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Adult Teaching Practices of Exemplary Extension Agents

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Abstract. Teaching is an important part of an Extension agent's duties; however, little is empirically understood about effective teaching practices in an Extension context. The purpose of this study was to explore the adult teaching practices of exemplary extension agents. Through a nomination process, seven agents in Florida were interviewed. The analysis revealed four themes: (a) approach to teaching adults, (b) awareness of learners, (c) planning, and (d) learning to teach. Each theme had several sub-themes. Recommendations for practice and additional research are provided.

INTRODUCTION

Extension is the art and science of using education to build individual, family, and community capacity through such methods as individual consultations, group classes, written communication, and, more contemporarily, social media. Regardless of program area, a common job responsibility for Extension agents is to teach adults (Ota et al., 2006). The prevalence of adult education as a core function within Extension makes it desirable to learn how the most talented agents, the exemplary Extension agents, approach teaching adults and how they develop their teaching competencies. Examining these questions may generate new knowledge that improves what is known about best teaching practices in Extension.

Andragogy is a theory of adult learning consisting of six core adult learning principles: (a) the learner's need to know, (b) the self-concept of the learner, (c) prior experience of the learner, (d) readiness to learn, (e) orientation to learning, and (f) motivation to learn (Knowles et al., 2015). Knowles et al. (2015) theorized that these principles interact with individual and situational differences and differing goals and purposes for learning. Multiple intersections are possible, creating a complex learning environment for the adult educator to navigate. However, the adult educator can optimize outcomes by following an andragogical process model (Knowles et al., 2015) that actively considers the diverse experiences and needs of the learners and provides them with some ownership in their education (see Figure 1). We do acknowledge that examining this topic through the lens of Knowles et al.'s (2015) work creates some limitations in how we can interpret our findings.

Despite a growing body of literature regarding the competencies needed by Extension professionals and the frequent inclusion of teaching skills in such studies, relatively few articles have examined Extension professionals and their roles as adult educators. In 2010, Strong et al. found that county agricultural agents working with participants in the Master Beef Producer program in a southern state believed that the most effective strategy was hands-on instruction. Several years later, Conner et al. (2018) found that Nebraska Extension professionals primarily focused on youth development needed training focused on the principles of andragogy, based on a Borich assessment examining 22 andragogy-related topics.

A quantitative study by Alexander et al. (2020) of agents in Arkansas explored their philosophies of adult education and their perceptions of Extension's role. Based on responses to Zinn's (1983) Philosophy of Adult Education Inventory, the researchers found that the respondents tended to agree most with statements associated with progressivism, a philosophy that emphasizes learning for practical purposes (Dewey, 1997). Conversely, agents expressed the most disagreement with statements associated with radicalism, a philosophy associated with social change that provides increased power to the learner (Freire, 1970). Alexander et al. (2020, p. 4) suggested that "agents see themselves more as purveyors of information than as equal partners in the teaching/learning process." Agents' responses to open-ended items about the role of Extension for individuals, the role of Extension in

