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A Model for Integrated Approach to Professional Development of Extension Educators: Implications of Adult Education Principles and Practices

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Improving the quality of educational programs and the demand for accountability have put the professional development of Extension educators high on Cooperative Extension's agenda. Effective professional development facilitates improved program design and implementation, which, in turn, translates into higher clientele satisfaction. The purpose of this article is to discuss the principles and practices of adult education and their application in designing professional development offerings with specific examples for Extension educators. Using the integrated approach of learning, the authors present a framework and share their experiences for the application of practice in designing professional development programs for Extension educators.

Keywords: professional development, Extension educators, adult education, integrated approach, application to practice

Introduction

The Cooperative Extension Service (CES) is the largest nonformal education provider in the United States, empowering people through research-based knowledge. It serves adults and youth of various ages and backgrounds. Extension educators are the front-line instructors responsible for educating clients, the majority of whom are adults. They design and implement educational programs to assist producers, rural families, urban, and sub-urban audiences (Rasmussen, 1989).

Since the beginning of the CES, improving the quality of educational programs and the demand for accountability have put issues related to the professional development of Extension educators high on the agenda. The rationale is that effective professional development could facilitate improved program design and implementation, which in turn translate into higher-level clientele satisfaction and adoption of learned practices. As a result, a considerable number of resources are spent on in-service education and other forms of professional development.

According to Lawler and King (2003), professional development programs with educators of adults should be grounded in the principles and practices of adult learning and adult education. In their model, an “integrated approach to professional development for the teachers of adults,” they listed adult education as the primary component of professional development. Therefore, Lawler and King’s premise reflects the importance of incorporating adult education principles in the professional development of Extension educators. Adult education knowledge goes beyond knowledge of the subject matter, and it facilitates an effective teaching-learning process. Thus, it relates to Extension educators’ behavior in the classroom as well as assisting clientele in the field. Including “hands-on opportunities related to best practices to engage adults” during their professional development trainings would prepare Extension educators to model the best practices in their own programming, curricula development, and delivery of educational activities.

The history of adult education in the United States dates back four centuries, when Europeans landed on the North American coast at Jamestown, Virginia and Plymouth, Massachusetts in 1607 and 1620, respectively (Cartwright, 1945). Today, it occupies an important place in the American education system. De Crow (1968) stated that “no day passes in the United States without the invention of new kinds of adult education programs” (p. 186). In 1920, adult education was founded as a “professional field of practice.” Since then, it has been a mission for scholars and practitioners to understand how adults learn best (Merriam, 2001). The increasing number of adult learners over the years has impacted the areas of educational programs and practice, economic development, governmental policy, and others (Long, 2004).

In professional development, adult learning ranges from on-the-job training to formal graduate coursework (Merriam & Caffarella, 1991). The purpose of adult learning is to acquire knowledge and skills to compete in the marketplace or for self-improvement (Burks & Tilson, 2000). Cranton (2006) described adult learners as socially responsible mature individuals who participate in formal or informal activities that lead to learning new knowledge and skills or revise or elaborate their existing skills, knowledge, and experiences. Knowles et al. (2005) stated that adult learners accept responsibility for their own learning and participate in learning activities to meet their personal, professional, or practical needs.

Adult Education for Personal and Professional Growth

Various theories and models of adult education have been developed to describe the context and process of adult learning, but one of the commonly applied frameworks is *andragogy*, proposed by Malcolm Knowles in 1968 (Ross-Gordon, 2003). Knowles introduced the European concept of andragogy to North American educators and defined andragogy as “the art and science of helping adults to learn” (Knowles, 1980, p. 43).

Andragogy is a scientific discipline grounded in humanistic philosophy. Scholars in this field study everything related to learning and teaching “which would bring adults to their full degree of humaneness” (Henschke, 1998, p. 8). Humanistic philosophy focuses on learning from the perspective of human growth and self-actualization (McNeil, 2006) and embodies the idea that education should facilitate the development of the entire person through a focus on life experiences, affective needs, personal growth, and professional development (Rogers, 1983).

The humanistic philosophy of education emphasizes helping students to discover and understand who they are rather than just shaping them into a form that is designed in advance (McNeil, 2006). This philosophy implies that professional development programs that focus on self-directed learning, personal involvement, and self-initiative by the learners can encourage adults to participate in such programs (Knowles et al., 2005).

