusing new efforts on the translation of the face-to-face orientation to online modules. In addition, UA CES is working to expand the use of self-paced, readily available tutorials for training in organizational operations, as well as expanding the use of webinars as a delivery method for employee professional development activities.

Major challenges. UA CES has identified several professional development challenges, including employee turnover. This situation increases the need for timely training delivered on-demand, acquiring skill sets to develop quality online courses, and funding to create the courses. Providing training opportunities in program areas where few employees need specific training sometimes causes offerings to be postponed until a critical mass of participants is available.

Colorado State University Extension

Colorado State University Extension uses a variety of methods for the professional development of new and experienced employees (J. Barth, personal communication, March 31, 2015). These include a combination of face-to-face and electronic methods to reach both new and experienced employees.

Onboarding new employees. Currently, online presentations, an online workbook, and printed materials are being used. In addition, a three- to four-day face-to-face new employee training is conducted on-campus twice a year. A formal mentoring program is also part of the onboarding process. Mentors are assigned to new employees based on their area of responsibility, geography, and program size. Regional program directors select the mentors, and funds are provided for the mentor and mentee to have face-to-face meetings. All of these efforts have a focus on the program development process. Anecdotal evidence suggests these efforts are having an impact on new employees when compared with earlier efforts that did not utilize face-to-face trainings or a mentoring program.

Professional development for experienced employees. Experienced employees create a professional development plan and update it every four years. These plans are discussed annually during the employee's performance appraisal to determine how they stay up-to-date and grow in their respective fields. In addition, subject-matter units provide content updates, and an annual conference provides professional development opportunities for employees. Yearly regional meetings and monthly county director webinars also provide professional development opportunities for employees.

New ideas and concepts. For new employees, a comprehensive, online training system is being developed. This system will be housed in Canvas, an online learning platform, and will take 12 weeks to complete. An agent committee is working on the development and implementation of the Canvas-based learning platform.

Major challenges. The major barrier to professional development identified was time. Employees state they are overcommitted, making it a challenge to participate in professional development.

University of Illinois Extension

The University of Illinois Extension professional development efforts range across a wide spectrum, utilizing multiple strategies, including a combination of face-to-face and technology-based efforts (A. Taylor, personal communication, April 2, 2015).

Onboarding new employees. A new online system is currently under development to complete basic pre-hire information prior to a new employee's first day on the job. On his/her first day, the formal onboarding process would include a series of online courses, such as a welcome from the Director, history of Extension, reporting, etc. Academic professional staff are assigned a mentor and also participate in face-to-face trainings at the regional and state levels.

Professional development for experienced employees. Experienced employees receive a variety of trainings and also participate in regional and state trainings. Program areas provide specific trainings throughout the year, and the Illinois Joint Council of Extension Professionals provides a variety of professional development opportunities at an annual conference. These conferences have included nationally known speakers to deliver professional development. Finally, monthly webinars and meetings with county directors are used to identify professional development needs of employees and provide educational opportunities accordingly.

New ideas and concepts. Technology is being used more fully for professional development. The online program described above is a major new effort. In addition, the organization is developing more comprehensive inclusion and diversity professional development.

Major challenges. Time and money are major barriers for professional development. A major reorganization effort a few years ago decreased professional development as a priority in the organization, so a rebuilding of professional development capacity is taking place.

University of Kentucky Extension

The University of Kentucky Extension professional development efforts focus on a core strategy to meet the needs of both new and experienced employees through a combination of face-to-face and technology-based efforts (K. Jones, personal communication, April 2, 2015).

Onboarding new employees. All new Extension employees participate in an orientation upon being hired. County Extension agents are provided a guidebook that includes human resource

materials, the organizational structure of Kentucky Extension, as well as information on program development. This orientation is followed by a face-to-face core training of three sessions over a 12-month period. The emphasis is on program development principles and practices, including building linkages and relationships, situation analysis, priority setting, program design, program implementation, evaluation, and accountability. All new employees are also required to complete a specified number of in-service trainings per year. New agents are paired with experienced agents who serve as mentors. Mentors complete training prior to being assigned.