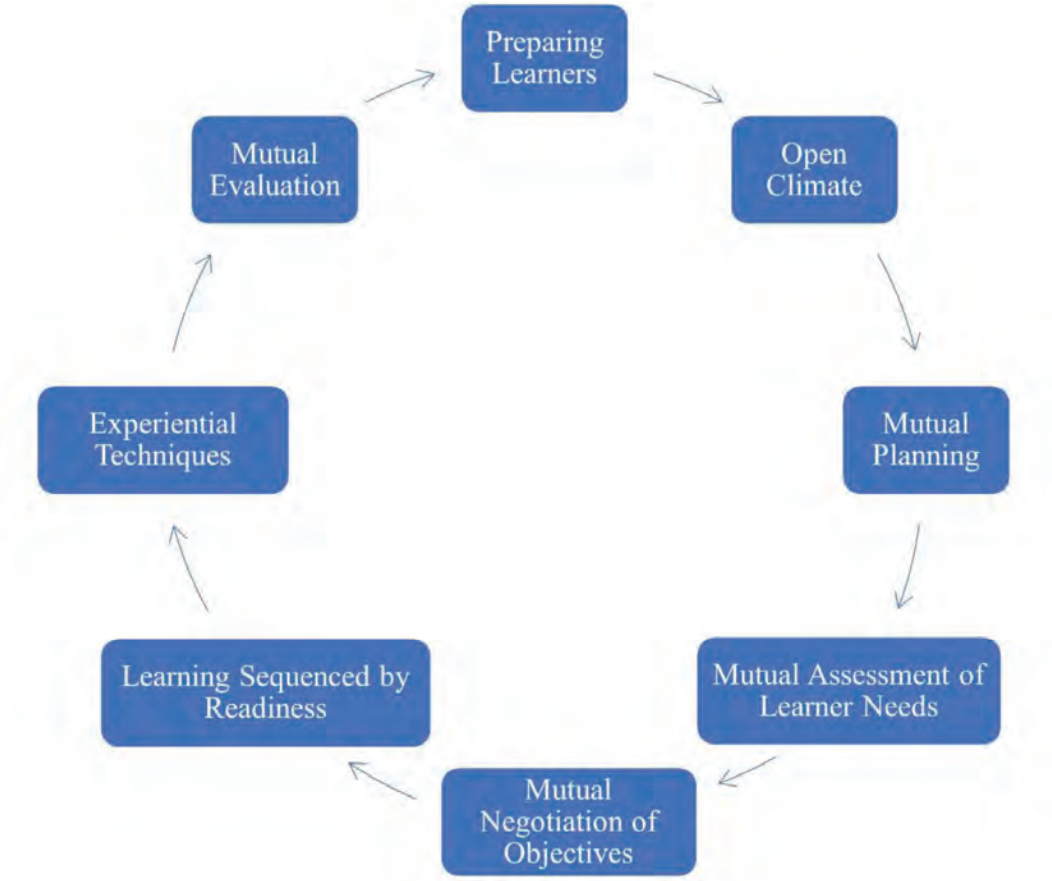

Figure 1. Process elements of andragogy.

the community, and how their roles advance the Extension mission were consistent with the quantitative results.

PURPOSE

Existing research has not fully explored effective teaching practices for adults in an Extension context. Understanding this phenomenon has implications for Extension education degree programs and in-service programming to support current Extension professionals. The purpose of this study was to explore the adult teaching practices of exemplary Extension agents. Three research questions guided this inquiry:

1. How do exemplary Extension agents approach teaching adults?
2. How do exemplary Extension agents approach planning for adult learning programs?
3. How do exemplary Extension agents develop their skills in teaching adults?

METHODS

We used a case study design (Creswell & Poth, 2018) to explore the adult education practices of exemplary agents in the University of Florida's Institute of Food and Agricultural Sciences (UF/IFAS) Extension System. Participants were recruited through a nomination process from their district Extension directors or state program leaders. Sixty participants were nominated and invited to take the Adult Learning Style Inventory (Knowles et al., 2015). Based on those responses, 10 participants were invited for interviews, of whom seven agreed to participate.

We developed the interview guide based on the research questions. One researcher took the lead, and then the other two researchers provided edits for clarity. One of those two researchers then pilot-tested the interview guide with an Extension agent not participating in this study. The ordering of questions was adjusted, and the wording of a few questions was changed to better suit an Extension context. The final interview guide consisted of nine questions with suggested prompts.

Interviews were scheduled at the convenience of participants and conducted via Zoom in the late spring of 2022. We conducted interviews based on which researcher was available for each participant, with each of us conducting at least one interview. Interviews were recorded on Zoom. Researcher notes were also captured during each interview. Interviews lasted between 31 and 50 minutes. Interviews were transcribed verbatim by using an app called Otter.ai. Transcripts were double-spaced, and line numbers were added to aid in data analysis. Transcripts were sent to each participant for member checking. A few minor wording edits were received from two participants.