When viewing the professional development of adults, Knowles et al. (2005) listed the following assumptions about adult learners:

- The need to know (Why do I need to know this?)
- The learners’ self-concept (I am responsible for my own decisions.)
- The role of the learners’ experiences (I have experiences that I value and you should respect.)
- Readiness to learn (I need to learn because my circumstances are changing.)
- Orientation to learning (Learning will help me deal with the situation in which I find myself.)
- Motivation (I learn because I want to.)

It is important for the Cooperative Extension Service to consider these assumptions about adult learners while developing professional development programs for Extension educators to facilitate their learning.

Andragogy and Professional Development of Extension Educators

Adult learners participate in various settings, forms, and modes of andragogy to acquire the skills and knowledge required for their professional development (Boyd & Apps, 1980; Etling, 1993; Knowles et al., 2005). In formal settings, adults participate in university-level graduate

coursework; and in nonformal settings, they participate in on-the-job and in-service training (Merriam et al., 2007). To a large extent, informal learning in adulthood occurs in a social context through a variety of interactions with community members or through experiences in day-to-day life that are not planned or organized (also referred to as incidental learning; Kleis et al., 1974; Merriam et al., 2007). Extension educators' interactions with clientele, peers, and university faculty are informal sources used to widen their knowledge and skills.

According to Boyd and Apps (1980), weekend and evening classes, community action groups, workshops, and seminars are the different forms of andragogy. Boyd and Apps further identified two different transactional modes in andragogy: individual and group transactional modes. In individual transactional modes, an adult learns through independent study courses or interaction with the members of society. For Extension educators, farm visits, observations, one-on-one technical assistance to producers, and interaction with state specialists are examples of individual transaction modes of learning. When groups of adult learners meet together with a common purpose and share their concerns with one another, it is an example of a group transactional mode. This implies that office meetings, workshops, seminars, conferences, field days, and meetings with communities are group transactional modes of andragogy in the Cooperative Extension Service, which provides professional development opportunities for Extension educators. The individual and group transactional modes mainly focus on the setting in which learning happens, but learning can be achieved through one or the combination of multiple forms of learning, including experiential and project-based learning.

While instructional methodologies guide the information delivery process, the selection of appropriate instructional methods and techniques of andragogy is important to achieve expected learning outcomes in an educational activity related to the professional development of adults (Kidd, 1973). Instructional methods organize learners and establish relationships between the learner and the instructor (Verner, 1959). Instructional techniques (e.g., experiential, project-based learning) are the variety of processes used to promote learning. The use of visual aids and computers support instructional techniques and facilitates learning and knowledge acquisition.

As adult learners and community educators, Extension educators may respond differently to various instructional methodologies that might influence their knowledge acquisition and transfer of learned skills to the communities where they work. Knowles et al. (2005) and Brookfield (1986) advised educators of adults to recognize that the richest resources for learning reside in adult learners themselves and are influenced by their experience and educational background. Professional development education for Extension educators should focus on experiential techniques that tap into the experience of learners, such as group discussions, problem-solving, case methods, simulation exercises, games, and role-play instead of primarily using lectures.

The studies conducted by various authors have identified different instructional techniques to accomplish the learning goals of adults. Morris and Ballard (2003) studied 264 adults to find

older adults' preferences for instructional strategies and techniques in family-life education programs in Tennessee. The results indicated that midlife adults (50–64 years) rated group-teaching techniques (e.g., discussion and lectures) as more helpful in acquiring knowledge and skills. Migletti and Strange (1998) studied 185 adult college students in developmental education classes. Participants were the students from a two-year branch of a large four-year regional Midwestern institution; the branch facility enrollment, including part-time and full-time students, was approximately 1,500 students, with about 54% over the age of 25. The authors wanted to examine learning styles and how each of these factors— teaching style, classroom environment, and learning style— contributes to students' academic achievement and satisfaction. The results showed that learner-centered instruction was associated with a greater sense of satisfaction and accomplishment among students older than 25. Thus, professional development programs should focus on learner-centered activities, personalized instruction, and relating the courses to Extension educators' experiences in ways that facilitate the flexibility for personal and professional growth.

Ross-Gordon (1991) studied 181 adult college students' perceptions of effective teaching. The results indicated that students primarily emphasized a comfortable environment and helpfulness, the educators' concern and respect for students and their experiences, encouragement of discussions, and flexibility. Donaldson et al. (1993) studied adult college graduates and undergraduates to identify the characteristics associated with effective teaching-learning processes. They found that apart from the use of a variety of instructional techniques, students emphasized the creation of a comfortable atmosphere, the ability of the instructor to motivate students, the relevance of materials, knowledge of the instructor, and encouragement of participation in learning activities. Focusing on the teaching-learning situation with adults, Houle (1996) stated that “educators should involve learners in as many aspects of education as possible and in the creation of environment in which adults can most fruitfully learn” (p. 30). This statement implies that instructional methods and techniques alone are not enough to enhance Extension educators' learning processes.

