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Development of a Comprehensive New 4-H Extension Agents Training Program Using a Multi-Module Approach and the 4-H Professional Research, Knowledge, and Competencies (4HPRKC) Taxonomy

Barry A. Garst
American Cap Association, bgarst@clermson.edu

Joseph R. Hunnings
Virginia Cooperative Extension, hunnings@vt.edu

Kathleen Jamison
Virginia Cooperative Extension, jamisonk@vt.edu

Jewel Hairston
Virginia Cooperative Extension, jewelh@vt.edu



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Development of a Comprehensive New 4-H Extension Agents Training Program Using a Multi-Module Approach and the 4-H Professional Research, Knowledge, and Competencies (4HPRKC) Taxonomy

Abstract

Following significant budget reductions in 2002, Virginia Cooperative Extension explored strategies to meet the professional development needs of new 4-H Extension faculty and staff. The Department of 4-H Youth Development created a training program to teach youth development competencies consistent with the national 4-H professional research, knowledge, and competencies (4HPRKC) taxonomy. Written and verbal evaluations from participants in the New 4-H Extension Agents Training Program suggested that the training was informative, interactive, and responsive to participants' needs. This program is a potential model for other Extension programs that serve the professional development needs of new 4-H Extension faculty and staff.

Barry A. Garst

Director of Research Application
American Camp Association
Martinsville, Indiana
bgarst@acacamps.org

Joseph R. Hunnings

Extension Specialist
4-H Youth Development
Virginia Cooperative Extension
Virginia Tech
hunnings@vt.edu

Kathleen Jamison

Assistant Professor and Extension Specialist
4-H Youth Development
Virginia Cooperative Extension
Virginia Tech
jamisonk@vt.edu

Jewel Hairston

District Program Leader
Southeast District
Virginia Cooperative Extension
Virginia Tech
jewelh@vt.edu

Robert R. Meadows

Associate Director, 4-H
Virginia Cooperative Extension
Virginia Tech
bmeadows@vt.edu

Introduction and Purposes

In a service-oriented public organization like Extension, highly qualified and appropriately trained

faculty and staff are our most important resources. Only by hiring and training exemplary Extension faculty and staff do we position ourselves to provide the level of service that youth, families, and communities demand and deserve. Without careful attention to the professional development of 4-H youth development faculty and staff, we fail to *purposefully enable and encourage* success.

Over the past several years, many states have experienced changes that influenced the overall makeup of their Extension personnel, including (a) reductions in the numbers of field faculty/staff and (b) reductions in the experience level of Extension faculty/staff. Older, more experienced Extension employees either moved into Extension administrative positions or retired. In some cases, these changes were the consequence of reductions in state-level funding for Extension programming.

It is important for state Extension programs to understand, describe, and share strategies for addressing changes of this nature. Recognizing that Virginia Cooperative Extension (VCE) experienced changes in the early 2000s that required new strategies for meeting the needs of new 4-H youth development professionals, this article:

- Describes how the 4-H youth development department of VCE developed a set of core competencies for Virginia 4-H youth development
- Describes a core-competency based multi-module professional development program that the 4-H youth development department of VCE developed for new 4-H youth development professionals, and
- Identifies the satisfaction ratings, short-term outcomes, and benefits associated with participation in the Virginia New 4-H Extension Agents Training Program.

Background

In 2002, the Virginia General Assembly faced significant budget shortfalls and reduced funding for several state agencies. State-level funding to VCE was reduced by 13%. VCE was forced to explore an "alternate severance option" (ASO) for Extension faculty with significant years of experience. As a result, approximately 30% of all Virginia 4-H youth development agents chose early retirement. The majority of these agents had been hired in the mid 1970s and represented an immediate loss of decades of knowledge and experience for VCE. This loss was a type of mandatory change that catalyzed new ways of thinking and working.

When the Virginia General Assembly restored some limited funding to VCE through specialized budget amendments beginning in 2003, a new crop of 4-H youth development agents began to be hired. This new generation of agents tended to be young professionals who were entering the youth development field with diverse educational and professional backgrounds, including history, agricultural and Extension education, recreation, child development, horticulture, engineering, and art.

Thus, these professionals did not possess the competencies that were needed to succeed as 4-H youth development professionals. Boyd (2004) also suggested this when he noted that "County Extension Agents often lack the competencies needed to be effective administrators of volunteers. This situation can negatively affect programs in a variety of ways, including quality of work and programming, participation, and organizational liability and risk management issues."

