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Opportunities for Competency Support of Virginia Cooperative Extension Professionals at the Colleague Stage

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Opportunities for Competency Support of Virginia Cooperative Extension Professionals at the Colleague Stage

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This study focused on the professional development needs of Cooperative Extension agents and specialists with between four and seven years of experience, placing them roughly within the colleague career stage. Data were collected through focus groups and validated through member checking and the use of a modified World Café approach. A research team collaborated, increasing the reliability of the findings through intentional reflection in the development of the findings. Areas of competency strength and weakness vary for agents and specialists, and specific topic areas within competencies vary. While many of the emergent competencies identified in this study fit within the competency framework of Harder et al. (2011) and previous competency studies, more specific topic areas were identified. However, the top priorities identified for professional development focus included communication, educational design, leadership, and budget and fiscal management. Attention to these areas can increase the ability of these professionals to work more effectively and productively. Providing professional development in areas of need for both agents and specialists can support the development of collegiality within the Extension organization. Supporting professionals in this stage of their career growth will position them well for advancing to additional career stages within Cooperative Extension.

Keywords: colleague career stage, Cooperative Extension competencies, agent professional development, specialist professional development

Brief Literature Review

According to Weatherly, a competency “is a collection of related knowledge, skills, abilities, and other personal characteristics ... working in concert to produce outstanding performance” (Cochran, 2009). Cochran further attributes competency to better job performance and workplace excellence. Significant resources are invested in helping new employees develop workplace competencies, representing financial loss to the organization when employees leave (Harder et al., 2017). Harder et al. (2017) used a formula developed by Johnson and Senges to estimate that the financial cost to Cooperative Extension (CE) of losing an agent with a \$47,499 annual salary was \$284,994. The loss is based on the salary, which increases as the salary increases. Significant resources are committed to developing early career employees. Harder et al. (2017) quantified the value of the UF/IFAS onboarding program in increasing the competency of agents by 36.9%, providing a \$17,527 value per agent, also based on a \$47,499 salary.

It has often been expressed that Extension trains these agents, and then they move on to greener pastures; however, we have not thoroughly explored why they leave. An exit survey conducted by Human Resources of Virginia Cooperative Extension (VCE) agents, including 40 agents or field faculty over a four-and-a-half-year period, found that the primary reason these faculty departed was that they “secured a better job” (Woods, 2021). The reason these individuals gave for looking for other jobs was dissatisfaction with opportunities for advancement (Woods, 2021), despite the financial investments. Participants in a study of early career VCE agents expressed concern when they lost members of their cohort (Vines et al., 2018).

The career stages approach developed by Rennekamp and Nall (1993, 1994) helps underscore the professional development dynamics and motivations and has been used as a basis for the development of professional development programs in multiple states (Benge et al., 2011; Kutilek et al., 2002). Benge et al. (2011) added the pre-entry stage, so the career stages include the Pre-entry Stage, Entry Stage, Colleague Stage, and Counselor/Advisor Stage (Benge et al., 2011; Rennekamp & Nall, 1994). The approach highlights the distinctions between different stages and Extension agents’ motivations to consider career growth (Benge et al., 2011; Kutilek et al., 2002; Rennekamp & Nall, 1993, 1994).

This approach defines abilities and professional development needs for Extension employees in different stages of the career. Stages that are defined include:

1. The Entry Stage is the Extension agent’s career commencement stage. In this stage, agents acquire essential skills to complete specific tasks, learn organizational standard procedures and policies, implement and propose innovative ideas, establish internal linkages, and move from dependence to independence (Benge et al., 2011; Kutilek et al., 2002; Rennekamp & Nall, 1993, 1994).
2. The Colleague Stage is where professionals gain identity in the profession, become independent, expand their innovation and initiative, identify an area of expertise, seek

- professional development opportunities and funding, and move from independence to interdependence (Benge et al., 2011; Kutilek et al., 2002; Rennekamp & Nall, 1994).
3. In the Counselor/Advisor Stage, the agents acquire leadership positions, take decision-making roles and problem-solving, gain positions of influence, and acquire broad-based expertise (Benge et al., 2011; Kutilek et al., 2002; Rennekamp & Nall, 1994).

