

Evaluating a New and Aspiring County Extension Director Leadership Education Program: Determining Outcomes and Needed Improvements

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Abstract

This leadership education evaluation study explored the leadership development outcomes of potential county extension directors and the ways to improve the program. The leadership education program aimed to improve participants' leadership abilities in understanding self, building relationships and managing resources. The analysis of quantitative and qualitative data confirmed that the leadership training institute was effective in building participants' leadership skills and improving leadership behavior. The incorporation of participants'

learning needs into the program, use of hands-on experiential learning activities and problem solving activities combined with small group discussions were the contributing factors for the success of this leadership education program. The participants suggested the use of more hands-on and problem solving activities, team building exercises and condensing the time gap between the pre and post sessions as strategies for further improvement of this program.

Introduction

A systematic evaluation of leadership development programs is becoming an important part of leadership education. When resources are scarce and funding agencies are demanding program impacts for accountability, the demand for evaluation is obvious. The current economic downturn has forced us to evaluate leadership education programs for accountability and improvement. The literature highlights the significance of evaluating leadership education programs for fiscal responsibility (Blackwell, Cummins, Christine, Townsend, & Cummings, 2007). The focus of this evaluation study is to determine outcomes and needed improvements of a leadership education program presented to a group of potential county extension directors.

According to the Society for Human Resource Management (2005), the Baby Boomer generation will reshape the workforce as they retire. These transitioning demographics of today's society clearly indicate the need for leadership education (Astin & Astin, 2000). For Cooperative Extension nationally, the impact is being seen in the growing transition of leaders. State extension services are faced with the challenge of replacing large numbers of supervisors at all levels of the system as the last of the baby boomer generation retires. Byrd and Owen found (2009) through an informal survey of Human Resource leaders working for extension in southern states that there was a unanimous belief that building bench strength for leadership positions is a critical priority for extension. Building "effective leadership is central to an organization's success" (Braun, Nazlic, Weisweiler, Pawlowska, Peus, & Frey, 2009, p. 195). The county extension director provides the overall leadership at the county level for extension programming, personnel and budget management, and maintaining public relationships with the county government and other key stakeholders. Effective county extension directors can be considered as leaders as well as managers (Rudd, 2000). A study done with county extension directors in California revealed that these leadership roles are inadequately supported (Campbell, Grieshop, Sokolow & Wright, 2004). Ensuring that employees are prepared to become county extension directors as leaders and managers is vital for Cooperative Extension to be successful in meeting the future needs of the citizens.

Building Leadership

Leadership education programs can be used to develop leadership in persons and organizations. (Eich, 2008; Rost & Barker, 2000). According to Day (2000), leadership development is “expanding the collective capacity of organizational members to engage effectively in leadership roles and processes” (p. 582). North Carolina Cooperative Extension (1999) established the *Blue Ribbon Commission* and completed an exhaustive study of the human development needs of extension. One outcome of that study was the creation of a leadership development program to address future leadership needs of the local county extension office. This program, the New and Aspiring County Extension Director Leadership Institute, was designed to build a strong bench for the county extension director position among the best of field faculty working for the organization. The program uses a content curriculum based on core competencies identified for county extension directors (Owen, 2004) and works to achieve three broad changes in participants’ leadership skills and behaviors: (a) A greater understanding of themselves, their strengths and weaknesses; (b) Improved skills in building and maintaining strong interpersonal relationships; and, (c) Improved ability in managing both physical and human resources as the leader of an organizational unit. The available literature stressed the significance of these three competency areas for someone to be successful in county extension director role (Ladewig & Rohs, 2000; Radhakrishna, Yoder, & Baggett, 1994; Rudd, 2000; Whiteside & Bachtel, 1987).

Leadership education is a strategy used to prepare people and groups of people to manage the difficult challenges they have to deal with (Hannum, Martineau, & Reinelt, 2007). According to Stech (2008), “the ideal way to create good leaders would be to devise a program in which education, training, and development processes take place” (p. 45). The New and Aspiring County Extension Director Leadership Institute was presented in four intensive educational sessions over a period of nine months to achieve desired results. Each of the four sessions consisted of two days along with evening work. The extended period of time between the sessions provided an opportunity for participants to apply what they learned and share their leadership experience. The leadership institute used a variety of presenters and teaching strategies to maximize the learning outcomes. Hands-on experiential learning activities and problem solving activities combined with small group discussions were used as educational strategies to enhance the learning outcomes of participants. This leadership program evaluation study was implemented in 2008 to explore the outcomes in three broad constructs of understanding self, building relationships, and managing resources. “Leadership development evaluation brings together leadership development and evaluation in a way that expands and deepens the dialogue regarding what constitutes effectiveness in both” (Hannum, Martineau, & Reinelt, 2007, p. 7). As Patton (2002) described, “program evaluation is the systematic collection of information about the activities, characteristics, and outcomes of programs to make judgment

about the program, improve program effectiveness, and/or inform decisions about future programming” (p. 10).

