“Measure What Matters and Improve Your Workplace” presented by ACT and International Youth Foundation will begin momentarily.

For the Best Experience:
- Use Google Chrome
- Refresh your browser if the webinar freezes
- Ask questions through the question panel

Don’t Forget:
- Live Q&A following the presentation
- The webinar is being recorded and will be available to view at a later date
Shining a Flashlight on Essential Skills
Your Presenters

Jason Way, PhD
Senior Research Psychologist
Center for Social, Emotional, and Academic Learning
ACT

Sheerin Vesin
Director, Product Strategy
International Youth Foundation
Just a single drop of water?
Or a flood in the making?
Shining a Flashlight on Essential Skills
What are Essential Skills?

- **Work Ethic**
  - Work Ethic reflects the extent to which a person’s actions demonstrate persistence, goal striving, reliability, dependability, and attention to detail at work.

- **Collaboration**
  - Collaboration reflects the extent to which a person’s actions demonstrate the ability to work on teams, empathy, helpfulness, trust, and trustworthiness.

- **Creativity**
  - Creativity reflects the extent to which a person’s actions demonstrate ingenuity, creative thinking, inquisitiveness, flexibility, open mindedness, and embracing diversity.
What are Essential Skills?

• **Resilience**
  o Resilience reflects the extent to which a person’s actions demonstrate stress management, emotional regulation, a positive response to setbacks, and poise.

• **Leadership**
  o Leadership reflects the extent to which a person’s actions demonstrate assertiveness, influence, optimism, and enthusiasm.

• **Integrity**
  o Integrity reflects the extent to which a person’s actions demonstrate honesty, sincerity, fairness towards others, and modesty at work.
Skills Gap in U.S. Economy

“When asked about the goals and expectations for graduates right out of high school, both parents and business leaders shared the hope that graduates would enter the workforce as good citizens who are willing to learn. However, there was one major disconnect: Parents said they want graduates to obtain professional/vocational education before entering the workforce, while business leaders want graduates to have strong communication and interpersonal skills, often referred to as “soft skills.” Business leaders stated they are prepared to teach the needed technical skills on the job or help students gain the necessary industry credentials. Additionally, a national study by CareerBuilder found that a large majority of employers (77%) believe that soft skills are just as important as technical, or hard skills.”

-Community for Economic Development (CED)
Why are essential skills important?

(and why do they have so many names?)
RESEARCH
Top skills required

• **Project Oxygen**: The 7 top characteristics for success are all Essential skills. STEM expertise = dead last. (2013)

• **Project Aristotle**: Further supports importance of Essential skills even in high-tech environments. (2017)
Sought-after skills

• More than 50% of the skills employers seek on a candidate’s resume are Essential Skills (survey of 260 employers)
• Communication skills ranked in the top three most-sought after qualities by job recruiters.
Skills of the future

Total hours worked in Europe and United States, 2016 vs 2030 estimate, billion

- **Physical and manual skills**: 203 (2016), 174 (2030, -14%)
- **Basic cognitive skills**: 115 (2016), 97 (2030, -15%)
- **Higher cognitive skills**: 140 (2016), 151 (2030, +8%)
- **Social and emotional skills**: 119 (2016), 148 (2030, +24%)
- **Technological skills**: 73 (2016), 113 (2030, +55%)

Source: McKinsey Global Institute Workforce Skills Model; McKinsey Global Institute analysis
Perception Gap

<table>
<thead>
<tr>
<th>How Well-Prepared is Current Workforce on this Skill?</th>
<th>Employers</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working in teams</td>
<td>37%</td>
<td>64%</td>
</tr>
<tr>
<td>Staying current on technologies</td>
<td>37%</td>
<td>46%</td>
</tr>
<tr>
<td>Ethical judgment and decision making</td>
<td>30%</td>
<td>62%</td>
</tr>
<tr>
<td>Locating, organizing, and evaluating information</td>
<td>29%</td>
<td>64%</td>
</tr>
<tr>
<td>Oral communication</td>
<td>28%</td>
<td>62%</td>
</tr>
<tr>
<td>Working with numbers/statistics</td>
<td>28%</td>
<td>55%</td>
</tr>
<tr>
<td>Written communication</td>
<td>27%</td>
<td>65%</td>
</tr>
<tr>
<td>Critical/analytical thinking</td>
<td>26%</td>
<td>66%</td>
</tr>
<tr>
<td>Being innovative/creative</td>
<td>25%</td>
<td>57%</td>
</tr>
<tr>
<td>Analyzing/solving complex problems</td>
<td>24%</td>
<td>59%</td>
</tr>
<tr>
<td>Applying knowledge/skills to the real world</td>
<td>23%</td>
<td>59%</td>
</tr>
<tr>
<td>Awareness/experience of diverse cultures</td>
<td>21%</td>
<td>48%</td>
</tr>
</tbody>
</table>

Predict work outcomes

- Job performance (Barrick, Mount, & Judge, 2001)
- Job satisfaction (Judge, Heller, & Mount, 2002)
- Income and occupational prestige (Damian et al., 2014)
- Success at work (Johnson & Schneider, 2013)
And over time!