Competencies associated with employment and professional development have been subject to much discussion and research because of their role in the retention of Cooperative Extension employees. Donaldson and Vaughn (2022) identified 97 total studies when searching for the keyword “Extension professional competencies” from the Summon Database at North Carolina State University with publication years. From these, they identified 37 studies that stated a research methodology; that occurred within the United States; did not focus on paraprofessionals, administrative assistants, and/or graduate students; or focus on competencies taught in Extension Education courses (Donaldson & Vaughn, 2022). Within these documents, Donaldson and Vaughan (2022) identified fifteen professional competencies associated with Extension professionals. They include communication, diversity and cultural competence, flexibility, interpersonal relations, knowledge of Extension, leadership, professionalism, program planning and evaluation, resource management, subject matter competence, teaching methodology and delivery, technology, thinking and problem-solving, understanding community needs, and volunteer management. A previous study by Harder et al. (2010) used a Delphi study with a national panel of Extension experts to determine competencies for entry-level Extension professionals. From these, they developed a model of entry-level Extension educator competencies. Implicit in their model is an indication that necessary competencies may vary over time, as their model is labeled to include competencies for 2015 (Harder et al., 2010). Additionally, Berven et al. (2020) also used a Delphi study to identify competencies needed for new agents in Tennessee to be successful in their work.

The competencies identified through national studies by Donaldson and Vaughan (2022) did not reference the career stage. These are summarized in Table 1, along with the entry-level competencies identified by Harder et al. (2010) and Berven et al. (2020). Harder et al. (2010) assigned competencies to broader categories to address specific areas within those competencies, which are reflected in this table. The broader categories reflected here from the Harder et al. (2010) model include applied research skills, core interpersonal skills, Extension program development process, technical/subject matter expertise, and volunteer development. Donaldson and Vaughn (2022) contributed Extension knowledge and the broad area of technology, which may encompass both professional processes as well as the use of technology in educational programming. The Harder et al. (2010) model referred to being “able to utilize technology for program delivery” (p. 49).

Table 1. Compilation of Categories of and Specific Competencies Focused on Early Career Extension Professionals and Connected to National Scoping Project for Extension Professionals Without Reference to Career Stage

Category	Specific Competencies Identified	Scope	Reference(s)
Applied Research Skills	Applied research skills	National	Harder et al. (2010)
Core Interpersonal Skills in general	Flexibility	National	Donaldson and Vaughn (2022)
	Professionalism	State and National	Berven et al. (2020), Donaldson and Vaughn (2022), and Harder et al. (2010)
	Self-management	National	Harder et al. (2010)
Core Interpersonal Skills related to communication	Communication	State and National	Berven et al. (2020), Donaldson and Vaughn (2022)
	Oral and written communication skills	National	Harder et al. (2010)
Core Interpersonal Skills related to diversity	Cultural sensitivity	National	Harder et al. (2010)
	Diversity and cultural competence	National	Donaldson and Vaughn (2022)
Core Interpersonal Skills related to interactions with others	Interpersonal relations	National	Donaldson and Vaughn (2022)
	Relationship building	National	Harder et al. (2010)
Core Interpersonal Skills related to leadership	Leadership	State and National	Berven et al. (2020), Donaldson and Vaughn (2022)
	Organizational leadership development	National	Harder et al. (2010)
	Personal leadership development	National	Harder et al. (2010)
Core Interpersonal Skills related to critical thinking	Problem-solving	National	Harder et al. (2010)
	Thinking and problem-solving	National	Donaldson and Vaughn (2022)
Develop Extramural Funding	Develop extramural funding	National	Harder et al. (2010)

Present Study

This study focuses on the experiences and needs of agents and specialists between four and seven years of service to identify needs at this stage in their careers. Objectives of the project

were to (a) identify career-related challenges experienced by VCE professionals four to seven years in their career; (b) identify opportunities for change in the work environment or professional development programming that increase support and retention for Extension professionals in this time; (c) identify unique and shared needs for Extension agents and specialists; and (d) increase visibility, membership, and activity for the Alpha Gamma Epsilon Sigma Phi (ESP) chapter within VCE. There were four areas of inquiry: competencies, sources of stress, the role of needs assessment in work, and mentoring and support. This portion of the study focused on competencies connected to objectives one through three. The five critical competencies for early career Extension faculty identified by Berven et al. (2020) were used as the basis for the focus group questions related to competencies. These are defined as communication, educational design, leadership, professionalism, and subject matter knowledge. Because these faculty are just beyond this career stage, they should be able to identify the best sources of support and needs associated with these competencies.

The juncture between the entry and colleague stage time in the career of VCE professionals is crucial as agents pursue promotion and tenure-track specialists go through the tenure process. Specialists were included in this study because there has not been a lot of work looking at the experience of specialists based on career stage. This project was supported in part by a national ESP professional development grant. ESP is an honorary Extension fraternity that generally requires a minimum number of years of service set by the state chapter for potential members. VCE faculty are eligible to join Epsilon Sigma Phi with three years of service. Membership extends beyond agents to include specialists and administrators as well.

