

Agriculture Workforce Stakeholders Highlight Importance

of Durable Skills and Networks

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**AGRICULTURE
WORKFORCE
TRAINING**
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INTRODUCTION

The National Research Council (2009) challenged agricultural education professionals to transform their relationship to the evolving global food and agricultural enterprise.

Why Durable Skills?

The Christensen Institute recently identified “investing in durable skills and durable networks,” as one of the “5 Education Innovation Trends Worth Watching in 2022” (Fisher, 2022).

Auger (2019) noted the importance of soft skills: leadership, collaboration, and communication.

America Succeeds (2021) reports on “The High Demand for Durable Skills” and ten associated competencies:

- Leadership:** Directing efforts and delivering results
- Character:** Personal and professional conduct
- Collaboration:** Teamwork and connection
- Communication:** Information exchange and management
- Creativity:** New ideas and novel solutions
- Critical Thinking:** Informed ideas and effective solutions
- Metacognition:** Self-understanding and personal management
- Mindfulness:** Interpersonal and self-awareness
- Growth Mindset:** Improvement and aspiration
- Fortitude:** Constitution and inspiration

“Employees who have the underlying durable skills can be taught and retaught job skills more easily as needs, jobs, and careers change over time.”

However, research suggests durable skills are “more difficult to train for and are not easily assessed.”

(D2L, 2019, p. 4)

Working with APLU, Crawford and Fink (2020a, 2020b) identified eleven employability skills:

- Understand Role in the Workplace and Have Realistic Career Expectations
- Recognize and Deal Constructively with Conflict
- Accept and Apply Critique and Direction in the Workplace
- Listen Effectively
- Communicate Accurately and Concisely
- Realize the Effect of Decisions
- Build Professional Relationships
- Navigate Change and Ambiguity
- Identify and Analyze Problems
- Transfer Knowledge from One Situation to Another
- Ask Good Questions

OPPORTUNITY TO HELP STUDENTS BRIDGE THE GAP

Specific Aims for the Project

- Enhance an agricultural technology program’s core curriculum with practical skill development in collaborative leadership appropriate for workplace success;
- Adapt and extend collaborative leadership curricula for use with the community college agriculture workforce training programs; and
- Create reusable learning objects that allow application of the collaborative leadership curricula in food and agricultural sciences programs at other community, junior, and technical colleges/institutes.

RESULTS TO DATE

Focus Group Findings

Using a semi-structured protocol, volunteers affiliated with Virginia agricultural workforce preparation programs participated in two focus groups. They surfaced six key themes:

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|---|---|---|--|
|  | Agreeing with APLU employability skills report. |  | Finding positive benefits in completing an internship. |
|  | Strategizing to build problem-solving skills. |  | Addressing assessment challenges in “soft” skills. |
|  | Prioritizing verbal communication skill enhancements. |  | Learning how to accept faults and mistakes. |

“I see leadership to develop in that intermediate teamwork; because when you do start working in teams, I think that’s when you start seeing leaders rise to the top.”

– Focus group participant

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Inquiries about the project should be directed to Dr. Eric K. Kaufman, the primary investigator, and the email address is ekaufman@vt.edu. Additional information about the grant is available online at the USDA-NIFA project portal. <https://portal.nifa.usda.gov/web/crisprojectpages/1022287-agriculture-workforce-training-for-collaborative-leadership.html>



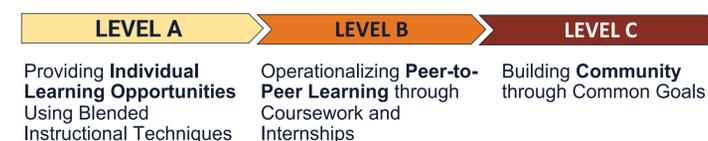
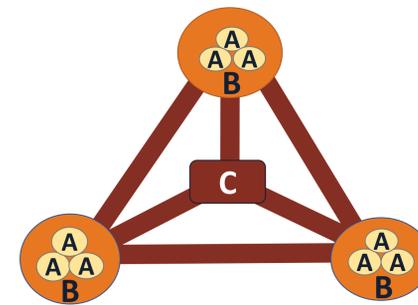
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EXPANDING NETWORKS

Engelbart Organizational Learning Schema

The Engelbart’s Organizational Learning and Improvement Schema (Anderson et al., 2020) provides a structure for implementing networked learning communities for continuous improvement. Engelbart sought to find ways to increase human productivity by using the computer as a medium to enhance idea development, collaboration, and organizational communication, which he coined a networked improvement community (NIC; Engelbart, 1992). Engelbart articulated this NIC as a model that could enhance human intelligence and the ability to solve complex problems by using technology and an interrelated tiered structure to facilitate social learning and organizational improvement.

- Level-A** signifies individual learning process.
- Level-B** involves peer-to-peer learning.
- Level-C** learning happens when multiple **Level-B** learning communities connect as a network, using various technologies.



Entrepreneurial interdisciplinary leadership education helps to improve agriculture workforce (Mars, 2015) and creates opportunities for faculty, students, and employers to build networked learning and communities of practice (Anderson et al., 2020; Nagy & Gilbert, 2021).



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