

Engaging Learners Through Collaborative Learning: Leadership Development of County Extension Directors and Lessons Learned

Abstract

The leadership institute, targeting new and aspiring county Extension directors, was completely revised to reflect face-to-face and online constructivist learning theory and practice. New co-learning and engagement methods were incorporated, and all facilitators and teachers/presenters were trained and coached to use the new methods and philosophy. Five competency area outcomes were expected and then evaluated to determine level of competency development. The events, teachers, and activities of each of the four workshops were also evaluated to determine participants' satisfaction level. The results of the study showed that learning and application of practices occurred in all five competency areas.

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Introduction

How shall Extension specialists and agents approach leadership development in an age of collaborative face-to-face team building, social networks, virtual communities, and online learning? Extension is respected and valued for teaching and facilitating community-based leadership development with grass roots communities of interest and communities of practice (Cooper & Graham, 2001). However, there are new tools and knowledge about what works best, especially when participants have instant access to global resources, social networks, and collaborative learning linked with face-to-face team members.

A Vision for the 21st Century challenged Extension to train leaders and administrators to address rapid changes and local and global issues, and to adapt educational programming in congruence with rapid communication technology advances (NASULGC, 2002). The graying of the "baby boomer" generation is currently contributing to increased employment turnover and higher rates of retirement throughout Extension (Borr & Young, 2010; Schuster, 2012;). These factors are contributing to faculty, agent, or educator stress. In addition, the rising number of unfilled Extension positions, changes in funding resources, and increased job responsibilities support the need for improved leadership development of employees (Bowen-Elizey, Romich, Civittolo, & Davis, 2013).

A team of agents, district directors, and specialists reviewed evaluations of past leadership institutes and then searched the literature across disciplines to document current effective practices. The team discovered that many articles were published in the 1990s but that only a few articles had been published in recent years. They discovered that earlier literature did not consider online access to learning and social networks. As a result of these findings, the authors in partnership with Extension administrators completely revised the New and Aspiring County Extension Director Leadership Institute using a constructivist collaborative learning approach. The principles of a constructivist, systems, and democratic partnership approach were consistent with Extension's mission, and recent engagement literature.

After a review of a broad field of academic experts who study successful leadership development strategies, a new framework and curriculum was designed. The concepts and foundation chosen came from the work of authors from 2005 through 2012 and crossed disciplines. The four sessions of the institute included face-to-face learning for individuals in cohort teams. Online learning tools were developed for cohorts, and information sources were provided. Collaboration through social networking was made available online throughout the course. The following constructs became the institute's core principles and practices.

1. Collaborative Learning, Teamwork, and Community Engagement Leading to Practice Change

The participants in the leadership institute and the facilitators adopted a constructivist and democratic model of planning, implementation, and evaluation (Caffarella, 2002; Lichtenstein & Plowman, 2009; Mathews, 2006; Rashman, Withers & Harley, 2009; Schneider & Somers, 2006; Yuki, 2008).

The framework and methods that were adopted stressed the use of democratic, mutually beneficial strategies to negotiate the program's design, delivery, and evaluation (Cervero & Wilson, 2006; Kezar, Chambers, Burkhart, & Associates, 2005). Online tools were developed to encourage collaborative learning in cohort groups and easy access to a variety of leadership learning resources (Ardichvili, 2008; Daniel, Schwier, & McCalla, 2003; Gannon-Leary & Fontainha, 2007; Kelsey & Stafne, 2012; Sobrero, 2008; Sobrero & Craycraft, 2008).

2. Systems Thinking and Action

Information and sessions within the leadership institute focused on systems thinking and action (Cawthorne, 2010; Reed, 2006). Case studies, role play, and simulations were incorporated to enable participants to apply systems thinking while addressing problems and complex issues.

3. Systematic Evaluation

The curriculum adopted a strong formative and summative evaluation component in order to report with certainty that changes occurred and that planned outcomes were achieved. (Butterfoss, 2006; Frechtling, 2007; Kelsey & Stafne, 2012). Ideally, use of a formative evaluation process contributed

to continuous improvement with evidence and practice change accomplishments (Anand, Ward, Tatikonda, & Schilling, 2009). The final cohort projects were developed to address a real-life Extension issue at the district and county, and were evaluated by colleagues prior to completion. Learning during the workshops sessions focused on the planned content that resulted in the outcomes we measured.