This study consisted of a single case study with sources of data including (a) focus group findings from Extension professionals with four to seven years of experience, (b) reactions and responses to focus group sessions by the research team, and (c) prioritization of issues and recommended solutions developed through an online modified World Café session led by members of the research team with focus group participants. This article provides findings and recommendations from the project related to competencies.

Methods

This project was deemed “not human subjects research” by the Virginia Tech Institutional Board (IRB 20-904).

We assembled a research team in May 2020 to develop an assessment of employees to build on an earlier study of entry-level Extension agents. The research team was made up of the leadership of the Epsilon Sigma Phi chapter as well as members of the VCE administrative team. We decided to use online focus groups and to look at not only the perspectives of Extension agents but also Extension specialists. Six online focus groups were developed using purposive random sampling to fill a total of six focus groups. Four agent groups were provided with two groups each for promoted and non-promoted agents. The remaining two focus groups were split

between tenure track and non-tenure track specialists. The lower number of specialist groups is due to their reduced number within VCE. The sampling frame was obtained from the human resources department and cleaned to identify the promotion and tenure status of potential participants. Random numbers were applied to each group to identify the order in which individuals were invited to participate in the project. The goal was to have six to eight participants in each focus group. Invitations to participate were sent via email. The invitations included a link to a Doodle poll that recipients could use to identify their availability if they were willing to participate in the study. Groups were set, and focus group sessions were scheduled using the data collected through the Doodle polls.

We conducted the focus groups online using a needs assessment approach (publication in press). Two members of the research team presided over each focus group. One focused on facilitating the session, with the second assisting by entering questions in the chat, taking notes, and asking clarifying questions. The sessions were recorded and transcribed. One of the research team members took responsibility for cleaning up the transcripts. The cleaned transcripts were shared with focus group participants for member checking.

The five critical competencies identified by Berven et al. (2020) were used to open the conversation with the Extension professionals and provide examples of what was meant by competencies. Focus group participants reflected on these as they responded to questions asking them to identify areas in which they felt most competent and methods used to attain that competency as well as areas in which they were least competent and support needed to achieve greater competence in those areas. Participants provided recommendations on how VCE could support their growth in these areas. In addition, participants were asked to identify additional competencies they felt were important.

After the focus group sessions were complete, the research team met to reflect on the competency area of inquiry. Three questions guided the research team's reflection:

1. What did you hear that you were not expecting to hear?
2. As you reflect on the content of your group as a whole, what action items would you recommend for us or others in the organization?
3. Are there areas where you feel we need to follow up to learn more?

These sessions were also recorded, transcribed, and sent to the participants for member checking.

Findings guides were developed based on the focus groups and research team discussions. These were shared with the research team for revision and then submitted as VCE publications to make them accessible to the VCE community. The findings guide for competencies is available at https://www.pubs.ext.vt.edu/content/pubs_ext_vt_edu/en/ALCE/ALCE-287/ALCE-287.html.

Focus group participants were invited to participate in an online session using a modified World Café approach in order to prioritize issues that were identified earlier and to develop recommendations. The online session took place roughly one year after the original sessions. Breakout rooms were used for each of the content areas, including competencies. Participants indicated priorities for three content areas they hoped to discuss and were assigned to participate in breakout sessions for each area. Breakout room assignments and links to the findings documents were sent via email to participants the week before the session to allow them time to review the materials. The initial and first follow-up sessions for each area were 20 minutes in length, with the third being 15 minutes in length. A member of the research team facilitated the session in each area, while another individual outside the project was asked to assist in capturing responses in a Google document. All participants could access and edit the Google document. Participants were asked to finalize a response over the three sessions to three questions. They were: (a) “Is there anything you feel is missing or should be added to the findings document?”, (b) “As a group, list the items you see as top priority that need to be addressed in order to improve VCE,” and (c) “Work through the items identified in #2 to make recommendations in terms of further discussion or study, policy, practice, professional development topics, etc. to address each of these in order to strengthen VCE.” The Google documents containing the responses were kept open for one week following the session for participants to review and make modifications, as well as for individuals unable to participate to make comments and additions. No additional responses were received. This data was then analyzed for inclusion in these findings.