To address the needs associated with hiring a great number of new 4-H youth development agents and to better align the Virginia 4-H program with the national 4-H professional research, knowledge, and competencies (4HPRKC, 2004) taxonomy, the 4-H youth development department of VCE began a 1-year "internal development process" to create a comprehensive list of necessary core competencies and design a related training program. Identifying these competencies was critical. As Stone and Bieber (1997) noted, competencies help make forward-looking human resource decisions by clarifying the knowledge, skills, and behaviors needed in the future and by serving as a foundation upon which to build employee selection, training, professional development, performance appraisal, and succession planning."

The internal development process resulted in the creation of an initial set of core competencies that the state 4-H youth development department deemed necessary for Virginia 4-H youth development professionals. These competencies were then compared with the national 4HPRKC taxonomy. Items from the 4HPRKC that were not represented in the state-level list were added, and duplication across lists was eliminated.

This process resulted in the *Virginia New 4-H Extension Agents Training Guide* (Garst, Hunnings, Meadows, Jamison, & Hairston, 2006), a self-directed professional development resource for new 4-H agents. Utilization of the 4HPRKC in the development of the *Virginia New 4-H Extension Agents Training Guide* is consistent with one of the National 4-H Professional Development Task Force's (2005) *Standards of Professional Development*, which suggested that "4HPRKC, 2004 establishes the academic base which supports 4-H youth development practices."

Next, a professional development program, the New 4-H Extension Agents Training Program, was

created. This training was designed to deliver information related to many of the core competencies identified in the *Virginia New 4-H Extension Agents Training Guide*. The training team was comprised of the State 4-H Leader and four Extension specialists in the area of 4-H youth development. Additional adjunct members of the training team members included the Director of Risk Management for Virginia Tech, several experienced 4-H youth development Extension agents, and staff members from Virginia Tech's communications department.

Because of the extensive amount of information that needed to be delivered and the necessary attention that needed to be paid to application and reflection, the training was developed as an 8-day program that would be delivered across three modules during a 1-year time period (i.e., December, April, and August) (Figure 1). Each module was conducted at a different 4-H educational center, each located in different regions of the state to accommodate participants and to minimize transportation barriers (Conklin, Hook, Kelbaugh, & Nieto, 2002).

Figure 1.

Overview of Virginia Cooperative Extension's New 4-H Extension Agents Training Program

MODULE 1-APRIL

CORE
(4 Days)

Historical Foundations of Youth Development
Virginia 4-H Indicators of Quality
Essential Elements of Youth Development
Purposeful Programming for Positive Youth Development
Youth as Learners in the Youth Development Process
Virginia 4-H Policies
Risk Assessment and Management (Insurance and Contracts).

Situation Analysis for 4-H Youth Development
Evaluating the Outcomes of 4-H Youth Development
Reaching and Involving Underserved Populations Risk Assessment and Management (Elements of Liability)
Reflection and Application of Concepts

MODULE 2-AUGUST

CORE
(4 Days)

Historical Foundations of Youth Development
Virginia 4-H Indicators of Quality
Essential Elements of Youth Development
Purposeful Programming for Positive Youth Development
Youth as Learners in the Youth Development Process
Virginia 4-H Policies
Risk Assessment and Management (Insurance and Contracts).

Developing and Delivering 4-H Youth Development
Virginia 4-H Curriculum
Competition, Awards, Incentives, and Recognition
Risk Assessment and Management (Frequency and Severity)
Reflection and Application of Concepts

MODULE 3-DECEMBER

CORE
(4 Days)

Historical Foundations of Youth Development
Virginia 4-H Indicators of Quality
Essential Elements of Youth Development
Purposeful Programming for Positive Youth Development
Youth as Learners in the Youth Development Process
Virginia 4-H Policies
Risk Assessment and Management (Insurance and Contracts).

4-H Volunteer Development and Management
4-H Enrollment Procedures
Collaboration for Youth Development and Social Change
Publicizing and Promoting 4-H Youth Development
Reflection and Application of Concepts

As described in Figure 1, the "core" portion of the training lasted for 4 days and was designed to be repeated every module (i.e., every 4 months) in order to be inclusive of new faculty/staff regardless of when they started the New 4-H Extension Agents Training Program. In addition to the core, Module 1 also included: situation analysis for 4-H youth development, evaluating the outcomes of 4-H youth development, and reaching and involving underserved populations.