4. Demonstrating Scholarship Through Community Engagement

The international, growing movement of community engagement scholarship is based on democratic strategies working with individuals and communities. This philosophy and approach was developed by Extension in its early history, when it was found that experts attempting to use transfer of knowledge failed miserably. Since then, Extension has used mutually beneficial learning models and democratic strategies to ensure changes in practice and measure the impact of changes at the community level. The evaluation findings are reviewed with peers who include community partners and Extension higher education peers. These practices illustrate community engagement scholarship.

The practice of community engagement scholarship has become the current terminology for any higher education individual or team wishing to work with communities, publish their own program results, and assure the work is reviewed by peers. The leadership institute adopted these practices and evaluated the program effectiveness (Holland, 2006).

In 2010 Fitzgerald, Burack, and Seifer edited a two-volume set of handbooks focusing on institutional change and community-campus partnerships. The articles relating to Extension were studied by leadership institute participants (Austin, 2010; Coon, 2010; Fitzgerald, Burack, & Seifer, 2010). This source enabled participants to broaden their understanding of the important link between the practice of community engagement scholarship and Extension program practices and strategies that benefit the community and academia for many decades. (Coon, 2011; Cooper & Graham, 2001; Franz & Stovall, 2012; Jones, 2012; O'Meara & Rice, 2005).

Purpose and Objectives

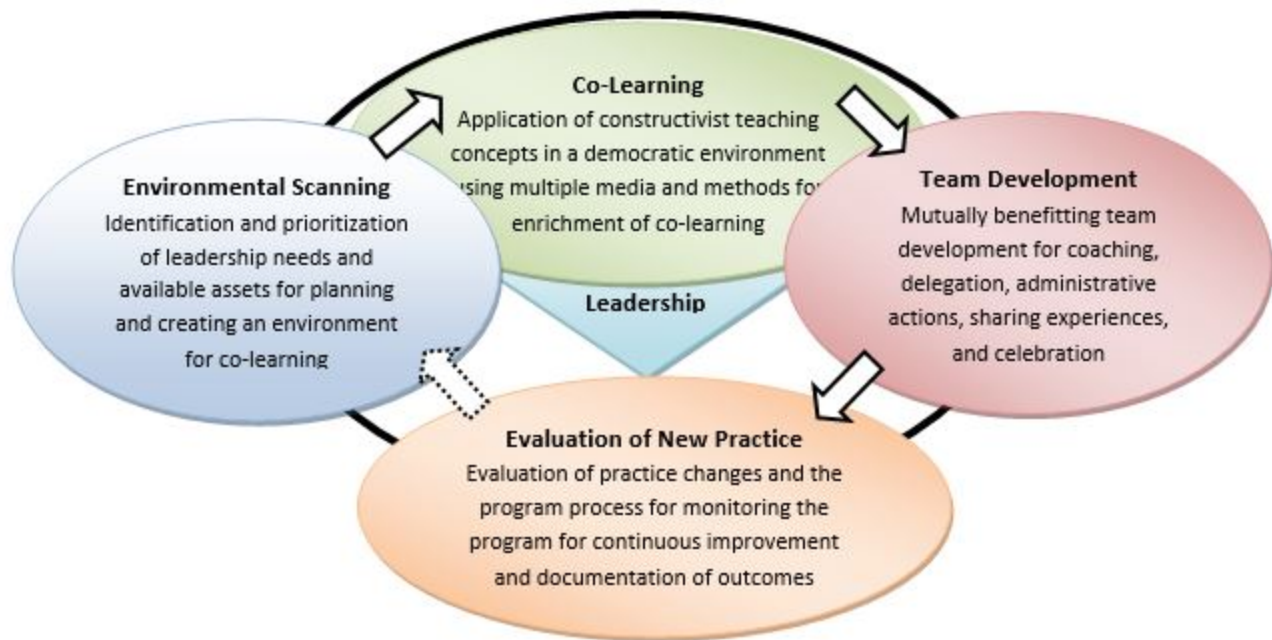
The purpose of the study reported here was to determine the participants' receptivity to the revised New and Aspiring County Extension Directors' Leadership Institute. Four sessions of workshops were held over a period of 6 months. Participants spent 45 hours in workshop sessions. Each of the sessions focused on competencies and skills needed to achieve the expected outcomes we evaluated. This leadership Institute was required for all new county Extension directors and open to agents aspiring to the position. The institute could be taken as a three credit graduate course or for no credit; however, all participants were required to complete the assignments and projects. The objectives of the study were the following.

