Does Leadership Education Increase Integrative Leadership?

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CIL Mission: To discover and disseminate transformative knowledge about the nature and practice of leadership across business, government and civil society sectors to advance the common good.

Executive Summary
The University of Minnesota’s U-Led cohort programs provide an opportunity to examine the impact that leadership education has on skills and capabilities in communities. By studying data collected on 345 alumni of 17 cohort leadership programs, it was found that the existing level of sophistication of leadership knowledge among integrative leaders is already high and hard to improve. The rural nature of these programs, and the tendency of rural leaders to wear multiple leadership hats, leads us to conclude that many of the participants already act as integrative leaders before entering the program, which reduces the likelihood of increased integrative leadership as a program impact. It may be worth exploring a leadership cohort track that focuses on leaders who are, and are not, integrative in their community involvement.

Background
This project provides the Center for Integrative Leadership (CIL) the opportunity to support applied research to examine data from graduates of leadership education and find out what impact, if any, the training had on their leadership participation. Specific research questions will include:

• How do changes in leadership skills, as measured by pre-post survey items, relate to changes in leadership behavior, as measured by organizational role changes?
• What are the characteristics of alumni who have become more integrative leaders?
• Does creation of more leadership capabilities among individuals have an impact on integrative (vs. specialized) leadership at the community or organizational levels?

The University of Minnesota Extension’s (Extension) leadership program, known as ‘U-Lead,’ engages with organizations and communities “to generate confident leadership and informed action on public issues” by providing resources and opportunities that “foster commitment for leadership roles, enhance the competency of leaders, and strengthen organizations and communities.” The curriculum of U-Lead is based on a dynamic leadership education framework that includes training in six core areas of leadership: Personal/ Trait Theory Leadership, Situation/Team Leadership, Organizational and Positional Leadership, Power and Political Leadership, Visionary Leadership, and Ethical Leadership.
These programs are staffed by Extension Educators and offered to public sector actors associated with local government, nonprofit organizations, economic development agencies, agricultural agencies, and the private sector. The programs of interest to this study are were cohort programs lasting between five and twelve months. These U-Lead programs expose participants to leadership concepts through educational topics, community visits, and group discussions.

While U-Lead programs do not have the explicit purpose to create integrative leaders, the ability for leaders to collaborate across sector boundaries is crucial. A recent qualitative impact study conducted with participants from three U-Lead cohorts documented that participants exhibit new leadership behaviors, both in their private lives and public lives. The increased leadership activity of U-Lead participants has an impact on the social, civic, economic, and environmental conditions of their communities.

Methodology

Since 2006, Extension has completed 17 community leadership cohorts, each with 25-40 participants. There is an opportunity is to formalize the concept of ‘integrative leadership’ as a teaching concept as well as add an evaluation component for potential inclusion in future cohorts. For evaluation purposes, a pre- and post-test is administered to participants of the U-Lead cohort programs. This includes the collection of data related to the involvement of participants in community organizations (see Appendix I for an extract from the sample survey). The instrument collected the name of the organizations, the sector of organization participants are involved with, as well as their level of involvement.

U-Lead programs are predisposed to involve non-privately involved individuals – that is, those involved in leading their community in both public and nonprofit roles. At the same time, one of the programs focuses on farming couples which then predisposes this cohort to be involved in agricultural organizations. The rural nature of these programs, and the tendency of rural leaders to wear multiple leadership hats, is also a bias inherent in the data we collect. To a great extent, many of the participants were already integrative leaders before entering the program, which reduces the likelihood of increased integrative leadership as a program impact.

There are eight sectors of organizations collected by the survey instrument. These eight sectors were recoded to three sectors matching the integrative leadership literature: Public, Private, and Nonprofit. These three make up the Integrative Leadership (IL) organization sectors. The following table details the reclassification scheme.