Purpose

The purpose of this evaluation study was to determine the outcomes of the leadership development institute presented to a group of potential county extension directors. The study sought answers to the following questions:

1. Did the leadership institute achieve its objectives?
2. What are the major outcomes of the leadership institute?
3. What specific changes are needed to further improve future leadership institutes?

This article presents how the leadership program evaluation study documented the outcomes of the leadership program and contributed to its improvement.

Methods of Evaluation

This was a descriptive evaluation study conducted with the participants in the leadership institute. Since there was no validated instrument especially designed for the county extension directors’ leadership program evaluation, the authors developed a survey instrument to record participants’ leadership skills and behaviors at three stages during the leadership institute. There were two scales in the instrument. One was to record leadership skills relating to understanding self, building relationships and managing resources. The other scale was to record participants’ leadership behavior related to these underline leadership constructs.

The leadership skill development measuring scale contained 21 items and a 5-point Likert-type scale ranging from 1 being not confident to 5 being very confident. This scale documented participants’ skill by recording their levels of confidence to carry out required leadership tasks in the county extension director position. The participants were asked to rank their levels of confidence to carry out each of the listed 21 tasks on this scale. These 21 specific tasks are based on the core competencies required for county extension directors. Of the 21, items on this scale, five items recorded participants’ skill development relating to understanding self, six items recorded building relationship skills and 10 items recorded managing resources.

The behavior recording scale was consisted of nine core behaviors essential for someone to be successful in the county extension director position and a 5-point Likert-type scale. The 5-point Likert-type scale ranged from 1 (I am not interested about this) to 5 (I am doing this regularly). The overall leadership behavior on this 9-item scale ranged from 9 being weak leadership behavior to 49 being a very strong leadership behavior.

In addition to these two scales, there were few open-ended questions to identify participants' learning expectations, what they learned the most and suggestions for further improvement of the institute. Participants' learning expectations were used to tailor the training institute for their learning needs. A panel of extension education experts reviewed the data collection scales and established the content validity. The Chronbach alpha of the 21 item skill recording scale and the 9-item behavior recording scale were respectively .92 and .86.

The survey instrument was used to collect data from the 15 participants in the leadership institute at three different stages of the 9-months long training institute. The first data collecting point was the first day of the training institute. The second data collecting point was at the end of the third session after four months. The final data collecting point was the end of the institute after 9-months. All participants completed the pre, mid-term and post-evaluations. We collected data from the 15 participants and entered into the SPSS program for analysis.

In addition to this quantitative survey, a qualitative questionnaire was administered to participants at the end of the training institute to get their feedback about the training. The participants' comments to these questions were analyzed and summarized to identify themes relating to the training and leadership development.

Results and Discussion

An important objective of the pre-evaluation was to collect necessary information for tailoring the program to meet the learning needs of the participants. For this purpose, a question was asked at the beginning of the program to identify participants' learning expectations. The analysis of the participants' answers revealed the following learning expectations:

1. Learning to analyze ones' own strengths and weaknesses relating to the leadership skills required for county Extension directors. For example, a participant said, *"I want to learn about my strengths and weaknesses in the area of leadership and apply techniques to improve as a leader."* Another participant said, *"I need to better understand the area that I need to work on to be a better leader."*
2. Development of skills necessary for managing personnel and other resources. For instance, a participant said, *"I would like to improve my personnel management skills to be able to coach, lead and manage an Extension office effectively."* Another participant said, *"I would like to develop skills needed to manage conflicts, handle personnel issues and develop budgets."*
3. Building public relationship skills. For example a participant said, *"I need to develop skills needed to better serve my staff and the public."* Another

participant said, “*I want to improve and enhance my leadership skills to allow me better serve Extension staff and the public as needed.*”

Understanding Self

The participants’ confidence to understand ‘self’ was recorded using five items on a 5-point Likert scale. The aggregated value on this scale ranged from 5 being very low level of confidence to 25 being a very high level of confidence in their ability to appraise themselves. The mean values on this scale at the pre-evaluation, midterm-evaluation and the post-evaluation were respectively 17.5, 17.7 and 21.9 as summarized in Table 1. Findings indicate that participants developed their confidence to understand their strengths and weaknesses and recognize potential career paths.