All data were analyzed by the lead researcher for consistency. Initial data analysis was conducted line by line, using an open coding process (Saldaña, 2021). Initial codes were then organized into themes by using axial coding (Saldaña, 2021). Direct quotes were used to provide a voice to participants.

We used the criteria proposed by Lincoln and Guba (1985) to establish the rigor of this research. Credibility techniques included the use of multiple sources, several investigators, member checking, peer debriefing, and engaging in reflexive practice during the study design, implementation, and data analysis. Peer debriefing (Merriam & Tisdell, 2015) was conducted with the two researchers not involved in data analysis, who asked questions to improve the clarity of the findings. Transferability was established by providing a thick description of the participants, which follows in the next section. An audit trail was kept, consistent with Lincoln and Guba's (1985) identification of that as a technique contributing to the establishment of dependability and confirmability.

DESCRIPTION OF PARTICIPANTS

Participants were promised that their identities would be protected when they agreed to be interviewed. Therefore, we are providing an overview of the group rather than specific details about everyone, which could endanger their anonymity. Six females and one male were in the group. Interviewees worked as county-level or regional specialized agents, the latter of which provide programming across a larger geographic area. Three of our participants provided education related to community resource development, two participants focused on horticulture, and two participants worked to provide natural resources programming. Our participants ranged across career stages, although the group was skewed toward more experienced agents. Agents were geographically dispersed across Florida. Participants are referenced by using a participant number (P1, P2, etc.).

FINDINGS

The analysis revealed four themes: (a) approach to teaching adults, (b) awareness of learners, (c) planning, and (d) learning to teach. Each theme included several subthemes.

APPROACH TO TEACHING ADULTS

All seven participants shared their approach to teaching adults. Sub-themes included creating personal connections, facilitating an interactive learning environment, varying the learning activities, and being able to adapt on the fly. Participants also shared how their self-awareness contributed to their approach to teaching adults.

Creating Personal Connections

Six of the seven participants shared how they strove to build relationships with the adults they teach (P1, P2, P3, P4, P5, P6). P5 (lines 400–401) succinctly summed it up: "I think having a relationship with your audience is important." When describing their views on personal connections, participants used such terms as "building a bond" (P1), "connecting with the audience" (P1, P2), "establishing rapport" (P1, P2), and "taking time to build relationships" (P5). P6 shared the importance of one-on-one connections, and P2 expressed the value of building continued relationships. In terms of how they made personal connections, P1 talked about building trust with the learners, respecting the learners, and valuing the learners' time. Participants also shared that they frequently told stories (P1, P5) and shared their own past experiences (P3). P4 talked about creating a shared learning experience between her and her learners.

Facilitating an Interactive Learning Environment

All seven participants expressed how they strove to create an interactive learning environment. P6 (lines 36–38) said, "I really thrive on getting some back-and-forth conversation from folks and talking to them like they are adults." Participants used such terms as "being conversational" (P1, P2, P3, P4, P5, P6, P7), "engaging the audience" (P1, P4, P5), and "creating a dialogue" (P2, P3) to describe their approach. Participants also described how an interactive learning environment benefitted the learners. Agents talked about the value of interactions in building relationships with other learners (P5), networking (P5), and sharing their opinions and experiences (P3, P4). Specific approaches included asking questions (P1, P2, P3, P4), discussions (P1, P2, P3, P4, P6, P7), small-group activities (P1, P4, P5), peer-to-peer activities (P2, P4), check-ins (P1), games (P3), polls (P7), and debriefing sessions (P1). Participants acknowledged that an interactive approach required educators to be comfortable with it (P6), learn to listen (P1, P4), and intentionally plan for interactions (P2). Participants shared that educators needed to be prepared to manage learner behaviors, such as taking

the discussion off course (P1), redirecting conversations (P2), managing overtalkative people (P2), and reading body language to know when to wrap up discussions (P3). P7 acknowledged that she placed much less emphasis on interaction in her one-time programs.