The additional content in Module 2--delivered across a 2-day period--included: competition, awards, and incentives, 4-H curriculum, delivery modes for 4-H youth development, and risk management (elements of liability). The additional content of Module 3--also delivered across a two-day period--included: 4-H volunteer development and management, 4-H enrollment procedures, collaboration for 4-H youth development and social change, publicizing and promoting 4-H youth development, orientation to Virginia 4-H on-line information, situation analysis for 4-H youth development, and risk management (frequency and severity, planning for risk management, and review of a recommended risk management flowchart).

A critical component of each module was a daily Reflection and Application of Concepts component. During these reflection and application periods, participants completed a range of exercises that provided them opportunity to reflect upon and directly apply what they learned to actual county/city-based situations. This approach was also supported by the National 4-H Professional Development Task Force's (2005) *Standards of Professional Development*, which suggests that professional development experiences should "help the learner to apply what is learned to real-world settings, especially the communities in which they work."

Because consistency was critical, any faculty and staff who were directly responsible for a county/city/4-H Center 4-H program were required to participate, including 4-H Extension agents, 4-H program assistants, 4-H project associates, 4-H Educational Center directors, and 4-H Educational Center program directors. The first module of the New 4-H Extension Agents Training Program was offered in December of 2003. A total of six modules were offered between December of 2003 and December of 2005. Three modules were planned for 2006.

Evaluation Methods

The evaluation component of the New 4-H Extension Agents Training Program was developed during the initial planning stages. An emphasis was placed on beginning with the end in mind (W.K. Kellogg Foundation, 2004) by focusing on the desired competencies that we wanted participants to learn. The program evaluation process included the administration of a post-training questionnaire to each participant at the end of each module. The questionnaire included a measure of length of service, program satisfaction, program outcomes, and other program benefits. The results presented in this article reflect data collected from participants over the course of a 2-year period (December 2003 to August 2005) (n=126). The administration of the questionnaire during the first module of year one was considered the pilot-test of the questionnaire.

One important limitation must be noted. In the study, the unit of analysis was the individual participant. This approach was necessitated by the questionnaire administration approach that was used. A stronger approach would have been to collect data from each individual participant at multiple points (following each module) and then to compare changes in their responses to the training over time.

Program satisfaction was measured in two ways. First, each, program component was rated using a Likert-type scale where 1= poor and 5= excellent. Second, a semantic differential was used to measure five dimensions of overall program satisfaction, including: "relevant → not relevant," "timely → old/repeated information," "informative → lack of information," "interactive/social → few opportunities to interact," and "encouraging → discouraging." Overall satisfaction was also measured with a Likert-type scale where 1= poor and 5= excellent.

Program outcomes were measured using a Likert-type scale where 1= "no change" and 5= "much change" in: (a) knowledge, (b) skills, (c) enthusiasm and motivation towards one's position, and (d) confidence related to incorporating what was learned into one's county, city, or 4-H Center program.

Other program benefits associated with the training were solicited through open-ended questions that were included on the questionnaire and through a daily verbal reflection process whereby participants identified "What worked?" and needed to be continued the next day (or the next module) and "What needed to be changed?" for the next day (or the next module). Portions of time throughout each day were devoted to purposeful reflection, during which participants could identify and publicly discuss course content or methodology that was particularly useful or relevant to their needs. Content analysis (Patton, 2002) was used with this qualitative data to identify emergent themes related to program benefits.

Results

Participant Descriptives

Participants in the New 4-H Extension Agents Training Program were 4-H Extension agents (74%), 4-H program assistants (10%), 4-H Center program directors (8%), 4-H Center directors (5%), and

4-H project associates (3%).

Length of employment with VCE varied. Fourteen percent of participants had less than 1 month of experience with 4-H youth development in Virginia. The majority of participants (23%) had 2-3 months of experience. Twenty percent had more than 2 years of experience. (Note: When the New 4-H Extension Agents Training Program was first implemented, agents who had been employed for 2 years or less were included.) Subsequently, participants were enrolled in the training program immediately upon starting their positions.