Table 1
Development of Confidence for Understanding Self (N=15)

Variable	Pre-Evaluation		Midterm-Evaluation		Post-Evaluation	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
1. Understand your career potential*	3.6	.632	3.7	.594	4.5	.516
2. Understand your strengths*	3.5	.640	3.5	.640	4.5	.516
3. Understand your weaknesses*	3.4	.828	3.3	.884	4.5	.516
4. Setting priorities*	3.7	.724	3.9	.743	4.2	.561
5. Recognize potential career paths based on your career goals*	3.3	.817	3.3	.900	4.2	.775
Overall confidence for understanding self (Scale: 5=lowest, 25=highest)	17.5	2.33	17.7	2.46	21.9	1.96

Note. *Scale: 1=not confident, 2=mildly confident, 3=somewhat confident, 4=confident, 5=very confident

A paired sample *t*-test was used to compare participants’ pre and post mean confidence levels for understanding self. Results indicate that participants’ confidence to understand self improved significantly from pre-evaluation to post-evaluation as summarized in Table 2.

Table 2
Comparison of Participants' Pre and Post Confidence Levels for Understanding Self (N=15)

Variable	Pre-Evaluation <i>M</i>	Post-Evaluation <i>M</i>	<i>t</i>	<i>p</i>
Overall confidence for understanding self (Scale: 5=lowest, 25=highest)	17.5	21.9	4.854	.001*

Note. *Significant at $p < .05$, 2-tailed

Building Relationships

Bass (1990) described interpersonal competency as a significant leadership skill. The level of participants' confidence for building interpersonal relationships was recorded by using six items with a 5-point Likert scale. The aggregated value on this scale ranged from 6 being low level of confidence to 30 being very high level of confidence in their ability for building relationships. The mean values on this scale at the pre-evaluation, midterm-evaluation and the post-evaluation were respectively 18.7, 21.2 and 24.9 as summarized in Table 3. The means of all six items increased from pre-evaluation to post-evaluation indicating that the participants were able to develop their confidence levels relating to each of these skills. For example, the mean of the participants' level of confidence in their ability to effectively network with others changed from 3.8 at the pre-test to 4.4 at the post-test. Leadership development involves "helping people to understand, in an integrative way, how to build relationships to access resources, coordinate activities, develop commitments and build social networks" (Iles & Preece, 2006, p. 323).

Table 3
Development of Confidence for Building Relationships (N=15)

Variable	Pre-Evaluation		Midterm-Evaluation		Post-Evaluation	
	<i>M</i>	<i>SD</i>	<i>M</i>		<i>M</i>	<i>SD</i>
1. Network with others effectively*	3.8	.561	3.8	.561	4.4	.632
2. Build effective teams to achieve a common goal*	3.1	.516	3.7	.799	4.1	.640
3. Lead others effectively*	2.9	.594	3.3	.594	4.0	.378
4. Manage conflicts effectively*	2.9	.704	3.1	.884	4.0	.378
5. Recruit effective advisory leaders*	3.0	.926	3.7	.617	4.1	.640
6. Retain effective advisory leaders*	2.9	.743	3.7	.724	4.2	.676
Overall confidence for building relationships (Scale: 6=lowest, 30=highest)	18.7	2.41	21.2	2.93	24.9	2.61

Note. *Scale: 1=not confident, 2=mildly confident, 3=somewhat confident, 4=confident, 5=very confident

The overall confidence for building relationships before and after the training institute was compared by using paired sample *t*-test. The results indicate that the mean of overall confidence for building relationships improved significantly from pre-evaluation to post-evaluation as summarized in Table 4.

