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The Nebraska Water Leaders Academy: Blending Water Policy and Science with Leadership Theory

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The Nebraska Water Leaders Academy: Blending Water Policy and Science with Leadership Theory

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Water: Science, Practice and Policy 2012
November 13, 2012
Background

- Water Challenges are Growing
- Population Continues to Grow
- New and Innovative Leadership is Needed
- Nebraska Water Leaders Academy (NWLA) was born!
NWLA Objectives

• Develop scientific, social and political knowledge about water and related natural resources

• Examine the economical and beneficial uses of Nebraska’s water resources

• Develop and enhance leadership and critical thinking skills

• Develop interpersonal skills to become actively involved with water policy issues at the local, regional, state, and national levels

• Develop life-long water resources management skills

• Challenge traditional paradigms while encouraging critical thinking and creative solutions.
On Change...

It takes a lot of courage to release the familiar and seemingly secure, to embrace the new. But there is no real security in what is no longer meaningful. There is more security in the adventurous and exciting, for in movement there is life, and in change there is power.

~ Alan Cohen
Assumptions

• Each individual has the capacity to grow and improve in ways that make them more effective
• People learn primarily through their experiences – Realizing not all experiences are equally developmental
• Even when change is directed toward teams or organizations, it is individuals who make and/or sustain the change
Leadership Developmental Model*

Leadership Development is a Process – not an Event

Assessment → Challenge → Support

Developmental experiences

Assessment

• Empirically or qualitatively collected information (data) that provides sound feedback to individuals about their skills, values, and/or traits

• Works to motivate individuals to want to improve or find better ways to do things

• Provides information about what needs to change
Assessment Examples

• Collecting Data
  – Formal – surveys, interviews, analyzing existing data, etc.
  – Informal – “coffee shop” discussions, community conversations, reading other studies, anecdotal information

• Confirm data accuracy and/or sources
  – Bring all the parties to the ‘table’
  – Make sure stakeholders buy into the data analysis and results
  – Gain consensus or when possible
  – Maximize buy in when consensus is not possible
NWLA – Assessment  
(Program Evaluation & Participants Knowledge, Skills, and Behaviors)

Pre & Post Academy

• Multi-factor Leadership Questionnaire (MLQ-5)  
  (Bass & Avolio, 1995)

• Champions of Innovation Scale  
  (Howell, Shea, & Higgins, 2005)

• Water Knowledge and Behaviors
## NWLA – Assessment (Each Session)

### BEFORE this Workshop  Now, at the END of the Workshop

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Session One</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1) I understand the relationship between personality and leadership</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>2) I can effectively use my knowledge of personality to improve my leadership skills</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>3) I understand the concept of Transactional Leadership</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>4) I understand the concept of Transformational Leadership</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5) I understand how Full Range Leadership can strengthen my leadership skills in the area of water policy</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>6) I understand Nebraska’s climate and weather issues</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>7) I understand Nebraska’s ecology issues</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>8) I understand the Water Balance approach to water management</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>9) I understand Nebraska’s Hydrology/Geology</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

10) What is **Your Main Takeaway** from the first session of the Water Leaders Academy?

11) Please give us one statement regarding your experience in this session of the Water Leaders Academy:

12) Additional Ideas, Comments, Questions:
Challenge

• Pushes individuals to be better
• Holds people to a higher standard, while creating optimism that desired behavior is within their reach
• Helps move in the direction of what needs to be done

• Defines the change!
Challenge Examples

• Provide win-win scenarios
• Help people learn new skills and behaviors
• Provide opportunities for “practicing” behaviors or skills out of their comfort zone in a safe environment
• Deal with conflict directly
• Help facilitate understanding of others’ points of view or perspectives
• Generate enthusiasm/excitement for change
• Turn challenges into opportunities
NWLA - Challenge

Practicing Behaviors

Peer Challenge to be Better

Helping people learn new skills and behaviors

Instructor Challenge to be Better
Support

• Provides on-going personal and professional intervention
• Provides a safe and supportive environment for individuals to practice their skills and behaviors
• Helps address barriers and identify ways to overcome them
• **Supports the change!**
Support Examples

• Efforts to learn and grow are valued/rewarded
• Largest source of support – other people
• Show/model patience with setbacks to learn from mistakes
• Reinforce commitment from “change seekers”
• Acknowledge positive changes
• Formalize shifts in norms/policies/procedures that result from successful changes
• Encourage/allow “change makers” to take ownership and model for others
NWLA - Support

Acknowledging Change & Reinforcing Commitment

Efforts to learn and grow are valued/rewarded
NWLA - Developmental Experiences

- Tours of Water Projects
- Q & A with Water Professionals
- Team Projects
- Presentations by Water Policy Professionals
- Presentations by Water Science Professionals

Image descriptions:
- People walking along a waterway
- Group of people appearing to engage in discussion inside an office
- Interior of a room with a presentation board
- People in a boat on a river
- People in a meeting room with a presentation in progress
Nebraska Water Leaders Academy
Theoretical Foundation

- Transformational Leadership (Bass & Avolio, 1994)
- Champions of Innovation (Howell, 2005)
- Conflict Resolution (Delli Priscoli & Wolf, 2009)
- Adaptive Management (Holling, 1978; Walters, 1986)
- Personality (Jung, 1923/1971)
- Group Communications (Hirokawa & Poole, 1996)
Transformational Leadership