Findings

Demographics

Demographics of the participants in the focus groups are provided at https://www.pubs.ext.vt.edu/content/pubs_ext_vt_edu/en/ALCE/ALCE-279/ALCE-279.html. The research team consisted of VCE administrators, specialists, and agents. They represented VCE leadership, specialty in VCE continuing professional development, and the ESP leadership team. A team of graduate students and a college retiree comprised the notetakers for the modified World Café sessions. A total of twelve agents and one specialist participated in the feedback session related to competencies.

Findings Overview

Overall and when considered by their roles as agents or specialists, participants in the focus groups reported most frequently feeling least competent in educational design and most competent in subject matter knowledge (see Table 2). Communication was the second most frequently identified area of least competency. No specialists reported feeling least competent in subject matter or most competent in either leadership or professionalism. Other competencies that were identified by the focus group participants included: budget and fiscal management,

collaboration, communicating with elected officials, fundraising, grant writing, inclusion and equity, marketing, performance evaluation reporting, solving issues across disciplines, time management, and work-life balance.

Table 2. Number of Agent and Specialist Responses Related to Areas in Which They Feel Least and Most Competent

Competency	Agents – Least	Specialists – Least	Agents – Most	Specialists – Most
Educational Design	15	4	5	2
Communication	5	3	8	1
Subject Matter Knowledge	5	0	10	8
Leadership	2	1	4	0
Professionalism	1	2	1	0

Four competency areas were identified as top priorities and ranked in this order during the modified World Café feedback session: communication, educational design, leadership, and budget and fiscal management. A summary of the findings for each of these categories is included here. The feedback group reviewing the findings related to competencies shared that although educational design was identified as the area where agents and specialists were least competent during the focus groups, they felt that without good communication, it did not matter how well-designed, implemented, or impactful programs were. Therefore, they prioritized communication skills above educational design.

Communication

Some agents and specialists identified communication as the area in which they were least competent. Communication was expressed as an outgrowth of relationships both inside and outside VCE. Agents spoke about challenges in keeping up with changes in delivery methods as making communication difficult with external audiences. One agent said, “You know, our traditional way of reaching people with newsletters and things like that – we don’t do much anymore. So, having to change – that is a little hard.” Another agent spoke about challenges in shifting audiences and talking to different age groups from six to 80 years old. She said, “That’s been my struggle recently, is how to communicate with a very diverse group of ages and communication preferences in a way that has been effective.” Agents expressed interest in learning how to best communicate with elected officials at the local, state, and federal levels.

One specialist identified communication as the area where she had the least exposure and training. She said,

But I also just think there’s so many different levels of communication that you have to know how to communicate with stakeholders. You have to know how to communicate effectively with staff at different levels, you have to know how to do this with funders, so there’s just so many different types of communication that it can feel overwhelming. ... I

took courses on pedagogy in school as well, not a lot of them, but I don't think I took anything beyond public speaking, or whatever it is you take when you're a freshman. I do think it's harder to learn how to send effective emails and get responses or when it's not appropriate to email, and when you have to call and who doesn't want phone calls and who wants a text message. And who doesn't like a text message and wants you to call them? It's just, it's things you have to learn on the job, I think that it can be, it can be a little overwhelming.

An area of challenge associated with communication repeated by several agents was the ability to communicate for fundraising and grant writing. One agent said,

Being an Extension agent is a lot like running your own business as a sole proprietor and you are truly building the business – you're marketing it, you're funding it, and you're doing all those things, and it can be a real challenge and be overwhelming because the funding isn't always readily available for a lot of agents.

Another agent spoke of challenges associated with moving to virtual programming as a result of COVID and being able to reach some of the older clients. The agent said,

Just this push for technology and push for virtual meetings has been really hard on them [older clients]. I feel like I've kind of pivoted and targeted towards it very easily, but reaching them and having them have some kind of buy-in has been really hard. So, trying to get information out to that group has been really difficult.

One specialist made the point that they must also be conscious of the differences in presenting content in a refereed scientific journal versus talking to growers. Another specialist echoed the challenge of keeping up with communication technology, especially as they age. They said,

The challenge for me in the realm of communication is the ever-changing technology of communication. So, keeping up with that, and you know as you get older it gets harder to learn new things. I mean I don't want to be stereotypical but you get set in your ways. You've learned this and to have to learn something else, now that kind of thing, that's challenging, just keeping up with the pace of change, and particularly in this realm.