Table 4
Comparison of Participants' Pre and Post Confidence Levels for Building Relationships (N=15)

Variable	Pre-Evaluation <i>M</i>	Post-Evaluation <i>M</i>	<i>t</i>	<i>p</i>
Overall confidence for building relationships (Scale: 6=lowest, 30=highest)	18.7	24.9	6.924	.001*

Note. *Significant at $p < .05$, 2-tailed

Managing Resources

A 10-item instrument with 5-point Likert scale recorded participants' level of confidence in managing resources. The overall value on this scale ranged from 10 being the lowest level to 50 being the highest level of confidence in managing resources. The mean values on this scale for pre, midterm and the post-evaluation

were respectively 27, 35 and 41.7 as summarized in Table 5. The mean values of all 10 items in the scale improved from pre-evaluation to post-evaluation. There was a gradual improvement of participants' confidence levels in managing resources from pre-evaluation to the midterm-evaluation and then to the post-evaluation. Building someone's ability to manage resources including people is important because this enables someone to lead and manage a group efficiently and effectively (Mintzberg, 1997).

Table 5
Development of Confidence for Managing Resources (N=15)

Variable	Pre-Evaluation		Midterm-Evaluation		Post-Evaluation	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
1. Manage personnel*	2.9	0.743	3.4	0.632	4.1	0.961
2. Conduct performance reviews*	2.5	1.187	3.5	0.834	4.1	0.884
3. Coach employees in their performance*	2.5	0.834	3.5	0.650	4.1	0.834
4. Interview potential employees*	2.9	1.060	3.3	0.704	4.3	0.724
5. Recruit skillful employees*	2.9	0.915	3.7	0.976	4.3	0.594
6. Manage the organizational change effectively*	2.9	0.640	3.5	0.743	3.9	0.704
7. Develop county Extension budget*	2.3	1.163	3.3	1.234	4.1	0.743
8. Manage county Extension budget*	2.5	1.125	3.5	1.246	4.3	0.704
9. Comply with human resource management policy*	2.9	1.100	3.9	0.594	4.3	0.884
10. Make effective organizational decisions*	2.9	0.743	3.6	0.632	4.3	0.884
Overall confidence for managing resources (Scale: 10=lowest, 50=highest)	27.0	7.12	35.0	5.57	41.7	5.59

Note. *Scale: 1=not confident, 2=mildly confident, 3=somewhat confident, 4=confident, 5=very confident

Participants' overall confidence for managing resources before and after the training institute was compared by using paired sample *t*-test. The results indicate that participants' confidence in managing resources improved significantly as summarized in Table 6.

Table 6
Comparison of Pre and Post Confidence Levels for Managing Resources (N=15)

Variable	Pre-Evaluation <i>M</i>	Post-Evaluation <i>M</i>	<i>t</i>	<i>p</i>
Overall confidence for managing resources (Scale: 10=lowest, 50=highest)	27.0	41.7	8.280	.001*

Note. *Significant at $p < .05$, 2-tailed

Changes in Leadership Behavior

A nine-item instrument recorded the leadership behavior of participants. The value on this scale ranged from 9 being the lowest level to 45 being the highest level of leadership behavior. The mean value for the overall leadership behavior on this scale at the pre, midterm, and the post-evaluation were respectively 26.3, 33.4, and 37 as summarized in Table 7. The mean value of every item in the scale increased from pre-evaluation to the post-evaluation.

Table 7
Development of Participants' Leadership Behavior (N=15)

Variable	Pre-Evaluation		Midterm-Evaluation		Post-Evaluation	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
1. Reviewing my career goals*	3.2	0.775	3.6	0.910	4.2	0.718
2. Analyzing my personal strengths and weaknesses*	3.3	0.817	3.9	0.915	4.3	0.651
3. Learning to address my weaknesses*	3.1	0.834	3.6	0.507	4.2	.718
4. Applying time management strategies*	3.4	0.910	3.8	0.706	4.3	0.779
5. Applying conflict management techniques*	2.9	0.594	3.5	0.640	3.8	0.937
6. Building effective teams to achieve a common goal*	3.1	0.834	3.5	0.743	3.9	0.669
7. Building social networks*	3.8	0.775	4.1	0.799	4.1	0.793
8. Building management skills*	3.3	0.817	4.0	0.655	4.3	0.651
9. Leading others effectively*	3.2	0.775	3.5	0.640	3.8	0.718
Overall leadership behavior (Scale: 9=lowest, 45=highest)	25.6	4.188	33.4	4.033	37.0	4.862

Note. *Scale: 1=I am not interested about this, 2=I am thinking about this, 3=I am trying this sometimes, 4=I am doing this most of the time, 5=I am doing this regularly

Paired sample *t*-test was used to compare participants' overall leadership behavior before and after the training institute. The comparison of pre and post means indicates that participants' leadership behavior improved significantly as summarized in Table 8.

