Employability Skills

FOUNDATIONAL DATA

• 2011 Comparative Analysis of Soft Skills: What is Important for New Graduates? Crawford, Lang, Fink, Dalton, & Fielitz

• 2017 APLU Survey Open-ended Response Analysis: Employability Skills Not Learned in College. Smith

• 2017 Mini-Survey Borich Gap Analysis Crawford, Fink, Warnick, Smith
Soft Skill Ranking

1. COMMUNICATION
   - Listen effectively
   - Communicate accurately and concisely
   - Effective oral communications
   - Communicate pleasantly and professionally
   - Effective written communications
   - Ask good questions
   - Communicate appropriately and professionally using social media

2. DECISION MAKING / PROBLEM SOLVING
   - Identify and analyze problems
   - Take effective and appropriate action
   - Realize the effect of decisions
   - Creative and have innovative solutions
   - Transfer knowledge across situations
   - Engage in life-long learning
   - Think abstractly about problems

3. SELF-MANAGEMENT
   - Efficient and effective work habits
   - Self-starting
   - Well-developed ethic, integrity and loyalty
   - Sense of urgency to complete tasks
   - Work well under pressure
   - Adapt and apply appropriate technology
   - Dedication to continued professional development

4. TEAMWORK
   - Productive as a team member
   - Positive and encouraging attitude
   - Punctual and meets deadlines
   - Maintains accountability to the team
   - Work with multiple approaches
   - Aware and sensitive to diversity
   - Share ideas to multiple audiences

Employer 2011

APLU Series on Employability Skills in Agriculture & Natural Resources
5. PROFESSIONALISM

- Effective relationships with customers, businesses and the public
- Accept critique and direction in the work place
- Trustworthy with sensitive information
- Understand role, realistic career expectations
- Deal effectively with ambiguity
- Maintain appropriate decorum and demeanor
- Select mentor and acceptance of advice

6. EXPERIENCES

- Related work or internship experiences
- Teamwork experiences
- Leadership experiences
- Project management experiences
- Cross disciplinary experiences
- Community engagement experiences
- International experiences

7. LEADERSHIP

- See the “big picture” and think strategically
- Recognize when to lead and when to follow
- Respect and acknowledge others contributions
- Recognize and deal constructively with conflict
- Build professional relationships
- Motivate and lead others
- Recognize change is needed and lead the change effort
The open ended responses yielded similar frequencies to the rank scores noted in the quantitative analysis.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Skill</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Identify career opportunities and hiring procedures <strong>(new)</strong></td>
<td>435</td>
<td>8.08</td>
</tr>
<tr>
<td>1</td>
<td>Recognize and deal constructively with conflict <strong>(L4)</strong></td>
<td>384</td>
<td>7.14</td>
</tr>
<tr>
<td>3</td>
<td>Productive as a team member <strong>(T1)</strong></td>
<td>251</td>
<td>4.66</td>
</tr>
<tr>
<td>4</td>
<td>Motivate and lead others <strong>(L6)</strong></td>
<td>228</td>
<td>4.24</td>
</tr>
<tr>
<td>4</td>
<td>Build professional relationships <strong>(L5)</strong></td>
<td>224</td>
<td>4.16</td>
</tr>
<tr>
<td>6</td>
<td>Maintain appropriate décor and demeanor <strong>(P6)</strong></td>
<td>220</td>
<td>4.09</td>
</tr>
<tr>
<td>7</td>
<td>Understand their role and has realistic career expectations <strong>(P4)</strong></td>
<td>216</td>
<td>4.01</td>
</tr>
<tr>
<td>8</td>
<td>Communicate pleasantly and professionally <strong>(C4)</strong></td>
<td>212</td>
<td>3.94</td>
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<tr>
<td>9</td>
<td>Effective relationships with customers, businesses, and the public <strong>(P1)</strong></td>
<td>204</td>
<td>3.79</td>
</tr>
<tr>
<td>10</td>
<td>Effective oral communications <strong>(C3)</strong></td>
<td>182</td>
<td>3.38</td>
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<tr>
<td>10</td>
<td>Understands basic business structure and components <strong>(new)</strong></td>
<td>180</td>
<td>3.35</td>
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</tbody>
</table>

Note: Parenthetical coding indicates category from the 2011 APLU Survey Instrument (Appendix A)
2017 Mini-Survey Borich Gap Analysis

- N=25 Academics & Employers
- Rate importance and preparedness of the 2011 Soft Skills

Are Universities providing the needed employability skill training?