Satisfaction Ratings of Program Components

Participants rated each component of the New 4-H Extension Agents Training Program on a scale of 1-5, where 1=poor and 5=excellent. Mean ratings for all components are provided in Table 1. The highest rated program components included: "reaching and involving underserved populations" (4.51), "publicizing and promoting 4-H youth development" (4.41), "essential elements of positive youth development" (4.39), "evaluating the outcomes of 4-H youth development" (4.38), "history of youth development" (4.36), and "4-H policies" (4.30).

Table 1.
Mean Ranking of Participants' Program Component Ratings of the Virginia New 4-H Extension Agents Training Program (2003-2005) (n=126)*

	n	Mean**	SD
Reaching and Involving Underserved Populations	37	4.51	.507
Publicizing and Promoting 4-H Youth Development	39	4.41	.818
Evaluating the Outcomes of 4-H Youth Development	37	4.38	6.81
Essential Elements of Positive Youth Development (CORE)	83	4.35	.652
Historical Foundations of 4-H Youth Development (CORE)	79	4.33	.783
Virginia 4-H Policies (CORE)	108	4.30	.752
Risk Management (CORE)	54	4.28	.712
Virginia 4-H Indicators of Quality (CORE)	83	4.24	.772
4-H Enrollment Procedures	18	4.22	.808
Reflection and Application of Concepts (CORE)	110	4.20	.822
New 4-H Extension Agent Training Overall	118	4.19	.731
Situation Analysis for 4-H Youth Development	36	4.19	.668
4-H Delivery Modes	48	4.13	.761
Youth as Learners (CORE)	80	4.11	.871
4-H Volunteer Development and Management	39	4.05	.916
Purposeful Programming for Positive Youth Dev. (CORE)	21	4.00	.775
Orientation to Virginia 4-H On-Line Information	37	4.00	1.080
Virginia 4-H Curriculum	46	3.96	.965
Competition, Awards, and Incentives	45	3.87	.968
Collaboration for Youth Development / Social Change	40	3.83	.931
* The unit of analysis in this study was the individual participant. This n size represents the maximum number of participants who were involved in the training. The n size associated with training components differed because of the number of new participants that entered the program every three months was variable and some agents missed training components due to scheduling conflicts.			
** 1-5 scale, where 1=poor and 5 = excellent			

Satisfaction Ratings of Program Dimensions

As previously described, five dimensions of satisfaction were measured using a semantic differential that included: "relevant → not relevant," "timely → old/repeated information," "informative → lack of information," "interactive/social → few opportunities to interaction," and "encouraging → discouraging." The results of the semantic differential measure of satisfaction are presented in Table 2. The highest rated dimension of program satisfaction was "interactive social" (4.58), and the second highest was "encouraging" (4.24). Timeliness was the lowest rated dimension of the training program (3.56).

Table 2.
Semantic Differential Ratings of Dimensions of the Virginia New 4-H Extension Agents Training Program (2003-2005) (n=126)

	5	4	3	2	1	
Interactive/Social	4.58					Few opportunities to interact
Encouraging	4.24					Discouraging
Relevant	4.20					Not relevant to what I need
Informative	4.12					Lack of Information
Timely	3.56					Old/ Repeated Information

Short-Term Outcomes

As previously described, the short-term outcomes associated with participation in the program were measured using a posttest measure of the amount of change in: (a) knowledge, (b) skills, (c) enthusiasm and motivation towards one's position, and (d) confidence related to incorporating what was learned into one's county, city, or 4-H Center program (Table 3). Participants expressed the greatest degree of change in the areas of knowledge/awareness (4.14) and self-confidence (4.09).

Table 3.
Mean Rankings of the Short-Term Outcomes Associated with Participation in the Virginia New 4-H Extension Agents Training Program (2003-2005) (n=126)

	n	Mean*	SD
Knowledge/awareness change	126	4.14	.734
Self-confidence change	126	4.09	.858
Enthusiasm/motivation change	126	3.95	.970
Skills change	126	3.89	.851

* 1-5 scale, where 1=no change and 5 = much change.

Training Program Benefits

As previously described, other training program benefits were solicited through open-ended questions that were included on the questionnaire and through a daily verbal reflection process whereby participants identified "What worked?" and "What needed to be changed?" Content analysis was used to analyze the written responses (n=82) to these questions, which resulted in five salient themes related to program benefits. These themes are identified below, along with supporting quotations from selected participants.

- **Interaction with other 4-H youth development professionals**

"Being able to ask specific questions on each of our experiences in the 4-H agent position. I learned the most relevant info hearing people's questions and the answers that were given."