Agents credited office colleagues for helping them learn how to communicate more effectively using social media and or developing videos or virtual programming. Past experiences, in the classroom, in degree programs, and on the job were credited with increasing presentation skills in both agents and specialists. Leadership in-service, participating in the state agricultural leadership development program – Virginia Agriculture Leaders Obtaining Results (VALOR), and practice were identified as supports in tailoring delivery and messaging to improve interpersonal communication for agents. Specialists credited senior Extension specialists and agents giving them opportunities to practice presentation skills with different audiences,

increasing their confidence and providing feedback. Training provided during winter in-service was also noted as beneficial to the specialists.

During the feedback session, the groups agreed that their communication modes had shifted in the year since the focus groups occurred as a result of COVID-19. Feedback emphasized that being able to communicate the story is critical. In discussing communication, they included internal communication within VCE as well as external communication to current and potential stakeholders, collaborators, community members, and elected officials. They also talked about knowledge gaps for students and clientele. Agents expressed difficulty differentiating their instruction to support state standards of learning in the classroom. Agents working with adults have difficulty knowing which audiences prefer more or less detail. The feedback group emphasized a major purpose of communication was marketing.

Educational Design

Educational design was the area where both agents and specialists expressed they were least competent in the focus groups. It can be a very broad area encompassing program development and evaluation. It may also include curriculum development and is also connected to the competencies of communication and professionalism in terms of presentation skills and making sure that the program that is being delivered is appropriate to the audience.

Agents identified the following challenges:

- Not being comfortable with program implementation, as a result of not having enough training experiences due to the pandemic;
- Not getting experience in educational design because they were primarily adapting canned programs developed by others;
- Not understanding the theory underlying educational design and using backward design planning approaches;
- Developing educational programming that connects to a “broad audience across multiple discipline areas;”
- Having difficulty incorporating emerging technologies. One agent explained, “4-H is still very much tied to the traditional way of doing things and so any aberration from that is seen as a little bit strange, and, at times, not as valued;”
- Needing to connect youth curriculum with school standardized testing criteria for some youth agents in marketing programming to schools; and
- Creating evaluations and using appropriate evaluation methods.

Challenges identified by specialists included

- Not receiving training either in formal education or professional development in this area,

- Balancing time for educational design and a sense that being skilled in this area was not something valued in tenure reviews,
- Needing to change delivery methods to virtual environments as a result of COVID, and
- Needing access to presentation tools, such as clickers, that they could use to interact with their Extension audiences.

Agents would like to be able to take audiences beyond basic knowledge levels and go beyond where they feel they are basically just providing information. They would also like to increase their toolset so they can reach different types of learners in new audiences. One agent said, “Being one of the older mid-career folks, I think I really need to work on developing my use of technology with the programs I conduct.” Specialists also expressed interest in keeping abreast of changes in educational design.

Some agents received support in educational program design from prior work experiences as high school teachers or adult educators in GED and hospital programs. Many also learned from other agents, specialists, or administrators and by trial and error. One agent majored in educational design for her undergraduate degree. One of the specialists focused on educational design throughout her PhD program. One of the agents has a group of “teacher friends” that provide support in this area. VCE in-service training and self-study were also identified as sources of educational design support.

During the feedback session, participants said that the training in educational design that is currently provided is inadequate. They recommended that training in this area be more detailed, practical, and delivered over a period of time. They recommend a mix of in-person and online options. They also suggested that small cohorts might be developed to participate in the training and that there need to be regular follow-ups to keep up with changing trends. The group also recommended that there needs to be a statewide initiative to develop programs around top priority issues in the state each year. Finally, the group suggested that something needs to be done to support and encourage Extension specialists to set time aside to improve their educational design competencies as a priority in their program.

Leadership

One member of the research team remarked, “There wasn’t a specialist that felt competent in leadership.” One agent who felt least competent in leadership felt there were barriers that prevented their growth in this area. They said,

And I really feel like working in Extension and seeing the way things are done that there’s nowhere to go once you come in as an agent. You can get to a senior agent. And that’s it. I feel like any levels above that – there are gatekeepers and they don’t give you enough information to get to that next level.

Another agent expressed frustration in obtaining a leadership position. The agent said,

And unless you are part of the insider trading team, you don't even really have a voice to talk that way about what's coming. And if you bring it up, they slam you with a process that is never really, truly made clear, which kind of stalls out your ability to lead in any one direction. And that's very frustrating.

I have a leadership position with an organization within Extension, but what I have learned is when I apply skills and knowledge from other areas outside of Extension for leadership here, I realized that that's not the way they want you to function. They just want you to be either a puppet or a 'yes man' and not to ruffle the feathers of the people who pull the strings. And that's it, and it's almost like a ceremonial thing and not an actual thing, and that part is very frustrating.

