Abstract

The authors present a rationale for developing core competencies for training and organizational development in extension. Core competencies are defined as “the basic knowledge, attitudes, skills, and observable behaviors that lead to excellence in the workplace.” Competency-based models can be used to create an infrastructure that promotes innovation and continuous learning in every dimension of an extension organization. Competency models are designed around the skills individuals and groups need to be effective now and in the future. Competencies must be tied directly to the mission and strategic issues of the organization. A ten-step model is offered for identifying, validating and developing core competencies for an extension training and organizational development system. The seven core competencies developed by North Carolina Cooperative Extension using this process are defined. These competencies are being used or adapted by several states in the Southern Extension Region of the United States, and extension organizations throughout the United States are beginning to develop competency-based models for training and development. Illustrations of the application of the core competencies in North Carolina are provided along with preliminary qualitative evidence of the impact of this approach.
Introduction

In order to function successfully in the context of a multi-functional agriculture, extension educators must be technically competent in the various disciplines related to agriculture and highly competent as educational practitioners. A strong system for training and organizational development is essential to ensure that extension educators develop programs that are technically sound, conveniently delivered, economically valuable and customer focused. By developing a set of core competencies for extension educators and incorporating those competencies into a training and organizational development system, the capacity of an extension organization to better serve its customers can be enhanced and sustained. The process for developing core competencies must be highly participatory. It must enable extension employees and volunteers to continuously identify and validate the knowledge, skills, and observable behaviors that are needed to achieve professional excellence. Competency-based models and the process used to continuously update and validate such models must foster an organizational environment of continuous growth and improvement. Extension employees can assume responsibility for their own professional development and become lifelong, self-directed learners. In such a system the organization must provide support for learning and offer incentives and rewards for excellence in the workplace.

Purpose and Objectives

In this paper the authors present a rationale for developing core competencies and a systems approach for training and organizational development in extension. They propose a ten-step model for identifying, validating and developing core competencies for an extension training and organizational development system. They define the seven core competencies developed by North Carolina Cooperative Extension using the ten-step model. In addition, they provide case examples of how the model has been used in North Carolina along with qualitative examples of positive impact.

Theoretical Base

Malcolm S. Knowles (1980), long recognized as a leading authority in adult education in the United States, offers a rationale for using a competency-based approach in designing learning experiences. Dr. Knowles argues that the learner and the teacher should collaborate in determining what should be taught. Research conducted by Knowles within a span of over 40 years concludes that when learners are actively involved in identifying the competencies to be taught, the learners feel a strong ownership for the content; and consequently, the learners are motivated to participate actively in the learning process. Such learning tends to be self-directed with the learners taking responsibility for their own learning and ultimately becoming lifelong learners. After the competencies have been identified, Knowles indicates that the learners should be involved actively in diagnosing their skill or knowledge level for each competency. The idea here is that learners need individualized learning plans especially designed for their unique situations; in other words, “one size does not fit all.” If a learner is determined to be at a satisfactory level of competence on a core competency, no
immediate training or learning experience is required. After learners assess their level of competency on each core competency, they develop learning plans to achieve the desired level of expertise. In summary, Knowles concludes that the involvement of the learner in the identification of the learning content or competencies and the immersion of the learner in the teaching and learning process results in a highly motivated and self-directed learner. Gagné and Medsker (1996) build a strong case for using a systems approach in training and development. They propose that the content or competencies that serve as the basis of the training should be directly related to a real world entity such as an occupation or life task. Thus in a systems model, the competencies or content is derived directly from a thorough analysis of performance on the job. These two experts stress that emphasis on actual performance and the critical core competencies needed to achieve a high level of on-the-job performance make it possible for training resources to be focused on those competencies that will offer the greatest return on training investment.

Renowned educator, author and researcher Ralph Tyler (1971) suggested three sources of content for educational programs. The first source of content is the felt needs of the learner. The assumption here is that learners have knowledge of what they need to know or be able to do in order to be successful. The second source of content derived from studies of the current situation. This may include studies of contemporary society, the culture, the organization, or the social system in which the learner must operate. The third source of content is from research and experts in the field of practice. In summary the three questions to be asked in determining what is to be learned or the core competencies are (1) what competencies do learners think are critical?, (2) what competencies do research studies indicate are critical?, and (3) what competencies do experts think are critical? All of these sources are legitimate and should be used in the determination of core competencies. Klemp (1999) urges educators to be selective in a number of competencies that compose an educational training curriculum. He indicates that the number of core competencies should be ten or fewer. This author suggests that competencies should be revised and reviewed periodically to reflect changes in organizational priorities, changes in the environment, and changes in the expertise needed for success in the future.