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1 Scheffert, Donna Rae. 2007. *Community Leadership: What does it take to see results?* Journal of Leadership Education. 175-190.
Table 1: Organizational Type Reclassification

<table>
<thead>
<tr>
<th>U-Lead Organizational Sector</th>
<th>Primary I.L. Organizational Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational/Youth Organization</td>
<td>Public</td>
</tr>
<tr>
<td>Economic Organization</td>
<td>Private</td>
</tr>
<tr>
<td>Government Organization</td>
<td>Public</td>
</tr>
<tr>
<td>Civic Organization</td>
<td>Nonprofit</td>
</tr>
<tr>
<td>Faith Organization</td>
<td>Nonprofit</td>
</tr>
<tr>
<td>Political Organization</td>
<td>Nonprofit</td>
</tr>
<tr>
<td>Agricultural Organization</td>
<td>Private</td>
</tr>
<tr>
<td>Other</td>
<td>Varied</td>
</tr>
</tbody>
</table>

There were a variety of organizations listed and a coding scheme needs to be consistent. In the educational sector, Community Education, PTA and Head Start are examples of a public classification. However, those activities associated with non-academic, non-sanctioned sports activities are considered nonprofit, such as driver education, firearms safety, and 4-H. The private classification includes businesses, labor unions, chamber of commerce groups, and industry associations. The nonprofit classification includes those groups classified under IRS rule 501c(3) such as the Red Cross, fraternal orders, and community betterment organizations.

The level of involvement by the participant within each organization is also collected. This level can be Inactive, Active, and Leader. For example, an individual can be a dues paying member of a group, yet not attend meetings with any regularity. In this case, they are considered inactive. Those identified as active are involved in a group, yet do not hold a positional leadership role.

This data collected both at the beginning and the end of the program allows us to examine the changes that occur over the course of a number of months. So, not only can we examine static qualities of the participants, we can also track this over time. It is expected that the differential length of the cohort programs does influence these results, as it was in the study conducted by Scheffert (2007).

There has not been any previous research on this topic which does not allow us to conduct comparative analysis. However, we do anticipate these results to inform our leadership programming and will contribute to the literature in future years as leadership offerings continue to be made.

Findings

There were a total of 345 participants in 17 programs that were involved in a total of 1,742 community organizations between 2006 and 2008. The age of participants ranged from 17 to 81 years, with an average of 40. The gender of the participants was found to 45% female and 55% male. The participants lived in average of 23 years in their community, with females averaging 19 years and males averaging 27 years.
**Types of Organizations**

*Table 2: Number of leadership positions by pre- and post-test by Integrative Leadership (IL) sector*

<table>
<thead>
<tr>
<th>IL Sector</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>318</td>
<td>358</td>
<td>12.6%</td>
</tr>
<tr>
<td>Private</td>
<td>323</td>
<td>379</td>
<td>17.3%</td>
</tr>
<tr>
<td>Nonprofit</td>
<td>804</td>
<td>882</td>
<td>9.7%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,445</td>
<td>1,619</td>
<td>12.0%</td>
</tr>
</tbody>
</table>

The totals do not equal 1,742 due to a participant either leaving an organization or joining a new organization. The table above reflects the number of positions at the time of the pre or post test. The participants in the 17 programs were most involved in roles in nonprofit organizations. Public and private sector roles were somewhat less common, and were reported with similar frequencies.

**Role Changes: Level of Involvement**

To explore the changes in the role a participant may have in their organizations, the survey provides data on the level of involvement. These levels are assigned values of 1 (inactive), 2 (active) and 3 (leader). An average level of involvement is then calculated with values closer to 2 indicating an “active” level of involvement. A value closer to 3 indicates a “leader” on average.

*Table 3: Average level of involvement by organization sector*

<table>
<thead>
<tr>
<th>IL Sector</th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>2.32</td>
<td>2.30</td>
</tr>
<tr>
<td>Private</td>
<td>1.99</td>
<td>2.11</td>
</tr>
<tr>
<td>Nonprofit</td>
<td>2.08</td>
<td>2.11</td>
</tr>
<tr>
<td>Total</td>
<td>2.09</td>
<td>2.13</td>
</tr>
</tbody>
</table>

At the time of the pre-survey, participants held an involvement average of 2.09, just above the “active” classification. At the end of the leadership program, this average has increased to 2.13. Those involved in Public roles were more likely than those in Private or Nonprofit roles to be leaders.
**Measuring Integrative Participation**

The literature on integrative leadership emphasizes the importance of our community leaders to be involved in, and work across, multiple sectors. While our data does not provide actual cross-sector activities, we can identify the presence that leaders are involved across multiple sectors. To explore the concept of integrative we examined the number of IL sectors in which an individual is involved both before, and after, their participation in U-Lead leadership programs. Those involved in more than one sector will be identified as “integrative leaders” with the potential for cross-sector activities.