Being in a position to lead, having the knowledge to lead, but those missing pieces that are part of Extension, I feel like they only give you enough to train somebody else but not enough to be really effective. And that's unfortunate because it's hard to lead when you don't have all of the knowledge and understanding and it's almost like they hoard that and give you just enough to get you to where they want you to be, but not as far as you could be and that handicaps you for being as effective as a leader as you can be. And so, it's really frustrating to have to go around to so many different people to learn to find out the bits and pieces that you really need to know in order to be as successful as you could be.

A specialist expressed that they would like to develop leadership skills to bring outside organizations together better when "there are a lot of personalities and emotions that run high" to share resources and better meet community needs.

Agents spoke of developing this competency through different types of training. The Faculty Leadership Development Program provided by VCE was identified, as well as county programs and work with specialists. Experience in leadership roles also contributed, as did work in professional associations.

Sources of support contributing to future growth in this competency are coworkers from multiple disciplines in shadowing experiences, virtual and in-person training, and pursuing advancing responsibility through administrative roles in the VCE organization. Professional associations were seen as a way to develop leadership and see what is being done outside Virginia. One agent highlighted the need to diversify representation in leadership positions within VCE to help other diverse individuals recognize their ability to move into higher roles. One agent spoke about opportunities for individuals in leadership roles to delegate in order to help others develop. The agent said,

People who are in a leadership position get that opportunity, but I feel like there's limited opportunities and I often see the same people in the same roles across lots of different things. ... I feel like I have the ability to be a leader, even though I'm only in year three, ... like every office only has one UC [Unit Coordinator]. Does the UC have to do all the roles of the UC, or can that be delegated so that there are opportunities for other people to step up? Because I would be willing to. I've just never been asked and I don't know what opportunities there are.

Another agent spoke about there being a need for clarification of roles. The agent observed,

a lot of confusion about the jobs and the roles of some of these leadership positions within the state and even within the district. There's so much crossover. It's like, which middle manager do I go to for this event?

Budget and Fiscal Management

Budget and fiscal management was one of the "other" competencies that was identified by both agents and specialists in the focus groups. The feedback group selected this as their fourth priority, stating that "some agents have no background in this." One agent expressed interest in understanding the budget and where it stood since their unit was currently without a unit coordinator who would normally manage that. They also expressed interest in understanding how to budget for mini-grants that are available to localities. The specialist expressed interest in knowing how also to manage grant processes as well as how to navigate "internal administrative processes." They expressed particular need to understand this because the specialist is housed off-campus and does not have administrative support at their location.

Discussion

Competencies emerging from the VCE early career Extension professional focus groups repeated communication, educational design, leadership, professionalism, and subject matter knowledge as defined by Berven et al. (2020). These results are not surprising since these competencies were included in the question prompt. However, competencies associated with budget and fiscal management, collaboration fundraising, grant writing, performance evaluation reporting, solving issues across disciplines, time management, and work-life balance emerged in the focus group discussions. Similarly, Benge et al. (2011) identified "cultural sensitivity, developing extramural funding, applied research skills, and leadership development" as emerging competencies (p. 6). Many of these emergent competencies can be directly connected to the competencies identified by Donaldson and Vaughn (2022) and Harder et al. (2011), as demonstrated in Table 3. However, collaboration, communication with elected officials, inclusion and equity, and marketing appear to be unique competencies identified by this study which we classified as core interpersonal skills (Harder et al., 2011). The top three competencies, communication, educational design, and leadership, ranked during the World Café session were identified by

Berven et al. (2020). However, the fourth-ranked competency, budget and fiscal management, is emergent. Budget and fiscal management will likely fit within resource management defined by Donaldson and Vaughn (2022). This area may relate to Harder et al.'s (2011) and Benge et al.'s (2011) development of extramural funding, which appears to be more about understanding specific university accounting and reporting practices for existing funding.