“Experiencing failure is one of the best ways to learn these skills and many students that we see have rarely been presented with that concept or feeling while growing up.”
ACADEMIC

“Most employers don’t expect graduates to light the world on fire with strategic thinking and ground breaking innovative ideas… most are just looking for loyal, grounded, hard working individuals who can work well with others...”
EMPLOYER
2019
From Academia to the Workforce:

Quantitative Analysis

• Verifying Critical Growth Areas for Students Today

Qualitative Analysis

• Preparing for Persistence, Ambiguity, Change, and Conflict in the Workplace
APLU SURVEY COMMITTEE

- Nancy Barcus, COO, Agriculture Future of America (AFA)
- Joel Brendemuhl, Associate Dean, College of Agricultural & Life Sciences, University of Florida
- Cathy Carr, Alumni and Career Services, College of Agricultural and Life Sciences, University of Florida
- Pat Crawford, Associate Director, School of Planning, Design and Construction, Michigan State University
- Wendy Fink, Executive Director, Academic Programs Section, Board on Agriculture Assembly, APLU
- Tracy Hoover, Associate Dean for Undergraduate Education, College of Agricultural Sciences, The Pennsylvania State University
- Kelly Millenbah, Associate Dean, Academic & Student Affairs, College of Agriculture & Natural Resources, Michigan State University
- Erika Osmundson, Director of Marketing and Communications, AgCareers.com
- Kasee Smith, Assistant Professor, Ag & Extension Education, College of Agriculture & Life Sciences, University of Idaho
- Mark Stewart, President and CEO, Agriculture Future of America (AFA)
- Susan Sumner, Associate Dean and Director, College of Agriculture and Life Sciences, Virginia Tech University
- Brian Warnick, Associate Dean for Academic Programs, College of Agriculture, Utah State University
- Christine White, Division Director, Leadership, Education, Assessment & Development Division, FFA
Finding the critical growth areas

- Mini survey
  - Employers Borich Gap
  - Academics Borich Gap
- Smith Did Not Learn Analysis

**Bold important in all 3**

Borich Gap
** Top 10 acad & empl.
* Top 8 employers
+ acad over prepared/empl underprepared

Smith Analysis
^ did not learn
^^ committee discussion

<table>
<thead>
<tr>
<th>Rank</th>
<th>2018 employability skills identified as critical growth areas</th>
<th>2011 study skill cluster Rank order</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Listen Effectively +</td>
<td>communication</td>
</tr>
<tr>
<td>2</td>
<td>Communicate Accurately and Concisely **</td>
<td>communication</td>
</tr>
<tr>
<td>3</td>
<td>Ask Good Questions *</td>
<td>communication</td>
</tr>
<tr>
<td>4</td>
<td>Realize the Effect of Decisions *</td>
<td>decision making</td>
</tr>
<tr>
<td>5</td>
<td>Identify and Analyze Problems *</td>
<td>decision making</td>
</tr>
<tr>
<td>6</td>
<td>Transfer Knowledge from One Situation to Another *</td>
<td>decision making</td>
</tr>
<tr>
<td>7</td>
<td>Understand Role/Structure in the Workplace and Realistic Career Expectations ^</td>
<td>professionalism</td>
</tr>
<tr>
<td>8</td>
<td>Accept and Apply Critique and Direction in the Workplace **</td>
<td>professionalism</td>
</tr>
<tr>
<td>9</td>
<td>Build Professional Relationships (including cross-generational, with mentors, and with teams)</td>
<td>professional</td>
</tr>
<tr>
<td>10</td>
<td>Recognize and Deal Constructively with Conflict</td>
<td>leadership</td>
</tr>
<tr>
<td>11</td>
<td>Navigate Change and Ambiguity ^^</td>
<td>(new)</td>
</tr>
</tbody>
</table>
Rising Concerns

• 1) ability to persist in a new job,

• 2) dealing with ambiguity in job tasks and workplace expectations,

• 3) dealing with the pace and content of change in the workplace, and

• 4) how to manage conflict in the workplace.
2018 Survey

On-line Survey Instrument

- 30 Universities participating
  - inviting students, faculty & alumni

- Employer invitations through
  - Universities
  - Ag Careers
  - AFA
  - APLU
Participants