Table 8

Comparison of Participants' Pre and Post Overall Leadership Behavior (N=15)

Variable	Pre-Evaluation <i>M</i>	Post-Evaluation <i>M</i>	<i>t</i>	<i>p</i>
Overall leadership behavior (Scale: 9=lowest, 45=highest)	25.6	37.0	6.455	.001*

Note. *Significant at $p < .05$, 2-tailed

Most Significant Contribution to Build Participants' Leadership Capacity

At the end of the training program, participants were asked to describe the most significant contribution for building their leadership capacity. Participants' responses were analyzed and identified the following major contributions toward building their leadership capacity:

1. Understanding self – A participant said, “*Learning more about my personality, and style of leadership that will help me identify areas of weaknesses and areas I need to grow in*” was the great contribution. Another participant said, “*Self examination, understanding leadership vs. management, made me realize I didn't know all I thought I knew.*”
2. Building relationships – A participant said, “*The network I developed through the interactive exercises and renewed enthusiasm for an Extension career vs. job*” was the significant contribution. Another participant said, “*The group activities that required me to mingle and find a new partner each time helped broaden my social network.*”
3. Managing resources – A participant said, “*The combination of personality evaluation, human resources, budgeting and leadership training provided me with a fantastic overview of what it involved in being a county Extension director. It was very enlightening and sobering!*” Another participant said, “*Learning more about hiring and managing staff*” was the most significant learning contribution.

Most Significant Contribution Impact on Participants' Current Work

Participants were asked how the training impacted their current work. Their responses were analyzed to identify major content themes. The following five major areas of impacts were identified:

1. Enabled participants to do a reflective self assessment of their own leadership situation: A participant said, “*This training showed me areas*

that I need to improve upon personally and professionally. I have started applying some of the principles and techniques that I learned in this series of workshops and have become more organized. I feel like I have become more effective through applying these to my county program.” Another participant said, *“This leadership training has given me the courage to lead from where I am!”*

2. Broadened participants’ vision and their ability to see the big picture of the leadership of county extension director role: A participant said, *“This training made me think about the total picture when planning, implementing, and making myself accountable.”* Another participant said, *“It made me visionary; cautious about how I spoke and acted.”*
3. Enhanced participants’ ability to building relationships and mentoring others: A participant said, *“I actively try to mentor others. I look for opportunities to do so. Previously, I had only done it if someone asked. Now, I look for ways to help others develop, especially in my office.”* Another participant said, *“The insight I received from this allowed me the direction to handle issues with an unmotivated staff member. After following the procedures that were recommended, this staff member has now drastically improved her overall attitude and performance. Leading is about coaching & helping people become the best they can be.”*
4. Enabled participants to play different roles as a leader: A participant said, *“In situations where I am the leader, I know how to be more effective. Where I am a team member, I can now contribute more effectively and help others to insure success of the team.”* Another participant said, *“I gained new knowledge and ideas of how to deal with those I supervise.”*
5. Built Participants’ Management Ability– A participant said, *“I was dealing with a challenging situation of supervising an employee. I was able to immediately use what I learned to more effectively address the situation. I have more confidence that I can better handle other similar challenging supervisory issues.”* Another participant said, *“Personnel management techniques I am using in my current situation and developing more confidence to manage challenging situations and deal with them as they occur were the significant skills I learned.”*

Application of What Participants Learned

Participants were asked how they plan to apply what they learned and found that their responses were centered on one major theme. Almost all participants expressed their readiness to step up for the county extension director role with confidence. A participant said, *“I am now much more comfortable with the idea of being a county Extension director. In the past, I would shy away from the opportunities to serve in leadership roles, but now I will not only feel comfortable in serving, but I will actively seek those positions, confident in my ability to serve.”* Another participant said, *“I have already been applying these principles*

as I took time to understand and internalize them. My staff co-workers have noticed a change. If I become a county Extension director, I hope that I am capable of leading with wisdom and use what I've learned."