1. Determine the learning outcomes of the institute program (curriculum).
2. Assess the process for program improvement.
3. Document lessons learned for Extension leadership development programs.

Methods and Data Collection

District directors, Cooperative Extension administration, and past students/learners were consulted. The curriculum was developed in partnership with district directors, faculty, and administration, and approved for implementation. The following leadership curriculum framework was adopted (Figure 1.)

Figure 1.
Leadership Development Framework



All speakers and instructors, along with facilitators of the cohort groups were coached to use effective collaborative learning and an engagement activity that would enhance teaching and learning. District Directors were the facilitators for their district cohort team. Cohorts formed the first day of the workshop, and learners stayed with the same cohort throughout the institute.

Two evaluation instruments were developed. The first instrument focused on process evaluation and was designed with a four-point Likert type satisfaction scale. This evaluation instrument measured teacher effectiveness, the learning environment, and teaching methods implemented. The instrument was given to learners after each of the four workshops.

The second evaluation instrument was an outcome evaluation tool. This instrument used a 10-point, five-item semantic differential scale as displayed in Table 1 for evaluating the impact on participants' leadership development. Cronbach's reliability coefficient of this five-item semantic differential scale ranged from 0.96 to 0.98 for recording participant' ability to understanding self, acquiring resources, building partnerships, marketing Extension, and managing personnel.

The score on this scale can range from 50 = fully capable of executing the task to 5 = not capable at all to execute the task. This instrument was administered before the course (four sessions), in the middle of the course, and at the end of the course.

Table 1.

Outcome Evaluation Semantic Differential Scale

Confident	10	9	8	7	6	5	4	3	2	1	Unsure
Possible	10	9	8	7	6	5	4	3	2	1	Impossible
Proficient	10	9	8	7	6	5	4	3	2	1	Unskilled
Encouraging	10	9	8	7	6	5	4	3	2	1	Daunting
Certain	10	9	8	7	6	5	4	3	2	1	Uncertain

The scale was used with the following five statements to collect data about participants' ability to understanding self, acquiring resources, building partnerships, marketing Extension, and managing personnel, respectively.

1. Understanding your strengths and weaknesses and complete a professional development plan for attainment of desired competencies needed to serve as an effective County Extension Director
2. Acquisition of funding and budget management for strong Extension programming in your county
3. Building win-win partnerships with potential stakeholders and Extension colleagues to address a priority issue in your county
4. Reporting and marketing a Cooperative Extension program success through diverse media and communication channels leading to a strong stakeholder support base in your county
5. Hiring, mentoring, supervising, and managing Extension agents, staff and volunteers for delivering valued quality Extension programs in your county

Findings and Discussion

The 25 new and aspiring county Extension directors taking the course included 57% male participants, and their Extension experience ranged from 3 to 29 years, with the mean of 13.7 years. All learners had a Masters degree, and 65% of the participants took the course for graduate credit. The remaining participants took the course for no credit. Findings indicate that 68% of the participants had taken at least one leadership development course, while 32% had no formal education in leadership development.

Table 2.

Comparison of Participants' Leadership Abilities at the Beginning, in the Middle, and at the End of the Program