Based on her studies of a variety of organizations, including three Fortune 500 companies, Hodge (1999) reports that core competencies must be strategically derived and strategically aligned with mission and goals of the organization in order to yield positive results in the workplace. Silvera (1999) defines competencies as “the skills, knowledge, and behaviors that describe successful performance.” He reports that competencies provide a mechanism for concentrating on developing in employees the skills, knowledge, and behaviors that will have the greatest positive impact on achieving individual and organizational success. A review of the literature indicates that the corporate sector has used competency-based approaches for training and development for over two generations. With a proven record of success in the corporate sector, it is logical that core competency approaches will be equally successful in nonprofit and government organizations.
Methods/Procedures and Data Sources

A training and organizational system including the core competencies determined to be critical to success in North Carolina Cooperative Extension were developed in 1999 by the Blue Ribbon Commission (BRC) for training and development. The North Carolina system is called the Personal and Organizational Development System (PODS). It is being developed and implemented in spite of severe budget constraints since January 2000. The BRC consisted of 21 members representing all job groups in North Carolina Cooperative Extension (NCCE). Over 800 employees of NCCE provided relevant input data and feedback. Members of the State Advisory Council (SAC) representing thousands of volunteers, customers, and other NCCE stakeholders were also involved in the process.

The BRC used a variety of quantitative and qualitative methods to analyze data; these included surveys, interviews, and focus groups. Peer institutions selected for study and collaboration were Iowa State University, Texas A&M University and Ohio State University. Experts from the two latter universities served as consultants to the BRC. Training and development systems in the corporate sector were also examined. These included the Westinghouse Savannah River Company; AT&T; How Medica, Inc.; First Heritage of Canada; TransAmerica Life Company; Toyota Sales; Xerox Limited; Amoco Corporation; Scherring-Plough Corporation; and Partners Healthcare System, Inc.

Planning Process Steps

A ten-step visionary planning process was used for identifying, validating, and developing core competencies for extension educators; and for building a training and organizational development system based on those competencies. The model for identifying the competencies including the following steps:

1. Conducting an environmental scan and examining internal and external forces impacting extension. The questions asked were: “What is working well within your extension organization?”; “What is working less well within your extension organization?”; and “What are current forces, both positive and negative, impacting your extension organization; and what are trends and forces, both positive and negative, that you think will impact your extension organization in the future?”

2. Collecting data on stakeholder/customer expectations and identifying the expertise (competencies) needed by extension educators for excellence in conducting extension programs. The questions asked at this step were: “What do you need and expect from extension workers?”; and “What knowledge, skills, or areas of expertise are essential for extension educators to provide for you the educational programs that you need?”

3. Establishing benchmarks for excellence and training and development systems by analyzing state-of-the-art training and development systems in exemplary
government organizations and the corporate sector. At this stage members of the BRC selected a variety of universities, government organizations, and corporations, mentioned above, and studied and analyzed their training and development systems. In addition, several members of the BRC attended an international conference on competency-based learning and attended presentations delivered by experts on competency-based learning systems from around the world.

4. Identifying (with extension educators) core competencies which are the broad areas of knowledge, attitudes, and demonstrable skills for achieving excellence in planning, delivering, evaluating, and accounting for extension education programs. In this step the BRC used data collected from six job groups in extension. The question asked was, “What do you need to know or be able to do in order to achieve excellence in your job?” An analysis of these data revealed seven core competencies. An unexpected result was that all job groups identified the same seven competencies as essential core competencies.

5. Validating and refining core competencies by the six groups within extension by using external consultants and by studying the core competencies of peer institutions. At this stage approximately 50 adjunct members of the BRC were identified, again representing six job groups. These adjunct members validated the core competencies and refined the definitions for each of the core competencies. It was found that many of the peer institutions, specifically Texas A&M University, had similar core competencies as North Carolina Cooperative Extension.

6. Developing subcompetencies with three levels of proficiency for each job group within the organization. At this stage the BRC adjunct members identified approximately three to seven subcompetencies, which more clearly defined the competencies for each of the seven identified. In addition, three levels of proficiency for each subcompetency were developed for each job group within the organization. This process continues with solicitation of input from over 800 members of the organization. Professional organizations within NCCE have also played a key role in developing the subcompetencies for the various job groups. At this time the subcompetencies and proficiencies for county extension directors is the most thoroughly developed framework.

7. Setting goals and developing action plans for integrating the core competencies into a sustainable training and development system. The BRC developed a long-range plan for introducing and implementing the core competency system into North Carolina Cooperative Extension. Although budget constraints have made it necessary to alter the timeline, the process continues.

8. Using a systems approach to implement organizational structures and a process for sustaining a competency-based training and development system. A special unit was established within NCCE for giving leadership to the implementation of
the system. This unit, Personal and Organizational Development (POD), consists of four full-time training and organizational development professionals and two part-time professionals who are charged to give leadership to the system.