The following tables exclude those participants that were not involved in any community groups. There were 4 (1.2%) participants at the time of the pre-survey and 7 (2.0%) at the time of the post-survey that were not involved. It is encouraging to see that U-Lead participants appear to be involved at high levels, even before the program begins.

Table 4: Number of IL sectors before and after participation in U-Lead program

<table>
<thead>
<tr>
<th># IL Sectors</th>
<th>Before n (%)</th>
<th>After n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>102 (29.9%)</td>
<td>90 (26.7%)</td>
</tr>
<tr>
<td>Two</td>
<td>164 (48.1%)</td>
<td>166 (49.1%)</td>
</tr>
<tr>
<td>Three</td>
<td>75 (22.0%)</td>
<td>82 (24.3%)</td>
</tr>
<tr>
<td>Total</td>
<td>341</td>
<td>338</td>
</tr>
</tbody>
</table>

At first glance, it does appear that U-Lead program participants become more integrative over the course of the program. In the pre-survey, it was found that 239 of the 341 (70%) participants were involved in more than one IL sector. As mentioned earlier, we were not surprised by this finding because of the tendency for rural leaders to wear multiple hats. Still, this percentage increased slightly in the post-survey whereby 248 of the 338 (73%) participants were involved in more than one sector. Interestingly, 75 of 341 (21.9%) were involved in all three IL sector at the time of the pre-survey. At the time of the post-survey, this increased to 82 of the 338 (24.3%) that were involved in all three IL sectors.

While it does not appear that significant changes are witnessed between the pre and post survey, this may be mitigated by the fact that participants appear to begin the program involved at a higher rate than the public in general. However, we do not have data from non-participants to verify this hypothesis.

We can expect that participants make changes in their community involvement over the course of the program. The following tables will examine these changes, beginning with those participants that were involved in just one IL sector at the time of the pre-survey.

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Table 5: Movement between PRE and POST survey, participants involved in one IL Sector

<table>
<thead>
<tr>
<th>POST</th>
<th>None</th>
<th>One</th>
<th>Two</th>
<th>Three</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>One PRE IL Sector</td>
<td>3</td>
<td><strong>83</strong></td>
<td>14</td>
<td>2</td>
<td>102</td>
</tr>
</tbody>
</table>

For the 102 participants involved in just one IL sector at the time of the pre-survey, it is found that 83 (81.4%) remained involved in one sector. Only 3 (3%) dropped their involvement completely, while 14 (13.7%) increased their involvement to two sectors and 2 (2.0%) jumped to three.

Table 6: Movement between PRE and POST survey, participants involved in two IL Sectors

<table>
<thead>
<tr>
<th>POST</th>
<th>None</th>
<th>One</th>
<th>Two</th>
<th>Three</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two PRE IL Sectors</td>
<td>4</td>
<td>3</td>
<td><strong>144</strong></td>
<td>13</td>
<td>164</td>
</tr>
</tbody>
</table>

For the 164 participants involved in two IL sectors at the time of the pre-survey, it is found that 83 (87.8%) remained involved in two sectors. A combined 7 (4.2%) reduced their involvement, while 13 (7.9%) increased their involvement to three sectors.

Table 7: Movement between PRE and POST survey, participants involved in three IL Sectors

<table>
<thead>
<tr>
<th>POST</th>
<th>None</th>
<th>One</th>
<th>Two</th>
<th>Three</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three PRE IL Sectors</td>
<td>8</td>
<td></td>
<td><strong>67</strong></td>
<td></td>
<td>75</td>
</tr>
</tbody>
</table>

For the 75 participants involved in all three IL sectors at the time of the pre-survey, it is found that 67 (89.3%) remained involved in three sectors. A total of 8 (10.6%) participants reduced their involvement to two IL sectors. Interestingly, there were no other participants that reduced their involvement below two IL sectors. These participants that begin committed appear to stay committed.