	Before Program (n=25)	In Middle of the Program (n=19)	At the End of the Program (n=17)
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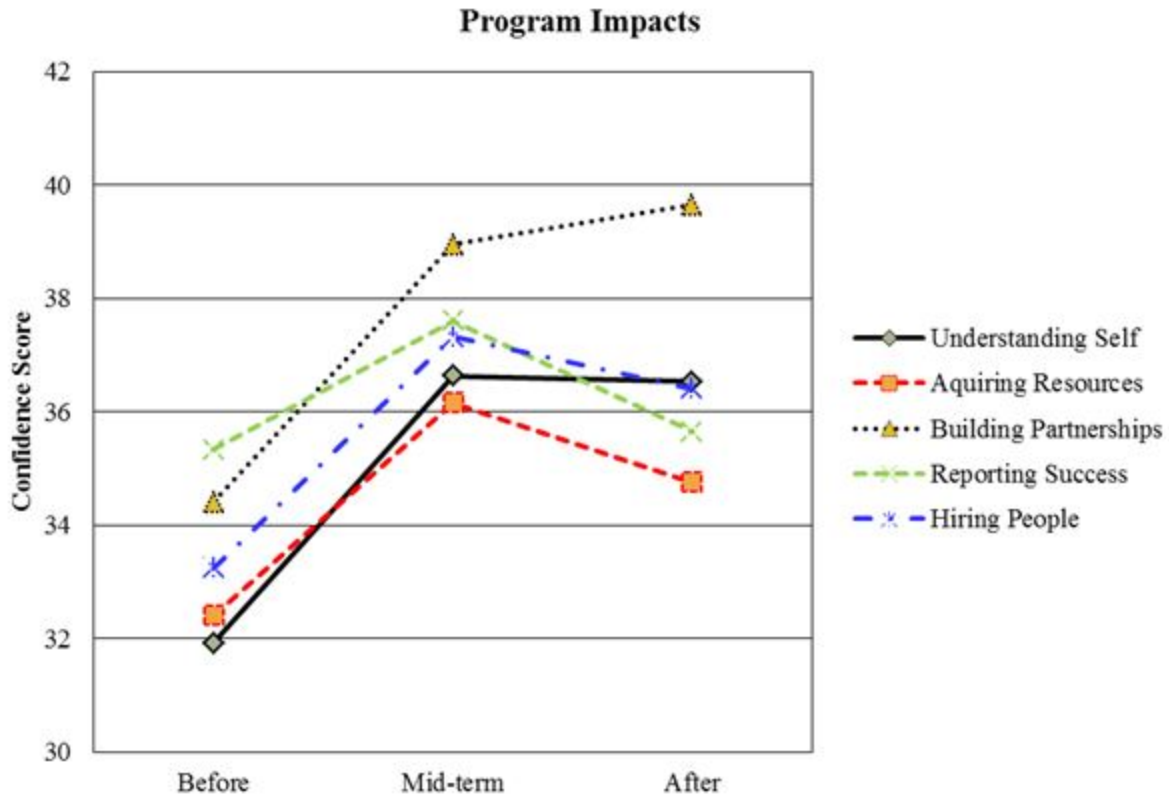
Participants' Ability to:	M		SD		M		SD	
	M	SD	M	SD	M	SD	M	SD
Understanding Self	31.9	9.47	36.6*	5.27	36.5*	6.59		
Acquiring Resources	32.4	11.76	36.2*	5.27	34.8	8.44		
Building Partnerships	34.4	8.2	39.0*	5.24	39.6*	5.54		
Reporting and Marketing the Success of Extension	35.3	7.98	37.6*	4.58	35.7	6.09		
Hiring, Mentoring, Supervising, and Managing Agents and Staff	33.2	8.95	37.4*	4.96	36.4	8.58		
Note: * These means are statistically significant at $p < 0.5$ level compared to the means before the program.								

The evaluation data confirmed that participants' abilities to understanding self, acquire resources, build partnerships, market Extension, and manage personnel developed significantly by the middle of the program (Table 2). At the end of the program, only their ability to understand self and build partnerships remained at significantly higher levels compared to their abilities at the beginning.

Their heightened abilities of acquiring resources, marketing Extension, and managing personnel didn't remain by the end of the program (Figure 2). However, standard deviations were smaller for all measured abilities in the middle and at the end of the program compared to beginning. The finding indicates there was a great variation in their levels of abilities at the beginning. However, these abilities leveled among the participants by the middle of the program.

Figure 2.

Changes in Participants' Abilities During the Program



Each of the four workshops was evaluated by soliciting participants' inputs to improve the program. Participants' evaluation of each workshop on a four-point Likert scale is summarized in Table 3. Data indicate that participants were satisfied with the presentation quality of instructors and the overall quality of the workshops. These findings were used for program revisions. For example, participants' rating of the training facility was low for the first training workshop. The training facility was changed for subsequent workshops. Evaluation data reflect that participants were pleased with facility changes.

Table 3.
Process Evaluation

Participants' Levels of Satisfaction with:	1st Workshop		2nd Workshop		3rd Workshop		4th Workshop	
	M	SD	M	SD	M	SD	M	SD
The relevance of information to their needs	3.0	0.63	2.8	0.50	3.2	0.66	2.9	0.73
Presentation quality of instructor(s)	3.3	0.65	3.3	0.57	3.3	0.69	3.4	0.65
Large group session followed by cohort dialogue	3.3	0.47	3.1	0.53	3.3	0.48	3.2	0.58
Preparation before Session	3.3	0.47	2.5	0.51	3.1	0.60	3.2	0.44
Training facilities	2.2	0.60	3.1	0.65	3.7	0.48	3.6	0.51

Meeting your learning expectation	2.8	0.60	3.0	0.32	3.2	0.54	3.2	0.58
The overall quality of the educational workshop	3.1	0.57	3.1	0.31	3.2	0.64	3.2	0.58
Scale: 1=Not Satisfied, 2=Somewhat Satisfied, 3=Satisfied, 4=Very Satisfied								

In addition to the scale, the following four questions were used to receive participants' feedback. The answers to these four subsequent questions were analyzed and used for making needed changes and improving workshops 2, 3, and 4.