Varying the Learning Activities

Six of the seven participants expressed the importance of varying the types of learning activities they used in each educational session (P2, P3, P4, P5, P6, P7). According to P5 (lines 69–70), "Effective teachers, especially of adult audiences, find a variety of ways to reinforce the topics that are taught." P2 highlighted that it was important to reach all individuals, including all learning styles, so it was important to have multiple ways of sharing information. In P7's (line 45) terms, it was important to "switch things up." Further, P7 emphasized the importance of finding a balance between lecture and interactive teaching. Similarly, P2 said that she used shorter lectures, and P3 said that his lectures were interactive. Aside from lectures, questions, and discussions, participants shared that they used indoor and outdoor learning spaces (P6), ice breakers (P2), flip charts (P2), case studies/scenarios/role-playing (P2), and hands-on activities (P3, P4, P6, P7).

Adapt on the Fly

In addition to their planned variability noted in the prior paragraphs, all seven participants expressed that they adapted their teaching on the fly, based on their reading of the audience (P1, P2, P3, P4, P5, P6, P7). When talking about adapting on the fly, P3 (lines 63–64) said that an educator must be "reading that facial and body language as to when enough has been said and it's time to move on." P3 also acknowledged the challenges of reading an audience online. When describing adapting on the fly, participants used such terms as "changing direction" (P1), "shifting gears" (P3), and "pivoting" (P7). As to knowing when to change, participants described losing their audience (P1), realizing that things were not working (P3), reading body language (P1, P3), having technological issues (P5), recognizing that things were not going how they thought (P1), seeing that learners were not getting the material (P1), adapting to the number of learners (P2), and adjusting based on the level of the learners (P2, P4, P7). Participants expressed the need to be flexible (P1, P2, P6) and not be concrete (P7). P7 (lines 183–184) summarized one example when she said, "So I pretty much had to wing it."

Self-Awareness

All seven participants discussed how their self-awareness influenced the way they approached their teaching of adults (P1, P2, P3, P4, P5, P6, P7). Several participants expressed their love for teaching adults. P6 (line 48) said that for her, "Having a love and passion for the topic is a must." Similarly, P7 (line 304) said, "People always tell me they can tell how much I love what I do." P3 and P4 liked to use humor in their teaching. According to P3 (lines 99–100), "I like to throw a little humor in there." P1 acknowledged that her mood influenced how she approached her teaching on any given day. P1 also shared that she believed that some people have a natural ability that allows them to be skilled educators. P1 and P4 shared that they naturally liked to move around the room, which they believed contributed to their effectiveness. In P1's (line 274) words, "I can't stand still." P5 said that she felt a need to be very responsive to her learners during a training and afterward. P2 (line 126) liked to experiment, saying, "I like to try new stuff all the time." P2 and P7 recognized when they lacked sufficient expertise and when it was time to defer to other experts. P3 talked about how he was comfortable with certain teaching approaches and not with others, so he would defer to a colleague to lead certain learning activities.

AWARENESS OF LEARNERS

All seven participants shared an awareness of the adult learners they taught and discussed how this awareness influenced the ways they developed and delivered their educational programs. Sub-themes included prior knowledge and experience, learner needs/problems, and tailoring approach to match the audience.

Prior Knowledge and Experience

All seven participants (P1, P2, P3, P4, P5, P6, P7) recognized the prior knowledge and experiences their learners brought to a given educational program. P5 (lines 60–61) summed it up when she said, "I would say that really understanding, both in terms of depth and existing knowledge, what your target audience is bringing to a workshop or teaching training is probably key." Participants used such phrases as "knowing your audience" (P3, P7), "meeting them where they are" (P5), and "understanding what learners bring to training" (P5). P6 shared that she liked to ask a lot of questions to learn about her audience. Participants recognized that adult learners often had considerable experience. Participants acknowledged this experience when they said that learners were more experienced than the educator (P1), educators should respect learners' experience (P7), and educators should recognize that learners were also experts (P2, P7).