Professional development for experienced employees. Experienced employees receive a variety of trainings, and like new employees, are required to complete a specified number of in-service trainings per year. In addition, they are required to assist in the development and delivery of new educational programs and materials, as well as contribute to research and academic publications. Study leave focusing on enhancing specific knowledge and skills is also available to experienced employees.

New ideas and concepts. Moving to an online training environment is a focus within the University of Kentucky Extension system. Civil Rights trainings and Orientation/History of Extension are now conducted via archived webinars for all Extension employees. In addition, utilization of experienced agents and specialists as trainers in the core-training program offered to new employees is a new focus.

Major challenges. Technology, technology support, and the availability of trainers with appropriate subject-matter skills were identified as professional development barriers. The development of collaborations between agents and specialists to serve as co-facilitators and trainers during the core-training sessions is also a challenge.

Table 3 summarizes the professional development methods used by several Extension systems to enhance program development competencies in new and experienced Extension professionals.

Table 3. Summary of Professional Development Opportunities from Case Studies

Strategy	Arkansas	Colorado	Illinois	Kentucky	Texas
Face-to-Face	O,E	O,E	O,E	O,E	O,E
Online	O	O	O	O	O
Mentoring	O	O	O	O	O
Notebooks/Documents	O	O		O	O
Webinars		O,E	E	O,E	O,E
Formal Assessment	O				

O = Onboarding experiences for new professionals

E = Professional development for experienced professionals

Implications and Recommendations

Knowledge and practice can quickly become out-of-date in today's complex and rapidly changing world. Professional development must adapt to an ever-changing society. Extension and its professionals must also view professional development as a continual learning process designed to stay current and to anticipate future organizational and/or clientele needs (Sims, 1998).

Share professional development best practices for improved program development. As Extension continues to learn more about professional development as it relates to program development, it becomes imperative to share ideas and best practices among institutions since context plays an important role in professional development (Avalos, 2011). Effective professional development is an ongoing, learner-centered, and collaborative process that recognizes educators as adult learners (Abdall-Haqq, 1996). There are numerous Extension organizations that have excellent resources or provide mechanisms to share resources. These include the National Association of Extension Program and Staff Development Professionals (NAEPSDP), eXtension, Epsilon Sigma Phi (ESP), and various subject-matter associations.

Balance theory and practice. A balance of professional development time must be spent on developing theory and application of theory in practice to improve program development. The andragogy in practice model developed by Knowles, Holton, and Swanson (2005) can be a useful tool when designing professional development for Extension professionals to ensure a balance between theory and practice. The goals and purposes for learning (which include individual, institutional, and societal growth), individual and situational differences, as well as the core adult learning principles (learner's need to know, self-concept of the learner, prior experience of the learner, readiness to learn, orientation to learning, and motivation to learn), should all be considered by those planning professional development. Effective professional development is job-embedded (Hunzicker, 2011), which allows Extension professionals to use their practice as a learning opportunity.

Focus on work-life balance. Increased workloads and use of time, as well as increased personal costs, are burdens preventing some Extension professionals from engaging with professional development opportunities (Lakai et al., 2012). Maintaining a work-life balance can help reduce stress and increase both wellness and effectiveness (Ensle, 2005). Training new Extension professionals on effective time management skills can be an important step in helping educators balance professional development with their other responsibilities and also reduce on-the-job stress (Baker & Hadley, 2014). Burnout can be costly to Extension and harmful to its professionals (Sears, Urizar, & Evans, 2000). Extension professionals able to manage their time and commitments have been shown to be more effective; thus, training in this area should be proactive (Place & Jacob, 2001).