We can now see how an individual can become more integrative over the course of their participation in the leadership program. That is, someone who began the leadership program involved in just one IL sector can join a new group in another IL sector (or one who started in two and then joined a new group in the third). Of the 345 participants, 33 (9.6%) became more integrative in their leadership.
How participants are involved is also of interest. A person can be a part of an organization, yet not be truly involved in the activities or decision-making process. A data point on this level of involvement is collected in the survey instrument. The data is a three point scale whereby:

1 = inactive (example: Paying dues to the Commercial Club but not participating in events or serving on the board)
2 = active (participating in events held by the organization)
3 = leadership (holding an elected or appointed leadership position)

It is hoped that participants may increase their level of involvement through leadership programs as skills and knowledge are gained that can benefit both the individual and organization. An average level of involvement is calculated from the data and reported in the table below.

**TABLE 8: Average level of involvement by number of IL sectors**

<table>
<thead>
<tr>
<th>Number of IL Sectors</th>
<th>PRE</th>
<th>POST</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Participants</td>
<td>Avg. Level of Involvement</td>
</tr>
<tr>
<td>One</td>
<td>102</td>
<td>2.11</td>
</tr>
<tr>
<td>Two</td>
<td>164</td>
<td>2.09</td>
</tr>
<tr>
<td>Three</td>
<td>75</td>
<td>2.07</td>
</tr>
</tbody>
</table>

When we examine the level of involvement and number of IL sectors, we did observe increases in the average level of involvement for participants involved in two or more sectors, but these changes were not statistically significant. Again, this indicator may be mitigated by the fact that participants appear to have a higher level of involvement than the public in general. This may have been due to the fact that participants appeared to begin their involvement at a higher level than the public in general. However, we do not have data from non-participants to verify this hypothesis.

**Characteristics of Integrative Participation**

This section examines the relationship of leadership participants characteristics to the number of IL sectors in which they are involved.

**Table 9: Number of IL sectors by age, gender, and years in community**

<table>
<thead>
<tr>
<th>Number of IL Sectors (at post)</th>
<th>Avg. Age</th>
<th>Gender (% female)</th>
<th>Avg. Years in Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>37.0</td>
<td>60%</td>
<td>20.2</td>
</tr>
<tr>
<td>Two</td>
<td>41.6</td>
<td>43%</td>
<td>21.4</td>
</tr>
<tr>
<td>Three</td>
<td>45.2</td>
<td>32%</td>
<td>31.6</td>
</tr>
</tbody>
</table>

Here we find that those involved in a greater number of IL sectors tend to be older, male, and have lived in their community for significantly more years.
Community Leadership Skills and Integrative Participation

The U-Lead survey measures attitude changes in addition to changes in leadership roles. The pre-post attitude survey measures five behavioral outcome factors\(^3\) of community leadership. These factors are composed of multiple questions in the survey instrument, outside of the organizational involvement of participants. These factors are:

1. Civic engagement – increased, effective civic participation
2. Community commitment – strengthened commitment and network to make their organizations effective and/or their community better
3. Community knowledge – greater knowledge of assets, needs, resources, and policy options
4. Personal growth & self-efficacy – greater sense of being able to make a difference
5. Shared future and purpose – stronger sense of a shared vision and purpose within the community.

A full list of the 28 individual questions that are associated with each factor can be found in Appendix II. These factors are measured on a 4 point scale. A higher score indicates a greater performance in the factor.

Table 10: Factor score by number of IL sectors

<table>
<thead>
<tr>
<th>Factor</th>
<th>One</th>
<th>Two</th>
<th>Three</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civic Engagement</td>
<td>1.86</td>
<td>2.12</td>
<td>2.23</td>
</tr>
<tr>
<td>Community Commitment</td>
<td>1.97</td>
<td>2.22</td>
<td>2.33</td>
</tr>
<tr>
<td>Community Knowledge</td>
<td>1.66</td>
<td>1.84</td>
<td>1.86</td>
</tr>
<tr>
<td>Personal Growth</td>
<td>2.20</td>
<td>2.33</td>
<td>2.38</td>
</tr>
<tr>
<td>Shared Future &amp; Purpose</td>
<td>1.91</td>
<td>2.03</td>
<td>2.13</td>
</tr>
</tbody>
</table>