In terms of how this belief affected their teaching, participants recognized that learners had various positions/opinions based on their experiences (P2) and should be allowed to share those experiences (P4). P3 said that it was also important to connect new information to the prior experiences of learners. Finally, participants said that educators should adjust the pace of what they taught to match learners' knowledge level (P3), speak to the audience based on their level of understanding (P3), and use appropriate

terminology, even if they did not use the most technical or scientific language (P3).

Learner Needs/Problems

Six of our seven participants discussed how they focused their educational programs on addressing learners' needs or problems (P2, P3, P4, P5, P6, and P7). For example, P5 (lines 95–96) said, "They are there for a reason, and it's generally a pretty specific reason." Participants expressed that they sought to address learners' needs or problems by meeting these needs (P2, P5, P6), focusing on what they needed to learn (P3, P4), focusing on what learners wanted to learn (P3, P6, P7), or focusing on what learners were interested in (P3, P4). Participants said that they tried to address learners' current situations (P2) by addressing what they had asked for (P3). P1 also shared that educators need to understand that learners may have different motivations when attending a required training.

Tailoring Approach to Match the Audience

All seven participants said that they sought to tailor their educational programs to match the audience (P1, P2, P3, P4, P5, P6, P7). P2 (lines 316–317) summed it up when she said, "Knowing who's in the room then allows you to tailor some of that education." Participants used such phrases as "tailor the process" (P7), "meet them where they are" (P2, P5), "cater to the audience" (P7), "know who is in the room" (P2), and "gauge audience" (P6). They shared that there was not one model that fit all (P7). Educators should understand learner goals and adjust accordingly (P4). Extension agents should also adjust for new audiences (P2, P3) and consider diversity, equity, and inclusion when delivering educational programs (P2, P3, P6). P1 discussed how she needed to consider whether her learners were professionals or homeowners. The amount of scientific knowledge of learners (P6, P7) affected how deep educators could go with their content (P5). Who was in the audience influenced the messaging (P2) and framing (P4) of what was delivered. All these considerations allowed educators to modify content (P7), teaching materials (P2), and teaching approach (P1, P7). Participants did acknowledge that one-off trainings made it more difficult to understand the audience and tailor the program accordingly (P5, P7). Participants also recognized that it was important to understand the barriers faced by adult learners (P2), including time constraints (P1). P1 said that she recognized that the time working professionals spent in a training was time they were not making money, so there was an opportunity cost.

PLANNING

We asked participants to share how they planned for their adult learning programs. Sub-themes included content, process, community awareness, and appropriate level for learners.

Content

Participants shared that the content they taught was sometimes educator-driven and sometimes learner-driven. All seven participants described instances when the content for some of the educational programs they delivered were driven by the educator, with little input from learners (P1, P2, P3, P4, P5, P6, P7). Participants used such terms as "pre-canned presentations" (P6, line 26) and "set curriculum" (P1, P6, P7). Participants talked about set objectives (P1, P4, P5), sometimes derived from a statewide logic model for a program (P4). When describing these kinds of programs, participants either framed it based on the content to be covered (P2) or on the educator's desired outcome, using such phrases as "I want them to take away…" (P2, line 185) and "I want them to know why they are there" (P2, lines 79–80).

In contrast, five of our seven participants described some of their educational programs where the content was driven by learners (P1, P2, P3, P6, P7). Participants used such phrases as "asking learners what they want to discuss that day" (P1), "learners come up with questions" (P1), "tailor programs to the audience" (P2), and "learners send suggestions for programs" (P2). P3 (lines 45–46) said that he "gears the presentation towards that, answering their questions." Participants said that they created content based on audience (P7) and focused on what learners were asking for (P3). This approach was sometimes driven by a needs assessment (P7). P6 shared how she modified canned presentations to meet the needs of certain learners. Regardless of how the content was decided, P1, P3, and P6 all highlighted the importance of their own content mastery when planning adult education programs.