The Need for an Integrative Approach

Creswell and Martin (1993) stated that there is no one technique that can be considered superior in teaching adults because the selection of instructional techniques depends on program content, expected outcomes, learning environment, available resources, and the academic background and experiences of adult learners. Galbraith (2004) found that adult learners have a wide range of cognitive, personality, experiential, and role characteristics, which may influence their learning preferences. Conti and Kolody (2004) argued that one of the difficult tasks in an educational activity for adults is to select appropriate instructional methods and techniques of andragogy to meet their learning goals.

Educators of adults need to consider using comprehensive approaches for selecting instructional methods and techniques to meet the learning goals and professional development of adults (Daley, 2003; Knowles, 1980; Ota et al., 2006). One of the ways to meet the learning goals of adults is to involve them in planning their learning processes (Cervero & Wilson, 2001; Galbraith, 2004). The involvement of employees is essential in determining their professional development needs and expected outcomes (Goldstein & Ford, 2002; McGehee & Thayer, 1961; Palmer, 1999). Evidence shows that top management making decisions for professional development needs is less helpful than involving the employees in the process (Agnia, 1996; Amos-Wilson, 1996; Erffmeyer et al., 1991). So, involving Extension educators in planning their learning process is increasingly important because their professional competence depends on how effectively they learn the knowledge and skills they need to serve their clients. Ferrell (2005) stated that Extension educators rely on professional development and adult education activities to prepare them to serve as an educator for their clientele. Professional development of Extension educators is directly linked to the success of the clientele with which they work.

Application of Adult Education Principles for Effective Professional Development of Extension Educators

Identifying the components of effective professional development for Extension educators is still a daunting task. To assist Extension administrators and professional development leaders in land-grant universities, we synthesized the literature review and included it in this paper as a framework (Figure 1). It is expected that this framework could serve as a guide to design and implement professional development programs for Extension educators.

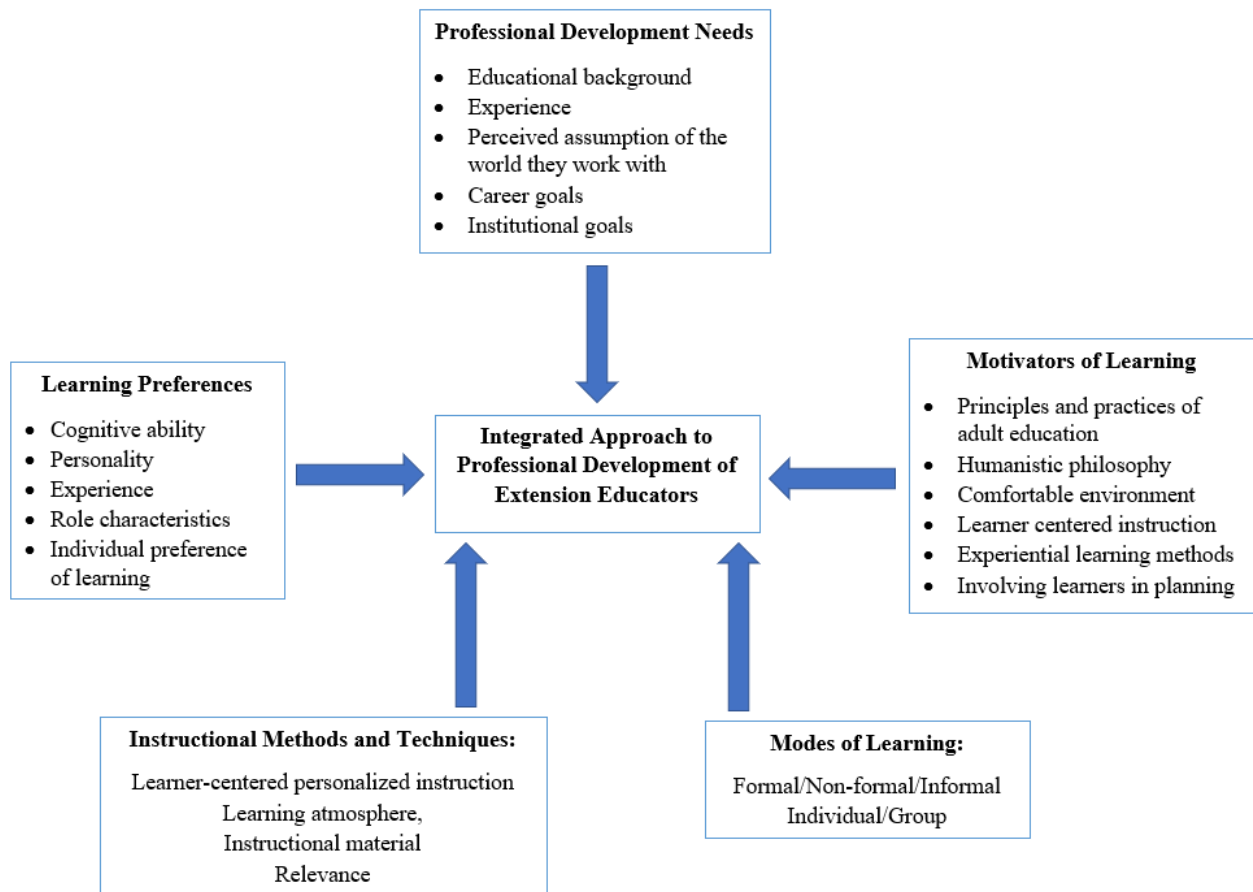
The framework shows that the identification of training needs precedes the professional development of Extension educators. Their decision to attend a professional development program depends on a variety of factors, including educational background, past experiences, perceptions of the community issues they will have to address through their programs, career goals, specific skills expected for the educational program in which they work, and institutional mission goals (e.g., increased need for program accountability data requires training on program evaluation, need to train educators based on core competencies expected by specific organizations, and understanding of training needs thorough feedback provided by administrators during annual performance appraisal).