Male/Female 50/50
White 88%

Age
14% 17-18
34% 19-23
20% 39-53
26% 54-72
6% 73 plus

<table>
<thead>
<tr>
<th>Stakeholder Group</th>
<th>Frequency</th>
<th>Percent</th>
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<tbody>
<tr>
<td>Alumni</td>
<td>4465</td>
<td>42.0</td>
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<tr>
<td>Current Student</td>
<td>2308</td>
<td>21.7</td>
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<tr>
<td>Employer</td>
<td>2528</td>
<td>23.8</td>
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<tr>
<td>Faculty</td>
<td>1222</td>
<td>11.5</td>
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<tr>
<td>Other</td>
<td>116</td>
<td>1.1</td>
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<tr>
<td>Total</td>
<td>10639</td>
<td>100.0</td>
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## Alumni - Fields

<table>
<thead>
<tr>
<th>Organization Type (Q14)</th>
<th>Frequency</th>
<th>Valid Percent</th>
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</thead>
<tbody>
<tr>
<td>(1) Agricultural Production</td>
<td>353</td>
<td>9.7</td>
</tr>
<tr>
<td>(2) Consulting / Service Providers</td>
<td>254</td>
<td>7.0</td>
</tr>
<tr>
<td>(3) Education</td>
<td>714</td>
<td>19.5</td>
</tr>
<tr>
<td>(4) Finance, Banking, Insurance, Real Estate</td>
<td>237</td>
<td>6.5</td>
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<tr>
<td>(5) Health Care</td>
<td>499</td>
<td>13.7</td>
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<tr>
<td>(6) Landscape Design or Construction</td>
<td>95</td>
<td>2.6</td>
</tr>
<tr>
<td>(7) Leisure and Hospitality</td>
<td>45</td>
<td>1.2</td>
</tr>
<tr>
<td>(8) Manufacturing</td>
<td>189</td>
<td>5.2</td>
</tr>
<tr>
<td>(9) Marketing, Media, or Communications</td>
<td>104</td>
<td>2.8</td>
</tr>
<tr>
<td>(10) Policy, Legal, or Government</td>
<td>299</td>
<td>8.2</td>
</tr>
<tr>
<td>(11) Sales</td>
<td>156</td>
<td>4.3</td>
</tr>
<tr>
<td>(12) Arts &amp; Entertainment</td>
<td>19</td>
<td>0.5</td>
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<tr>
<td>(13) Social Services</td>
<td>54</td>
<td>1.5</td>
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<tr>
<td>(14) Military / Defense</td>
<td>23</td>
<td>0.6</td>
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<tr>
<td>(15) Energy</td>
<td>55</td>
<td>1.5</td>
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<tr>
<td>(16) Information Technology or Software Dev.</td>
<td>70</td>
<td>1.9</td>
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<tr>
<td>(17) Other</td>
<td>160</td>
<td>4.4</td>
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<tr>
<td>(18) Natural Resources Management</td>
<td>239</td>
<td>6.5</td>
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<tr>
<td>(19) Research</td>
<td>83</td>
<td>2.3</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>3653</strong></td>
<td><strong>100.0</strong></td>
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Qualitative Data

Codebook Creation

- 21,065 responses
- 1,104 pages
- single space
- 10 pt font text

- Persistence 5,612
- Change 5,283
- Ambiguity 4,897
- Conflict 5,273
## Consulting Team

<table>
<thead>
<tr>
<th>Member</th>
<th>Area of Expertise</th>
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<tbody>
<tr>
<td>Dr. Don Marshall</td>
<td><strong>Agriculture, Food &amp; Environmental Sciences</strong>&lt;br&gt;Associate Dean of Academic Programs</td>
</tr>
<tr>
<td>Ms. Jana Hanson</td>
<td><strong>Institutional Assessment</strong>&lt;br&gt;Director</td>
</tr>
<tr>
<td>Dr. Karla Hunter</td>
<td><strong>Communication &amp; Journalism</strong>&lt;br&gt;Associate Professor</td>
</tr>
<tr>
<td>Dr. Gemechis Djira</td>
<td><strong>Mathematics &amp; Statistics</strong>&lt;br&gt;Associate Professor</td>
</tr>
<tr>
<td>Dr. Kyle Page</td>
<td><strong>Industrial/Organizational Sociology</strong>&lt;br&gt;Assistant Professor</td>
</tr>
<tr>
<td>Mr. Duncan Schwartz</td>
<td><strong>Sociology &amp; Human Services</strong>&lt;br&gt;Student</td>
</tr>
</tbody>
</table>
Codebook Testing