Suggestions to Further Improve the Leadership Program

The participants made the following suggestions for further improvement of the leadership program:

1. Increase the experiential learning opportunities with hands-on activities. A participant said, *"Need more hands-on group activities."*
2. Provide networking opportunities with team building exercises. A participant said, *"Need more network time."*
3. Increase the problem solving sessions with experienced county extension directors. A participant said, *"Spend more time on personnel issues. Need more county Extension director experiences with actual problem solving."*
4. Duration of the training institute should be condensed for four months instead of expanding it for nine months. For example, a participant said *"put the 4 week sessions closer together – 4 month duration instead of 9 months. Summer gap was too long."*

Conclusions

Evaluation results confirm that the leadership training program achieved its objectives. A comparison of participants' leadership skills before and after the program clearly indicates that the program was effective in building participants' leadership skills and improving their leadership behaviors. This training made a significant impact on participants by building their leadership skills and improving behaviors in three major competency areas namely understanding self, building relationships and managing resources. These are essential leadership competencies for the county Extension director role (Ladewig & Rohs, 2000; Radhakrishna, Yoder, & Baggett, 1994; Rudd, 2000; Whiteside & Bachtel, 1987). The analysis of qualitative data further confirmed that the program has made a considerable impact on participants' current leadership behaviors. If the leadership program is successful, participants should be able to apply the leadership skills they learned in their job and create desired results (Peters & Baum, 2007). The participants of this program learned to integrate leadership skills and started to work in their leadership roles with full confidence. A participant said, *"I am now much more comfortable with the idea of being a county Extension director."* The use of hands-on experiential learning activities and problem solving activities combined with small group discussions and allowing time for participants to apply what they learned can be considered as the educational techniques contributing toward the success of the leadership program.

The pre-evaluation was used to determine participants' learning expectations relating to the county extension director role. The effective use of evaluation contributes to achieve desired results by being deliberate about needed changes (Hannum, Martineau, & Reinelt, 2007). As a result of this, the program managers were able to tailor the leadership education program for meeting participants' learning needs. The midterm evaluation was helpful for program managers to identify the strengths and weaknesses of the program and enabled them to make necessary modifications. Participants' suggestions for future training improvement are useful for making needed changes for the next round of training. The most important suggestions were:

- More hands-on activities.
- Team building exercises.
- Problem solving sessions.
- Condensing the duration of training from nine to four months.

Implications

The context of this leadership training evaluation study is in extension. However, the process used in this evaluation has implications for other areas of leadership evaluation. The focus of this evaluation study was to document the outcome of leadership education relating to understanding self, building relationships and managing resources. "Educators and practitioners need to be intentional about clearly identifying the focus of the intervention and related learning outcomes in order to align assessment measures to accurately gauge impact" (Rosch & Schwartz, 2009, p. 186). Aligning the focus of the evaluation with the objectives of the leadership training sets the basis for planning to document the outcomes of a leadership education program. This is the first implication of this study and it can be applied for other contextual areas of leadership education.

The second implication is the development of a valid and reliable assessment tool with constructs related to the key elements of leadership education program. It is necessary to use a variety of tasks related to the targeting leadership areas to triangulate the impacts of training. Rosch and Schwartz (2009) described that leadership educators "who wish to build a foundation of accurate assessment of learned leadership skill must utilize an assessment tool that explicitly reflects the learning outcomes embedded in the intervention" (p. 186). This implication is applicable to any leadership education program evaluation for ensuring the triangulation of outcomes and accuracy of findings.

The third implication of this study is that asking participants' learning expectations at the beginning and incorporating their inputs into the training program, educators can help to meet the learner needs. This is very helpful for leadership educators to increase learning outcomes and achieve the cost effectiveness of leadership education programs. The midterm evaluation has

implications for leadership educators to review the progress and make necessary modifications for rest of the program.

The fourth implication is the use of quantitative and qualitative evaluations to triangulate the outcomes of the program realistically. According to Patton (2002), qualitative inquiries provide in-depth information about the leadership program. By combining quantitative and qualitative methods, leadership educators will be able to document impacts with numbers and in-depth stories.

Limitation of this evaluation study is its small sample size. Further research is needed to evaluate the long-term impacts of this type of leadership education programs on participants' continued leadership behavior.