9. Developing and delivering a curriculum for training employees and volunteers in the core competencies, subcompetencies and proficiencies. At this time, diagnostic assessment tools for determining the level of proficiency in each competency have been developed for county extension directors. In addition a curriculum for training new and aspiring county extension directors has been developed and tested within a variety of delivery systems. The 2003 State Extension Conference was organized around the competency-based approach. Work is currently being done on developing a curriculum for extension agents, program assistants, specialists, secretaries, and volunteers.

10. Obtaining feedback on the effectiveness of a competency-based system, adjusting and refining the system as needed. Members of POD continue to collect data, both quantitative and qualitative, on the effectiveness of the system. Data from the six job groups on the success of the competency-based systems approach to training and development are continually being collected, analyzed, and used as a basis for adjusting the system.

Goals of the system are as follows:

1. To enable the recruiting, hiring, training, evaluating, and supporting of creative, Motivated, and innovative cadre of faculty, staff and volunteers.

2. To provide learning opportunities that are responsive, accessible, applicable, and competency-based.

3. To encourage collaborative learning.

4. To empower individuals to pursue their own career goals and professional growth.

5. To enhance customer focus and organizational effectiveness.

6. To build individual and group accountability.

7. To build organizational commitment for a sustained learning system.

8. To continuously assess, monitor, validate, and refine competencies needed for individual and organizational excellence.

Results/Findings

The seven core competencies were identified by the BRC, validated by the adjunct members of the BRC, and are being continuously validated and refined.
throughout the organization. These were identified as critical to successful performance of all NCCE employees and volunteers:

1. Knowledge of the organization—an understanding of the history, philosophy, and contemporary nature of NCCE.

2. Technical subject matter expertise—the mastery of a scientific discipline, a research body of knowledge or a technical proficiency that enhances individual and organizational effectiveness.

3. Programming—the ability to plan, design, implement, evaluate, and account for significant extension education programs that improve the quality of life for NCCE customers.

4. Professionalism—the demonstration of behaviors that reflect high levels of performance, a strong work ethic, a commitment to continuing education and to the mission and goals of NCCE.

5. Communications—the ability to effectively transfer and receive information.

6. Human Relations—the ability to successfully interact with diverse individuals and groups creating effective partnerships, networks, and dynamic human systems.

7. Leadership—the ability to positively influence a wide range of diverse individuals and groups.

Core Competencies

These seven core competencies were determined to be applicable to all job groups in NCCE. These job groups were: agents, specialists, administrators, support staff, program assistants/associates/technicians, and volunteers. The seven core competencies are consistent for each of the six job groups. However, subcompetencies and proficiencies vary; and it has been necessary to develop three levels of performance or proficiency for each subcompetency, which may be unique in some cases to a job group. Part of this work was presented as the initial phase of a continuing developmental process resulting in a set of core competencies, subcompetencies, and proficiency for each of the major job groups within NCCE. Input from county extension faculty, state-level faculty, support staff, and volunteers throughout the organization has been ongoing. The content of the competency-based model is always presented as evolving; however, the current content represents the best available information on the knowledge, skills, and demonstrable behaviors essential to excellent performance on the job within extension organizations.
Conclusions/Implications Recommendations/Educational Importance

The ten-step model for developing core competencies does not force change, but rather involves extension employees in the process of continuous and focused professional improvement. Employees are involved in every stage of the process and remain involved in an organizational system that fosters an atmosphere of individual growth and renewal.

Individual “buy-in” or ownership for competencies, subcompetencies and proficiencies is a product of continuous involvement. This involvement results in ownership of the content, the training program, and its outcomes. The basic premise of this participatory process can be summarized by what the authors call the “Principle of IOU.” The Principle of IOU is that Involvement Results in Ownership and Understanding. When the IOU Principle is applied, the results are a commitment to the outcomes and products of the process. This is proving to be true as the competency-based system is being introduced within NCCE. Some typical quotations from a recent training program for new and aspiring extension directors include the following:

“This was one of the most beneficial training experiences that I have ever attended. The course was well designed to meet the needs of anyone interested in learning the specific tasks and competencies necessary for an individual considering this job. I highly recommend it as a prerequisite for anyone wishing to become a county extension director.” Another participant wrote, “This course should be a prerequisite for anyone wishing to become a county extension director. It will help them be more successful and avoid problems for them and for the organization.” Finally, a third participant wrote, “The time I spent with you and the rest of the participants in the past twelve months has been some of the most valuable experience that I have had in my twenty-year career with extension…the knowledge that I have gained from this program will serve me well in all aspects of my professional life.”

Competencies developed using this model are being used or adapted by states throughout the Southern Extension Region. A recent leadership program developed by Arkansas Cooperative Extension is a good example of the practical use of a competency-based system. There are clear implications for the application of this competency-based and systems approach to international extension organizations. Toward that end the authors recommend that research be conducted to answer a number of critical questions. Among these are: (1) Are competency-based systems approaches already in place in other international extension organizations? (2) Are core competencies universal for extension workers around the world? (3) Can technology allow web-based training systems to be used and shared by extension organizations on a global basis?
References