1. What was the most important thing you learned from the workshop?
2. What did you like the most about the training workshop?
3. What did you like the least about the training workshop?
4. How could this training be further improved?

After each workshop session the responses to the first two questions helped the facilitators to determine if topics need further attention during the next session or if an individual needed on-on-one coaching. The responses to the last two questions helped facilitators know what to change or add during the next session. These ideas were incorporated throughout the four workshop meetings and used to continuously improve the next institute's planning.

Conclusions

Revised Curriculum, Methods, and Leadership Teaching and Learning Theory

Study and evaluation of the leadership institute showed that the changes made to the curriculum, methods used, and the collaborative learning theories improved the learning and adoption of concepts and practices in leadership development. The use of four cohort teams enabled collaborative learning, teamwork, critical thinking, and action, and the teams continued to work together after the institute ended.

The selection of District Directors (who were the supervisors for the learners) as cohort facilitators was reported as successful. District Directors reported developing good understanding of the learners' strengths, and the learners reported developing trust in their relationship with their District Directors. Both groups expressed the positive value of developing a stronger relationship that was mutually beneficial based on their follow-up dialogue with participants and peers.

Course Assignments and Performance

The course assignments were evaluated as meaningful and helpful in understanding leadership and

the real situations they may face when leading their county faculty and staff. However, a few learners reported that they did not have time and did not take time to prepare before each workshop. These learners did not perform as well as prepared colleagues.

Learning and Practice Changes Documented

All the learners were able to improve leadership skills and practices in all five competency areas by the middle of the institute. However, fewer improvement occurred from the middle to the end of the course. When District Directors were asked about this finding, they thought the last workshop session was more stressful. Each cohort team presented their final project to Extension administration and their institute peers. An hour later they were asked to complete the final evaluation.

District Directors believed that learners were anxious to go home and were tired. As a result, their cohort members either rushed to finish, or did not respond with much thought. We observed that there were fewer final evaluations (70%) completed than during previous workshop sessions. This observation highlights the need for further study and improvement of evaluation collection methods, and timing of evaluation submissions.

The greatest amount of change occurred in participants' ability to understand self, and build partnerships. District Directors reported that their cohort members had more opportunities to practice these skills on the job during the course, and cohorts have continued to work collaboratively since the end of the institute. The cohort component was seen as a successful way to build partnerships within Extension. Other factors may have determined the outcomes, such as amount of activity time spent in each competency area.

Recommendations and Lessons Learned

In the future we plan to survey the graduates of this institute at 6 months and 1 year after the leadership institute ends. A 6-month evaluation would give a more accurate record of practices and competencies achieved and adopted permanently. In addition, it would be helpful to assess the achievement of learning and practice change in relation to the level of pre-preparation each learner reports.

The curriculum should be continually reviewed and revised based on the process evaluation findings to assure that enough time is spent teaching concepts and practicing implementation of each of the five competencies. Continuous training of presenters is essential so the institute will continue to be a collaborative learning environment. The same goes for hands-on learning activities such as case studies, projects, and real-life simulations to maintain the momentum of collaborative experiential learning throughout the institute.

For future institutes, a more structured collection of evaluations should be implemented so that it is clear which learners completed evaluations and who failed to complete an evaluation. Those who did not complete evaluations should be given a second opportunity to provide input. Collection and records of completion should be the responsibility of one leadership institute team member.

Limitations and Suggestions for Future Research

The results of the study were limited to learners who completed the evaluations. At the end of the last workshop only 17 of 24 learners (70%) completed the evaluations. In addition, the amount of time spent learning and practicing skills was not tracked. Tracking requires attention for future institutes and could also be a factor affecting outcomes.

We failed to evaluate the role of online learning in relationship to the performance of individuals and teams. Continued study should be conducted to add to the knowledge of collaborative learning and practice change and the role of face-to-face learning and online learning has on individuals and teams.

We discovered the importance of examining age, experience, and factors such as taking the course for credit or no credit, and past leadership training. We believe if these are evaluated in the future, they will be correlated with performance level and possibly practice changes. We plan to evaluate these factors in the future.

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