There are differences with regards to factor scores. Participants involved in just one IL sector score lowest on the community knowledge factor. The largest difference exists for the Civic Engagement factor. A one-way ANOVA confirms a significant difference between these groups. A t-test was conducted and determined a significant difference between those involved in one and two sectors, one and three sectors, but not between those involved in two and three sectors. This indicates that improvement in factors will not be as significant for those participants that are involved in 2 or more sectors. That is, there is less of a chance that programs will improve scores for community leadership if programs begin the program working within 2 or 3 sectors. This existing level of sophistication of leadership knowledge among integrative leaders is already high and hard to improve. It may be worth exploring a leadership cohort track that focuses on leaders who are already integrative in their community involvement.

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APPENDIX I: Sample Survey Instrument
Involvement in Community Organizations

Please complete the table on the following page with types of community organizations and/or committees to which you belong, the jurisdiction of those organizations (i.e., city, county, region, state, national, etc), the names of those organizations, and your level of involvement in each. See the list below for how to determine the type of organization. Refer to the following example.

<table>
<thead>
<tr>
<th>Organization Type</th>
<th>Level of Community Served</th>
<th>Name of Committee/Organization</th>
<th>Current Level of Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5 6 7 8</td>
<td></td>
<td>Inactive</td>
</tr>
<tr>
<td></td>
<td>X X</td>
<td>1. St. John’s Sunday School</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>X X</td>
<td>2. County Chamber of Commerce</td>
<td></td>
</tr>
</tbody>
</table>

Organization Type
1 = Educational/Youth Organization (e.g. school board, 4-H, Extension programs, PTA, scouts, etc.)
2 = Economic Organization (e.g. Chamber of Commerce, economic development groups, labor unions, business/professional organizations)
3 = Government Organization (e.g. City council, township board, elected or appointed government office, library, etc.)
4 = Civic Organization (e.g. American Cancer Society, United Way, Legion, Lodge, Rotary, Sertoma, Shriners, etc.)
5 = Faith Organization (e.g. church, faith formation groups, religious studies groups, etc.)
6 = Political Organization (e.g. Democratic Party, Republican Party, other political parties, lobby or special interest groups, etc.)
7 = Agricultural Organization (e.g. Pork Producers’ Assn., MN Soybean Growers, Farm Bureau, etc.)
8 = Other

Level of Community Served
1 = City
2 = County
3 = Regional (multi-county)
4 = State
5 = National
6 = International

Level of Involvement
Inactive: Mark this if you rarely attend meetings but remain on the membership listing
Active: Mark this if you attend most meetings
Leader: Mark this if you hold a leadership position such as president or secretary or you chaired a committee
APPENDIX II: Factor Questions

Factor 1: Civic Engagement
1. I think I am better informed about public issues and government than most other people.
2. I feel that I could do as good a job in public office as most other people.
3. I seek to forge connections and strengthen personal and professional bonds among members in my community.
4. I consider myself to be well qualified to participate in public issues.
5. I feel that I have a pretty good understanding of the important public issues facing our community.

Factor 2: Community Commitment
1. I am involved in my community.
2. I have pride in my community.
3. I have a sense of belonging to my community.
4. I have a sense of community ownership.
5. I strive to improve the quality of life in my community.
6. I am likely to participate in community meetings.

Factor 3: Community Knowledge
1. Our community is cohesive in its efforts.
2. I am aware of all the needs in my community.
3. I know how to change things in my community.
4. I rely on everyone’s strengths for change.
5. I understand my community’s structure and dynamics.

Factor 4: Personal Growth and Self-efficacy
1. I do not try to control everything.
2. I know the difference between management and leadership.
3. I am unselfish.
4. I respect a variety of leadership styles.
5. I have understanding and patience when working with others.
6. I regard change as a source of vitality.
7. I endeavor to improve my credibility as a leader.
8. I seek out different perspectives as a means of generating ideas, information, resources, etc. for my community.

Factor 5: Shared Future and Purpose
1. I talk optimistically about the future of my community.
2. I have confidence that my community will achieve its goals.
3. I envision exciting new possibilities for my community.
4. I articulate a convincing vision for the future of my community.