Meeting 1
- Review full response set (selected 50 pages)
- Review first draft codebook

Meeting 2
- Pilot test NVivo application of codebook with Persistence data (1/3 of data set)
- Refinement of themes for codebook

Meeting 3
- Review coded Persistence data by theme
- Analysis & interpretive observations
15 CODE THEMES

1) life transitions
   career trajectory, environment/place, adulthood

2) orientation to the workplace
   role & expectations, organization framework, social systems

3) coping mechanisms

4) individual character qualities

5) relationships & mentoring
15 CODE THEMES

6) seeking clarifying information
7) evolution of decision-making skills
8) conflict
9) knowledge evolution
10) independent thinking processes
   critical, creative, growth mindset
15 CODE THEMES

11) experiences
- breadth of coursework
- real world in the classroom
- adapting to teaching styles
- research
- in-course activities
- work anywhere
- work career related
- internships
- International travel
- home/family
- high school
- stretch experiences
- extra curricular
- sports
- performing arts
- ROTC/reserve/military
- Ag organization groups

12) negative perceptions
- educational system, new employees and students, employers

13) cannot be taught in university
Persistence

“Students idealization of their first post-college job and the reality of that job can be quite different. It can be difficult to remain persistent and stick with the job through the early bumps and challenges.

How can skills to build persistence be honed in formal or informal settings before beginning a professional career?”

• 5,612 RESPONSES
PERSISTENCE
5 PRIMARY THEMES

1. ORIENTATION TO THE WORKPLACE
   EXPECTATIONS & ATTITUDE

2. LIFE TRANSITIONS
   PROVING GROUNDS & GROWING UP

APLU Series on Employability Skills in Agriculture & Natural Resources
PERSISTENCE
5 PRIMARY THEMES

1. ORIENTATION TO THE WORKPLACE
   - EXPECTATIONS & ATTITUDE
2. LIFE TRANSITIONS
   - PROVING GROUNDS & GROWING UP
3. COPING & ADAPTATION
   - FACING FAILURE & SELF-MANAGING
PERSISTENCE
5 PRIMARY THEMES

1. ORIENTATION TO THE WORKPLACE
   - EXPECTATIONS & ATTITUDE

2. LIFE TRANSITIONS
   - PROVING GROUNDS & GROWING UP

3. COPING & ADAPTATION
   - FACING FAILURE & SELF-MANAGING

4. RELATIONSHIPS & MENTORING
   - GET A MENTOR (NOT YOUR MOM)

APLU Series on Employability Skills in Agriculture & Natural Resources
PERSISTENCE
5 PRIMARY THEMES

1. ORIENTATION TO THE WORKPLACE
   - EXPECTATIONS & ATTITUDE

2. LIFE TRANSITIONS
   - PROVING GROUNDS & GROWING UP

3. COPING & ADAPTATION
   - FACING FAILURE & SELF-MANAGING

4. RELATIONSHIPS & MENTORING
   - GET A MENTOR (NOT YOUR MOM)

5. EXPERIENCES
   - START EARLY, REPEAT OFTEN

APLU Series on Employability Skills in Agriculture & Natural Resources
Recommendations to Universities and Employers for fostering PERSISTENCE

**managing expectations**
- Honest information about job prospects, entry experience & career trajectory
- Exposure to career pathway, twists, & challenges
- Rewards as more than salary & promotion

**failure as growth**
- Provide opportunities to fail, work with minimal directions, repeat work assignments, and dealing with negative critique
- Setting goals and handling setbacks
- Growth mindset – “belief that basic abilities can be developed through dedication and hard work” Dweck

**professional behaviors & social skills**
- Expect and encourage students to work - anywhere!
- Mentoring & networking with alumni, employers, peers (beyond family & faculty)
- Adulting – “the practice of behaving in a way characteristic of a responsible adult, especially the accomplishment of mundane but necessary tasks” Google Dictionary