- **Interacting and learning with state-level 4-H specialists**

"All state staff were present. This was the first time I was training with just a 4-H mind set. I appreciated the time with all specialists and [our State 4-H Leader] in the room so we get answers that all agree with (instead of hearing things from different people at different times.)"

- **Responsiveness of teaching team**

"I liked the fact that the facilitators adapted to our needs. It was very engaging to be able to "step away" from the presentations and delve into personal experiences. A lot of questions were answered."

". . . when the group was overwhelmed, everyone took a step back, looked at the schedule to make changes. I felt like my needs were being considered."

- **Content was relevant and included resources and ideas that agents could immediately use in their fieldwork**

"The reflection time--it's very helpful to share experiences with others and to learn from their experiences. Question and answer sessions are also helpful with finding out challenges that face other agents. All the topics are/were relevant, especially the "youth as learners"

component. I have often felt "un-equipped" in that area."

- **Learning 4-H program expectations**

"The key strength was learning 4-H policies and the discussion time permitted as a group (networking) on the second day. I learned a lot on 4-H procedures and processes (forms, expectations, etc.)"

Discussion

To respond to an influx of new, diverse 4-H youth development professionals, the Virginia 4-H department developed a new training resource and related training program for new 4-H youth development faculty and staff. Triangulation across the satisfaction ratings, the outcomes ratings, and the open-ended responses suggested that the training program was (a) relevant, (b) dynamic and responsive, and (c) allowed participants to build relationships.

The content of the course was purposefully and thoroughly developed over many months to include both state-level and national-level core competences for 4-H youth development professionals. The addition of a purposeful and flexible application and reflection component increased its relevance by allowing participants to incorporate course content into real-life issues and challenges. All of the components of the training program were rated above average, with most rated above 4.00. Several of the "core" training components received the highest ratings. Of the four short-term outcomes that were measured, the greatest area of change was in the enhancement of "knowledge" related to the course content.

The on-site teaching team, comprised of state-level 4-H faculty, responded daily to participants needs by modifying course content and instructor teaching styles to better meet the needs of the learners. Participants shared how much they appreciated this flexibility and attention to their needs. This supports what the National 4-H Professional Development Task Force identified in their *Standards of Professional Development* (2005) as "learners have a say in what is learned, how it is learned, and when they learn it."

Furthermore, participants expressed how pleased they were to have direct access to the entire state-level 4-H faculty for a 4-day period. This was consistent with Ferrer, Fugate, Perkins, and Easton's (2004) finding that Extension agents, during a 7.5-day in-service training, came to value the "support and technical assistance from state specialists and staff."

Most important, the training program allowed agents to build professional and personal relationships with their 4-H colleagues. Day sessions of lectures, group discussions, pair-shares (dyads), group activities, energizers, and purposeful reflections were coupled with evening social activities to create a learning environment that was both formal and non-formal--where participants could interact in ways that were personally and professionally relevant and meaningful.

The 4-H youth development department learned quite a bit about the differential needs of new staff with different levels of field-based experience. In a multi-module training system, experienced participants who are further along in the training process and who have stronger field-based experience, need to be provided with differentiated learning experiences. Frustration can easily result when new information is repeated or fails to be made relevant. Furthermore, when agents are involved in a system-wide simultaneous training program offering similar content, trainers need to be aware of, and sensitive to, potential redundancy.

The success of the multi-module Virginia Tech New 4-H Extension Agents Training Program supports the importance of systematic, competency-based professional development system. Systematic competency-based professional development systems are not entirely new. For example, Texas Cooperative Extension has developed the "You, Extension, and Success (YES)" program (Stone & Coppernoll, 2004). But the experience by Virginia Cooperative Extension also suggested that national-level publications, such as the 4HPRKC (2004) taxonomy and the *Standards of Professional Development* (2005), were important resources that supported and validated the development of the New 4-H Extension Agents Training Program.

Although professional development resources often become scarce with shrinking budgets, Extension cannot expect faculty and staff to excel with youth, families, and communities until we recognize that quality staff are our first (potential) product. In this case study of the Virginia New 4-H Extension Agents Training Program, we were reminded of the importance of giving new faculty/staff a focused, flexible, responsive, face-to-face training designed to provide them not only with theory and methodology, but also with real-work tools, resources, and examples.

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