Process

Participants described the planning process for their programs, typically beginning with an outline (P1, P3), an agenda (P2, P4), or a story (P7). P7 shared that considering the flow of a program was important, and P2 planned her programs by chunking time. P1 shared how she reflected on a program after she was done and made notes about revisions for the next time she taught that program. Participants liked to be detail-oriented (P2), and those details were informed by learning objectives (P4) or their logic model (P4). P1 also liked to create her evaluations during the planning process. Three participants emphasized the importance of being overprepared (P1, P2, P7). P1 and P7 emphasized the time needed to plan, saying "give yourself enough time" (P1, lines 250–351) and "stupid amount of time" (P7, line 397). P3 said that once he had his plan prepared, he liked to mentally rehearse it before he delivered the program.

Participants also discussed how they considered various instructional media they might use in their programs. They talked about PowerPoints (P1, P6), videos (P3), Zoom (P4,

P5, P6, P7), Canvas (P4), and handouts (P6). P6 shared how she liked to bring back-up technology in case there was a problem with the provided equipment.

P3 and P4 shared how they sought outside input in their planning process, including input from their advisory committee (P3, P7) and local agents if they were presenting in a different community (P3, P4). Four participants shared how they engaged partners when planning (P3, P4, P5, P7). They emphasized bringing in outside experts for things they were less knowledgeable about (P3, P5), assembling a team (P4), collaborating with other agents (P5), and inviting past participants (P5). P7 emphasized that partners needed to be involved in the planning process.

Community Awareness

Six of our seven participants shared how they strove to plan their educational programs to reflect the local community (P1, P2, P3, P4, P5, P6). Participants shared how they planned their programs to "reflect the local needs" (P2, line 66), accounting for regional variations (P1), community expectations (P1), and local knowledge (P2). To make this personalization happen, they conducted prework (P3), which included formal needs assessments (P4) and informal needs assessments, such as having conversations with stakeholders (P2, P5, P6).

Appropriate Level for Learners

When asked about their planning process, all seven participants shared how they considered the level of learners when planning their programs (P1, P2, P3, P4, P5, P6, P7). We noted earlier that our participants tailored their approach to the learners, and this work also carried over to their planning efforts. Participants discussed making their programs accessible to clientele (P1), changing content to match audience level (P4), and making sure to not go over their heads (P5). They shared that it was necessary to consider their learners' knowledge base (P2) and be prepared to adjust (P1). P1 and P3 also discussed how they considered the terminology they used based on the level of the audience. P2, P4, and P7 acknowledged the difficulty of gauging audience level when going into a training without knowing who would show up.

LEARNING TO TEACH

Participants were asked about how they learned to teach. Sub-themes included models, coursework, continuous learning, and prior roles.

Models

All seven participants talked about how they used other teachers as models for developing their adult teaching skills (P1, P2, P3, P4, P5, P6, P7). P1 (line 314) summed it up when she said, "I always want to be like [name omitted]." Participants described their models as their teachers (P4), their college professors (P2, P3, P6), their fellow agents (P2, P7), and the specialists they worked with (P1). Participants also reflected on what they liked as a learner (P3, P5). P6 shared how giving and watching student presentations in college helped her. When asked what advice they would give new agents, participants said to go watch others teach (P1, P2, P4, P6, P7) and to be sure to watch good and bad examples (P4).

Coursework

Five of our seven participants shared how the coursework they took in college helped prepare them to teach adults (P1, P2, P3, P4, P6). P6 earned a bachelor of science and P1 earned a master of science degree in a department of agricultural education and communication, where they took many courses that focused on educational topics. P3, P4, and P6 took education courses as a part of their non-education master of science degrees. P2, who started her career as a high school teacher, described taking teacher training courses in college and taking a formal teacher training program while she was teaching.