Start professional development earlier in the employee's Extension career. It may be advantageous to start the professional development process earlier. The timing of professional development opportunities with the start date of new employees was a concern found by Baker and Hadley (2014). Specifically, program planning was mentioned as a competency that needed to be developed early in an Extension educator's career so he/she does not feel things were done incorrectly prior to receiving professional development. For example, Virginia Cooperative Extension created a multimodule 4-H agents' training program to teach youth development competencies consistent with the National 4-H Professional Research, Knowledge, and Competencies (4HPRKC) taxonomy. Written and verbal evaluations indicated the program, a first-year requirement for new Extension professionals, was informative, interactive, and responsive to participants' needs (Garst et al., 2007).

Mobilize online and hybrid learning for professional development. More of the professional development process as it relates to program development should be moved online to address time and cost constraints, as well as the preferences of the newest generations entering the workforce. There is growing evidence that online education is a viable option for Extension professional development, and that Extension professionals are interested in and receptive to this option (Senyurekli, Dworkin, & Dickinson, 2006). A hybrid course featuring both online and face-to-face interaction may be an ideal method for teaching Extension professionals about program development as a balance between cost and time constraints and the preferences of Extension professionals to interact face-to-face. These professional development opportunities and related resources should be archived so professionals can easily refer to the information presented (Baker & Hadley, 2014).

Implement individualized professional development plans. Stone and Coppernoll (2004) suggest the creation of an individual professional development plan to guide employee competency development. This plan is created in partnership between a supervisor and the employee outlining specific professional development goals and steps to meet those goals. This process reinforces a best practice that learners should select what they need to learn to meet their career goals (McLoughlin & Lee, 2008). Results from the effort currently in development in Texas may provide support for this strategy in the future.

Involve employees as stakeholders of professional development. Extension professionals should help identify the knowledge, skills, and behaviors needed for developing their job competencies (Stone & Bieber, 1997). Just as Extension involves stakeholders in the program development planning process, so should employees as direct stakeholders be involved in the professional development planning process. Stone and Bieber (1997) suggest that Extension professionals will effectively grow their competencies by being involved in the planning process, and will also fully know their job responsibilities.

Use a variety of professional development methods. Extension professional development opportunities should use a variety of interactive methods and techniques to keep learning fresh and to take into consideration the variety of learning style preferences of participants (Baker & Hadley, 2014; Davis, 2006). As seen from the case studies above, each institution takes a different approach to professional development for program development, and no two institutions use the same mixture of methods for onboarding or experienced professionals. Situational differences across institutions, including cultural, geographical, and budgetary, mean that some methods are better suited than others. However, it is clear that no institution utilizes a single method alone.

Motivate Extension professionals to engage with professional development. Due to their busy professional lives, it is necessary to motivate Extension professionals to seek out professional development opportunities by helping them realize the benefits of these opportunities (Lakai et al., 2012). Effective professional development for Extension professionals depends upon the motivation of the Extension educator to improve professionally and achieve organizational goals (Dromgoole, 2007). It is imperative that Extension professionals who desire to excel choose to continue to develop themselves professionally. Efforts such as the certification program being developed in Texas or the youth development certificate offered by Clemson University (Clemson University, 2015) might provide additional internal motivation to continue the learning process. In addition, Extension administration and supervisors must continue to provide the rationale and opportunities for continued professional development.

Conclusion

The ability of Extension to continue to develop relevant, high quality educational programs is directly dependent on the implementation of the Program Development Model and the professional development of Extension professionals. It is likely that professional development will continue to transition to online and hybrid methods in the next few years to take advantage of advances in technology and increases in comfort levels with technology. Professional development issues of balancing work, motivation to engage with professional development opportunities, and perhaps even the individualization of professional development will become increasingly important with the next generation of Extension professionals. It is important to remember that professional development needs to occur throughout an Extension employees' career. While professional development is heavily stressed in the onboarding and early career stages, it is necessary for it to continue past that point to ensure that quality, relevant programs continue to be planned, delivered, and evaluated. In situations where time and budgets are challenges faced by Extension, increased or steady professional development activities may be the most appropriate response. The future of the organization and its Program Development Model greatly depends upon competent Extension professionals. Professional development may

look different today and in the future, but it is important to keep in mind that the competencies of Extension professionals are upon what Extension's success is built.

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