- **Idealized Influence**: Charisma of the leader
  - Confidence and power
  - Actions centered on values, beliefs and sense of mission

- **Inspirational Motivation**: The way leaders energize others
  - Viewing the future with optimism
  - Stressing ambitious Goals
  - Projecting an Idealized Vision
Transformational Leadership

- **Intellectual Stimulation:** Leader Actions that appeal to sense of logic and analysis
  - Challenging others to think creatively and find solutions

- **Individualized Consideration:** Leader Actions that contribute to others’ satisfaction
  - Advising and supporting
  - Paying attention to individual needs
  - Helping others self-actualize
## Results

### Transformational Leadership Behavior Results of Paired Samples $t$-Test (N = 14)

<table>
<thead>
<tr>
<th>Leadership Behavior</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Diff.</th>
<th>$t$</th>
<th>df</th>
<th>p</th>
<th>Cohen’s d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idealized Influence</td>
<td>2.59</td>
<td>2.89</td>
<td>0.30</td>
<td>2.81</td>
<td>13</td>
<td>.015</td>
<td>0.60</td>
</tr>
<tr>
<td>Inspirational Motivation</td>
<td>2.54</td>
<td>2.89</td>
<td>0.35</td>
<td>2.80</td>
<td>13</td>
<td>.015</td>
<td>0.61</td>
</tr>
<tr>
<td>Intellectual Stimulation</td>
<td>2.32</td>
<td>3.05</td>
<td>0.73</td>
<td>5.33</td>
<td>13</td>
<td>.000</td>
<td>1.20</td>
</tr>
<tr>
<td>Individual Consideration</td>
<td>2.68</td>
<td>3.05</td>
<td>0.37</td>
<td>2.57</td>
<td>13</td>
<td>.023</td>
<td>0.75</td>
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<tr>
<td>Total</td>
<td>2.54</td>
<td>2.96</td>
<td>0.42</td>
<td>4.54</td>
<td>13</td>
<td>.001</td>
<td>0.94</td>
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</tbody>
</table>
Champions of Innovation

- Expresses enthusiasm and confidence in innovation
- Persists under adversity
- Gets the right people involved
### Champions of Innovation Behavior Results of Paired Samples t-Test (N = 14)

<table>
<thead>
<tr>
<th>Innovation Behavior</th>
<th>Pre-test M</th>
<th>SD</th>
<th>Post-test M</th>
<th>SD</th>
<th>Diff.</th>
<th>t</th>
<th>df</th>
<th>p</th>
<th>Cohen’s d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expresses Enthusiasm and Confidence in Innovation</td>
<td>2.93</td>
<td>0.66</td>
<td>3.27</td>
<td>0.43</td>
<td>0.34</td>
<td>2.34</td>
<td>13</td>
<td>.036</td>
<td>0.61</td>
</tr>
<tr>
<td>Persistence under Adversity</td>
<td>2.93</td>
<td>0.49</td>
<td>3.10</td>
<td>0.40</td>
<td>0.17</td>
<td>2.19</td>
<td>13</td>
<td>.047</td>
<td>0.38</td>
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<tr>
<td>Get Right People Involved</td>
<td>2.86</td>
<td>0.57</td>
<td>3.05</td>
<td>0.58</td>
<td>0.19</td>
<td>2.83</td>
<td>13</td>
<td>.014</td>
<td>0.33</td>
</tr>
<tr>
<td>Total</td>
<td>2.91</td>
<td>0.46</td>
<td>3.15</td>
<td>0.32</td>
<td>0.24</td>
<td>3.28</td>
<td>13</td>
<td>.006</td>
<td>0.61</td>
</tr>
</tbody>
</table>
## Water Knowledge and Behavior Results of Paired Samples $t$-Test (N = 14)

<table>
<thead>
<tr>
<th>Knowledge &amp; Behavior</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Diff.</th>
<th>$t$</th>
<th>df</th>
<th>$p$</th>
<th>Cohen’s $d$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness</td>
<td>M 3.19</td>
<td>SD 0.60</td>
<td>M 3.67</td>
<td>SD 0.41</td>
<td>0.48</td>
<td>3.82</td>
<td>13 .002</td>
</tr>
<tr>
<td>Engagement</td>
<td>M 2.57</td>
<td>SD 0.61</td>
<td>M 3.15</td>
<td>SD 0.61</td>
<td>0.58</td>
<td>4.89</td>
<td>13 .000</td>
</tr>
</tbody>
</table>
Lessons Learned

• Just like true leadership development this leadership program is a true process
  – Continuous innovation
  – Collaboration and diversity
• More assessments and research projects are needed
• We can make a difference!
Future Work – Leadership Program Evaluation
(Black, 2006; Black & Earnest, 2009)

• Individual
• Organizational (Alumni)
• Societal Community (Alumni)
The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn.

~ Alvin Toffler
Acknowledgements

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- Loup Basin Reclamation District
- Pathfinder Irrigation District

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- Nebraska Public Agency Investment Co.
- Reinke Manufacturing Company
- North Loup River Public Power & Irrigation District
- Ainsworth Irrigation District
- Twin Loups Irrigation District
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Questions?

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