Table 3. Relationship Between Competencies Emerging from this Study and Earlier Studies of Early Career Studies (Berven et al., 2020; Harder et al., 2011) and The National Scoping Document (Donaldson & Vaughn, 2022)

Category (Harder et al., 2011)	Emergent Competency Label from VCE Focus Groups	Berven et al. (2020) label	Harder et al. (2011) label	Donaldson and Vaughn (2022) label
Develop Extramural Funding	Budget and fiscal management, fundraising, and grant writing	Not defined	Develop extramural funding	Resource management
Core Interpersonal Skills	Collaboration	Not defined	Not defined	Not defined
	Communication with elected officials	Not defined	Not defined	Not defined
	Inclusion and equity	Not defined	Not defined	Not defined
	Solving issues across disciplines	Not defined	Problem solving	Thinking and problem solving
	Time management and work-life balance	Not defined	Self-management	Not defined
Extension's Program Development Process	Marketing	Not defined	Not defined	Not defined
	Performance evaluation reporting	Not defined	Program evaluation, program implementation, and planning	Not defined

These findings suggest that competencies may vary by individual Extension organizations, a position confirmed by Cochran (2009), who listed “understand the organization, understand and respect diversity, achieve excellence in teaching, conduct program evaluation, maintain accurate records and reports, maintain effective internal and external partnerships, communicate program value, ensure productive interpersonal relationships, demonstrate technology literacy, and demonstrate personal accountability” as core competencies (p. 64). Even though some differences may be attributed to organizational terminology, there is significant overlap from one

CE to another. Another possibility is that competency needs emerge as the organization changes over time.

Despite the VCE core competencies and emerging competencies highlighted, based on previous research, Arnold and Place (2010) outline possible negative outcomes that cause job dissatisfaction in the Colleague Stage. These influences include stressful environments caused by overloads, salary disparity, inconsistent performance evaluation, limited space for promotion, and frustrating reporting systems.

Recommendations

Communication

The findings emphasize the need for professional development training in the area of communication. The communication areas identified by the agents where they need support were grant writing, marketing, and virtual programming. Others suggested any kind of hands-on training where people could implement what they are learning and learn from each other. One specialist explained how she has her graduate students and technicians evaluate her presentation skills using her “um factor.” Support through communications experts that can be on hand to answer questions and through the winter in-service conference was seen as beneficial.

Educational programming to improve communication competency should focus on different strategies used to interact with specific audiences. A need to be able to communicate more effectively with elected officials was emphasized as being very critical. However, communication with other specific audiences, as identified in the findings document, is important as well. These included people of all ages, with different levels of education and needs around specific topics, and people with different communication preferences. Using technology to expand communication was also emphasized as an area of need. A participant stressed the importance of web-based programming as being “critical” for Extension success. Concern was expressed that the current VCE website was not useful and was lacking important information. Agents have to share documents directly with clients and, in some cases, have to reference other states to find the information they need.

Many of the recommendations related to the communications competency actually focused on organizational marketing to external audiences. A feedback participant said, “VCE has incredible programs which are broad and no one outside knows what these are about. We need to communicate more effectively.”

The feedback group discussed a need for increased human capacity to address communication needs for VCE. A comment indicates the need for a “standout communication department.” One agent suggested possibly having a marketing or grant-writing expert in each Extension district.

Participants in the feedback session recommended having communication and marketing specialists situated at the college or district level to provide support and assist with marketing.

Educational Design

Agents felt there were many opportunities they might use to improve their educational design competencies. Several expressed interest in basic training. One agent said, “I think anything that they can do that would kind of start from the beginning, and then we all grow from there would be great.” Others suggested more in-service offerings. One agent suggested “a longer more focused educational series on strengthening educational design, so perhaps like a four-week course or even longer than that maybe where we’re almost thinking, like the College level course in developing educational design.” Agents expressed a need for training that was more practical in nature and began at a more basic level to help with evaluation. Another agent suggested more programming similar to the well water clinics, which they described as being well-established and defined. Professional development associations, networking, and shadowing other agents were also identified as opportunities for growth. Another agent suggested special programming for new agents might be useful, especially related to Virginia Standards of Learning identified by the Virginia Department of Education. Refresher courses on educational design were also recommended. Agents also expressed interest in written materials they might read on their own during their work time.

A specialist suggested the materials related to educational design, or setting up Canvas sites, be placed online so they can be accessed on the road and in the field. They also expressed interest in in-service training and short courses. Another specialist shared,

I think, on the front-end orientations of new folks to the system could actually make it pretty clear about what is the role of educational design, what is the role of pedagogy in Cooperative Extension? I mean you are Extension educators, but there’s never like what that actually means. And particularly for folks that may have an interface - like before I interfaced with Extension, you know I did not think of Extension as an education source. It serves as a resource, so technical assistance. I never thought of Extension as education. Just because my own background and thinking about the education piece as the more formalized and so the whole non-formal-informal thing is something that I think VCE could do to help increase awareness. And then specifically offer noncredit workshops and things like that. Extension education is designed to help people who don’t have that exposure formally into, maybe how to incorporate reflections and practice-based learning too as a way to help people learn how to speed up there, because you know we’ve all been doing this in some way in our careers. But I think being able to have a formal process for capturing and understanding what we know how to do. It is taking some of those innate educational design experiences that we’ve had, and it’s a real learning.

