Key Competencies in Sustainability

Educating Future Change Agents

A Research Project of

Focus Group, December 2, 2016
Defining Key Competencies?

- Competencies, skills, abilities, etc.
- *Key* competencies are critically important for *sustainability* efforts
- Applicable to *all* professions
- “A complex of knowledge, skills, and attitudes that enable successful task performance and problem solving on real-world sustainability challenges, and opportunities”
The Framework

- Systems Thinking Competence
- Futures Thinking Competence
- Values Thinking Competence
- Strategic Thinking Competence

Interpersonal Competence

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The Underlying Competencies

- Systems Thinking
- Values Thinking
- Strategic Thinking
- Futures Thinking
- Interpersonal Competence
- Problem-solving Competence
Basics

- **Interpersonal Competence**: Ability to work in teams, and understand, embrace, and facilitate diversity among cultures and social groups. Interpersonal competence is a basic ingredient in each of the other competencies.

- **Systems Thinking Competence**: Ability to analyze sustainability problems and solutions cutting across different domains and scales; considering agents, cause-effect structures, cascading effects, inertia, feedback loops, etc.

- **Futures Thinking Competence**: Ability to anticipate how sustainability problems and solutions might evolve over time, considering alternative development pathways for current systems and crafting coherent and plausible pictures of the future.

- **Values Thinking Competence**: Ability to collectively map, specify, apply, reconcile, and negotiate sustainability values, principles, goals, and targets.

- **Strategic Thinking Competence**: Ability to design and implement transformational (systemic) intervention and transition strategies toward sustainability.
Example: The Watershed

Working with private landowners (ranchers, developers, farmers, fossil fuel producers, etc.) to fund and implement stream/watershed mitigation and restoration projects. Negotiation/consideration of trade-offs based on targets and goals for project, fiscal constraints, landowner/stakeholder values, and government concerns (municipality, county, state, tribal nations).
Example: The Watershed

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<thead>
<tr>
<th>Activities/Processes/Procedures</th>
<th>Key Competencies</th>
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<tbody>
<tr>
<td>• Oversee contracting and project management for stream and wetland restoration and mitigation projects including federal permitting</td>
<td>• Systems-thinking competence (structure of challenges, mitigation impacts)</td>
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<td>• Prepare grant proposals to seek funding for restoration and mitigation projects</td>
<td>• Futures-thinking competence (planning)</td>
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<td>• Strategic-thinking competence (management)</td>
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<td>• Values-thinking competence (goals and targets)</td>
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<td>• Interpersonal competence (stakeholder engagement)</td>
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<td>• Strategic outreach – identify groups for education opportunities such as targeted workshops for oil and gas producers</td>
<td>• Strategic-thinking competence</td>
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<td>• Provide hands-on educational experiences for students (K-16) and community groups</td>
<td>• Interpersonal competence</td>
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<td>• Provide support and training to volunteer citizen science groups</td>
<td>• Values-thinking competence (outreach)</td>
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<td>• Strategic-thinking competence</td>
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<td>• Values-thinking competence (environmental justice, cultural values)</td>
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Basic vs. Key Sustainability Competencies

Systems, Futures, Values, Strategic Thinking Competencies

Interpersonal Competence

Critical thinking, communication, learning, etc.

Key Competencies in Sustainability

Basic Competencies
 References