The two major components that influence Extension educators' learning are (1) learning preferences determined by their cognitive ability, individual preferences regarding how they wish to learn, access to resources (e.g., access to technology), ability to use resources (e.g., technology literacy) adequately, time available for learning, and metacognitive awareness related to their own learning preferences; and (2) learning motivators governed by instructors' ability to use the principles and practices of adult education and humanistic philosophy. An instructor's ability to promote enhanced cognition is vital to their maturation as an Extension educator. Both

formal and informal learning over time increases their higher-order cognitive thinking skills improving their ability for knowledge acquisition, decision-making, evaluative thinking, and creative program design.

The framework indicates that the process of acquiring knowledge and skills by Extension educators is not dictated by their participation in a professional development offering only. It is influenced by two other components: (1) the instruction methods (both in the classroom or outside of the classroom), learning atmosphere, and instructional materials used; and (2) their opportunity to be involved in and correspond with the various modes of learning, such as interaction with communities and participation in meetings and seminars as a part of the informal learning, and in-service trainings and graduate courses as a part of the formal learning.

Figure 1. A Framework for Integrated Approach to Professional Development of Extension Educators



Educational Implications

The framework presented in Figure 1 has implications for designing and implementing the professional development offerings for Extension educators. The authors of this paper have been using various components of this framework in their Extension work:

- conducting both formal and informal needs assessments with educators (e.g., systematically documenting emails and phone calls as a qualitative data source);
- involving educators in developing curriculum, designing instructional methods, and determining learning outcomes;
- collecting information to determine the learning goals of educators by including an open-ended question in the training registration form;
- making room for evaluation feedback in the training agenda and ensuring that educators have enough time to provide their responses;
- ensuring the combination of lecture and hands-on learning methods are well-distributed over the period of training to maximize the learning outcomes;
- involving educators in a group task to utilize their experience and background using the data and examples from their own work;
- providing an opportunity for participants' reflection through the Question & Answer and discussion sessions;
- working with educators to analyze results and teaching them how to decipher and understand participants' responses that are collected both from formal and informal assessments; and
- teaching Extension educators to develop higher-order cognitive thinking skills through demonstration, hands-on experience, and opportunities to reflect on their learning.

Conclusions

Extension educators are adult learners. Their professional growth and success are directly linked to the success of the communities and clients with which they work. Using the principles and practices of adult education to consider their experience and learning goals increase the effectiveness of professional development programs. The instructional methods, learning atmosphere, and the opportunity to interact with communities and participate in in-service training and meetings influence Extension educators' learning and growth. The professional development framework presented in this paper provides a guideline to consider the integrated approach in the teaching-learning process that could facilitate the Extension educators' acquisition of knowledge and skills. The framework is equally applicable to designing professional development programs for employees, volunteers, and other stakeholders in public and private institutions other than Extension.

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