The research team emphasized the different levels at which educational programming must be delivered to meet the wide range of audiences that Cooperative Extension serves. They commented that focus group participants were surprised at the amount of time that had to be invested in providing a successful educational program, going from identifying community needs through program evaluation. One research team member commented that after being around for a while, they had forgotten what it was like to learn to plan programs. Several commented on the changes in technology that they use in educational programming. Yet another member of the team spoke about how their teaching had changed from a more teacher- to a more student-centered approach over the course of their career.

Based on the discussion with the agents and specialists, the research team agreed that basic educational design training needs to be provided earlier in an agent's tenure. Additional training can then build on the basic training. There was a lot of discussion about how to provide a practical application component to the training, whether it be through a cohort of students, colleagues, mentors, or partnering agents or specialists. Members of the team found interactions across program areas and Extension regions were beneficial for them in learning to try new approaches and reach new audiences. There was also interest in providing modular content that trainees might access for follow-up after the course. The research team also suggested that all training should be widely publicized so that faculty might participate in it to receive a refresher.

The feedback discussion focused on the development of criteria to improve the adequacy of the training that is provided. They suggested a more detailed, practical approach that would be carried out over time with a cohort. They suggested this training be carried out using a virtual format but with at least an in-person kick-off. The program should have clear schedules set in advance so it will not lose momentum over time. Participants help hold each other accountable and learn from each other as they share their work and lessons learned. Other suggestions from the feedback group included having a statewide initiative to design standard programs based on real community issues. The feedback group also expressed a need to encourage extension agents to prioritize setting time aside to focus on educational design.

Leadership

The career stages approach to professional growth and the development of competencies explains a normal progression as Extension professionals go from pre-entry and early career to advisory roles (Benge et al., 2011; Rennekamp & Nall, 1994). This has implications for leadership development as well. VCE is currently focusing a lot of time on the development of the onboarding program for early career professionals. One recommendation from this proposal is that VCE hire someone to oversee onboarding and mentoring. Once the new onboarding program is implanted, VCE should spend time defining expectations from and support provided for individuals as they move through the different stages. There are numerous in-depth leadership development programs provided beyond the one identified in the focus groups. In-

depth leadership development training may be something that is provided for faculty as they move into the colleague or mentor stage. There may be places where Extension professionals can practice leadership as the mentor to others entering VCE or in serving in an advisory capacity for a regional or state-level program in addition to being the sole leader based on their job description or other position. Developing a wide array of leadership roles and identifying criteria and expectations for people taking those roles may make people more aware of existing roles and expose other areas where this leadership is needed. These roles may be in professional organizations, the communities, or within VCE. This will strengthen the organization by increasing employee buy-in and help develop leadership skills necessary in succession planning for VCE.

Budget and Fiscal Management

Budget and fiscal management is an area that has been identified as a need for VCE new faculty onboarding. Basics could be provided for agents and specialists in specific breakout sessions so that content could be provided according to their role. The grant managers in the college should work with educational specialists to develop appropriate modules that faculty could use to increase their knowledge as they take on new roles, begin to work with different types of grants, or have other experiences where this might be necessary. A repository of materials will allow faculty to review materials or have access to them as needed.

Conclusions

While there are many competencies that are important to VCE employees, communication, educational design, leadership development, and budget and fiscal management were prioritized most highly in this study of employees in the colleague career state at four to seven years of service. This stage roughly corresponds to the time at which Extension professionals should be in the colleague stage of professional development. Recommendations are provided to help support the development of these competencies for both agents and specialists. Routine evaluation should be used to identify progress in meeting the needs of VCE employees related to these competencies. This study suggests that competency needs should be revisited on a regular basis to identify and address new areas as faculty increase competency in these areas and identify emerging opportunities for professional growth. Additionally, despite the calls to retain Extension professionals, there must be efforts from the VCE to hire competent professionals as a means to transform the CE.

Study limitations include (a) we based our analysis on information provided by agents and specialists only without diversifying for other perspectives, (b) study findings are limited to VCE hence no claims for generalizability, and (c) it might have been helpful to gain deeper insights on extension professionals' job dissatisfactions which might influence competency and performance. Further study should look at ongoing changes in competency needs over time, by career stage, and within individual organizations. In addition, differences in competency needs

by agents and specialists should be considered when developing appropriate content for professional development programs.

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