Continuous Learning

Five of the seven participants described how they were continuously seeking opportunities to continue to improve their teaching (P2, P3, P4, P5, P7). P2 (line 473) acknowledged, "There is always space to improve your skills." P4 said that good teachers enjoy learning (P4). P4 described herself as a self-directed learner who continually kept learning. P3 (line 249) shared that he had "done a lot of reading." P7 also shared that she read to learn about teaching. Several participants said that they sought professional development sessions on teaching (P3, P5, P7). P3 elaborated that most of his recent training had focused on technologies used in teaching.

Prior Roles

Three of our seven participants described how their various roles before working for Extension helped them develop their teaching ability (P1, P5, P6). Past job and volunteer experiences as high school teachers, in nonprofits, and in summer camp settings were described (P2, P3, P5, P6). P1 credited her experiences as a youth in Future Farmers of America activities.

CONCLUSIONS AND DISCUSSION

The purpose of this study was to explore the adult teaching practices of exemplary Extension agents. Participants' approaches to teaching were based on (a) creating personal connections, (b) facilitating an interactive learning environment, (c) varying the learning activities, (d) being able to adapt on the fly, and (e) exhibiting self-awareness.

Emphasizing personal connections showed how these educators saw learners as partners in the learning process, which aligns with Knowles et al.'s (2015) andragogy theory. Facilitating interactive learning and varying the learning activities are consistent with prior research (Strong et al., 2010). Adapting on the fly is a novel approach not reported elsewhere in the literature in an Extension context. Self-awareness of the educator is also not mentioned in the Extension literature but is consistent with research in other types of education (Schön, 1987).

Participants also showed great awareness of (a) learners' prior knowledge and experience, (b) learners' needs and problems, and (c) the need to tailor their teaching approach to match the audience. Focusing on learners' prior knowledge and experiences is consistent with Knowles et al.'s (2015) andragogy theory and experiential learning theory (Roberts, 2006). Awareness of learners' problems and needs shows that this group of educators was aware of the motivation of why adults often seek to learn something new, which aligns with andragogy (Knowles et al., 2015).

Next, we concluded that when planning, this group of agents considered (a) the content, (b) the process, (c) an awareness of the community, and (d) the level appropriate for a particular set of learners. The content was sometimes driven by the agent and sometimes with input from learners. The former is consistent with Alexander et al. (2020), while the latter is advocated for by Knowles et al. (2015). Agents described a deliberate process, typically beginning with the end goal in mind, which is an approach used across many kinds of education (Wiggins & McTighe, 2001). Community awareness and community-based programming have long been key features of Extension programming (Seevers et al., 1997). Considering the level of learners when planning is consistent with andragogy (Knowles et al., 2015) and experiential learning (Dewey, 1997; Roberts, 2006).

Finally, agents learned to teach through a variety of methods, including (a) models, (b) coursework, (c) continuous learning, and (d) their prior roles. The role of models, especially peer models, is an important piece of social cognitive theory (Bandura, 1977). The importance of coursework on education has been previously reported in the literature (Harder et al., 2010). Aside from being educators of adults, these participants also showed that they were adult learners themselves by continuously seeking ways to learn more about teaching (Knowles et al., 2015). Participants also shared how their prior roles influenced their teaching, which is consistent with experiential learning (Roberts, 2006).

RECOMMENDATIONS

For practice, we recommend that the themes found in this research be included in onboarding efforts for new Extension agents. UF/IFAS Extension offers a Faculty Development Academy for new agents in which teaching and learning are one component. These results could be used to revise what is taught in that program. We also recommend that this research be shared with district and county Extension directors who mentor agents. Learning to be a better adult educator can become a central component to the continued professional growth of agents. We also recommend that the coursework in Extension education at the University of Florida be modified to reflect these findings. Other Extension systems can examine our findings and see whether they may have relevance for their onboarding and professional development efforts.

For additional research, we recommend that this study be replicated in other states to see whether similar themes emerge. We also recommend that exemplary agents be observed while teaching to see how the things found in this research are implemented in actual teaching practice. Researchers should also take a closer look at effective teaching practices in online programs offered by Extension. Beyond Extension, it would be interesting to see how other exemplary adult educators approach their teaching.

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