References

- Astin, A. W., & Astin, H. S. (2000). *Leadership reconsidered: Engaging higher education in social change*. Battle Creek, MI: W. K. Kellogg Foundation.
- Bass, B. M. (1990). *Hand book of leadership: Engaging higher education in social change*. Battle Creek, MI: W. K. Kellogg Foundation.
- Blackwell, C., Cummins, R., Christine, D., Townsend, C. D., & Cummings, S. (2007). Assessing perceived student leadership skill development in an academic leadership development program. *Journal of Leadership Education Volume 6(1)*, 39-58.
- Braun, S., Nazlic, T., Weisweiler, S., Pawlowska, B., Peus, C., & Frey, D. (2009). Effective leadership development in high education: Individual and group level approaches. *Journal of Leadership Education*, 8(1), 195-206.
- Bryd, H., & Owen, M.B. (2009). *Succession Planning*. Invited presentation at the National Extension and Research Administrative Officers' Conference. Baltimore, MD.
- Campbell, D., Grieshop, J., Sokolow, A., & Wright, J. (2004). Supporting the critical administrative leadership role of county directors. *Journal of Extension*, 42(2). Article 2FEA3. Retrieved December 23, 2009, from <http://www.joe.org/joe/2004april/a3.php>
- Day, D. (2000). Leadership Development: A Review in Context. *Leadership Quarterly*, 11(4), 581-611.
- Eich, D. (2008). A grounded theory of high-quality leadership programs: Perspectives from student leadership development programs in higher education. *Journal of Leadership and Organizational Studies*, 15(2), 176-187.
- Hannum, K. M., Martineau, J. W., & Reinelt, C. (Eds.) (2007). *The handbook of leadership development evaluation*. San Francisco: Jossey-Bass.
- Iles, P., & Preece, D. (2006). Developing leaders or developing leadership? The academy of chief executives' programs in the north east of England. *Leadership* 2, 317-340.
- Ladewig, H., & Rohs, F. R. (2000). Southern Extension leadership development: Leadership development for a learning organization. *Journal of Extension*,
-

38(3), Article 3FEA2. Retrieved August 24, 2009, from
<http://www.joe.org/joe/2000june/a2.php>

Mintzberg, H. (1997). The manager's job: Folklore and fact. In R. P. Vecchio (Ed.), *Leadership: Understanding the dynamics of power and influence in organizations*. Notre Dame, Indiana: University of Notre Dame Press.

North Carolina Cooperative Extension. (1999). *Blue ribbon commission on staff development and training: Strategic analysis and recommendations North Carolina Cooperative Extension Service*. Raleigh: North Carolina State University.

Owen, M. (2004). Defining key sub-competencies for administrative county leaders. *Journal of Extension*, 42(2), Article 2RIB3. Retrieved April 24, 2009, from <http://www.joe.org/joe/2004april/rb3.php>

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, California: Sage.

Peters, L., & Baum, J. (2007). The importance of local context in leadership development and evaluation. In K. M. Hannum, J. W. Martineau and C. Reinelt (Eds.), *The Handbook of Leadership Development Evaluation* (pp. 261-283). San Francisco: Jossey-Bass.

Radhakrishna, R., Yoder, E. P., & Baggett, C. D. (1994). Leadership effectiveness of county Extension directors. *Journal of Extension*, 32(2), Article 2RIB2. Retrieved August 24, 2009, from <http://www.joe.org/joe/1994august/rb2.php>

Rosch, D. M., & Schwartz, L. M. (2009). Potential issues and pitfalls in outcomes assessment in leadership education. *Journal of Leadership Education*, 8(1), 177-193.

Rost, J. C., & Barker, R. A. (2000). Leadership education in colleges: Toward a 21st century paradigm. *Journal of Leadership Studies*, 7(1), 3-12.

Rudd, R. (2000). Leadership styles of Florida's County Extension Directors: Perceptions of self and others. *Proceedings of the 27th Annual National Agricultural Education Research Conference*. Available at <http://pubs.aged.tamu.edu/conferences/NAERC2000/web/b3.pdf>

Society for Human Resource Management (2005) *SHRM® special expertise panels: Trends report*. Retrieved January 10, 2010 from

[Http://moss07.shrm.org/Communities/SHRMSpecialExpertisePanels/trends/Documents/FullPanelTrendsReport.pdf](http://moss07.shrm.org/Communities/SHRMSpecialExpertisePanels/trends/Documents/FullPanelTrendsReport.pdf)

Stech, E. (2008). Leadership education, training, and development: What should we be doing and what can we be doing. *Journal of Leadership Studies*, 7(1), 43-46.

White, J. E., & Bachtel, D. C. (1987). Stepping up – Training Extension county directors. *Journal of Extension*, 25(1), Article 1FEA4. Retrieved August 24, 2009, from <http://www.joe.org/joe/1987spring/a4.php>

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