In a nationally representative sample of Americans...

<table>
<thead>
<tr>
<th>1 SD increase in...</th>
<th>Increased income 11 years later</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>$2,419</td>
</tr>
<tr>
<td>Collaboration</td>
<td>$1,209</td>
</tr>
<tr>
<td>Work Ethic</td>
<td>$1,814</td>
</tr>
<tr>
<td>Resilience</td>
<td>$1,814</td>
</tr>
<tr>
<td>Creativity</td>
<td>$1,209</td>
</tr>
</tbody>
</table>

(Damian, et al., 2014)

In a nationally representative sample Swedish men...

A 25-minute interview designed to measure SEL characteristics in 18- and 19-year-old Swedish men was a better predictor of wages and unemployment 14–21 years later than were measures of cognitive ability

(Lindqvist & Vestman, 2011)
Essential skills are amenable to change (e.g., Hudson, Roberts, & Lodi-Smith, 2012), particularly through deliberate intervention (e.g., Roberts, Luo, Briley, Chow, et al., 2017).

By improving on skills, employers can improve their work attitudes (Zimmerman, 2008), increase their work readiness (Hodzic, Ripoll, Lira, & Zenasni, 2015), increase their job performance and retention (e.g., Sackett & Walmsley, 2014).
Positive ROI

2017 MIT Sloan study shows ROI of 250%

2015 Columbia Teachers College study shows ROI of 11:1

Source: http://mitsloan.mit.edu/newsroom/articles/soft-skills-training-brings-substantial-returns-on-investment/
Positive ROI

Retention rate for IYF/Passport to Success® participants
96%

Promoted since completing IYF/Passport to Success®
40%

Improved key soft skills including communication, teamwork, and conflict management skills
80%

(Source: https://www.iyfnet.org/blog/survey-confirms-dramatic-effects-life-skills-training-employees)
Why is measuring essential skills so challenging?
In IYF’s employability programs in the US & around the globe...
... need an easy-to-deploy “flashlight” to measure results
Challenges
Using self-report items alone

Faking
Reference Bias
Scale Response Effects

I would be good at leading a team.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Somewhat agree</th>
<th>Somewhat disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
Most essential skill and assessment frameworks lack:

- Clear organization and definitions
  - Mix in cognitive skills
  - No clear separation between skills

- Supporting research
  - Skills included and defined by committee, rather than established research
  - Lack of research showing skills are distinct and related to work outcomes
The holistic model of education and work success

**CORE ACADEMIC SKILLS**
- English Language Arts
- Mathematics
- Science

**CROSS-CUTTING CAPABILITIES**
- Information and Communication Technology
- Collaborative Problem Solving
- Thinking Skills
- Learning Skills

**BEHAVIORAL SKILLS**
- Acting Honestly
- Getting Along Well with Others
- Keeping an Open Mind
- Maintaining Composure
- Socializing with Others
- Sustaining Effort

**EDUCATION & CAREER NAVIGATION**
- Self-Knowledge
- Environmental Factors
- Integration
- Managing Career & Education Actions
A Multi-trait, Multimethod Assessment

• Intended for use with adults preparing to enter the workforce
  o Entry to mid-level employees

• Assessment is not intended for use to make hiring decisions

• Innovative assessment that measures six essential skills key to workplace success:
  o Integrity
  o Collaboration
  o Creativity
  o Resilience
  o Leadership
  o Work Ethic

• Reporting and Interventions
## Constructs

*Aligned to Behavioral Skills from the ACT Holistic Framework*

<table>
<thead>
<tr>
<th>Essential Skills</th>
<th>ACT Holistic Framework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Ethic</td>
<td>Sustaining Effort</td>
</tr>
<tr>
<td>Collaboration</td>
<td>Getting Along with Others</td>
</tr>
<tr>
<td>Resilience</td>
<td>Maintaining Composure</td>
</tr>
<tr>
<td>Creativity</td>
<td>Keeping an Open Mind</td>
</tr>
<tr>
<td>Leadership</td>
<td>Socializing with Others</td>
</tr>
<tr>
<td>Integrity</td>
<td>Acting Honestly</td>
</tr>
</tbody>
</table>
## Constructs

*Aligned to Behavioral Skills from the ACT Holistic Framework and the Big Five Model*

<table>
<thead>
<tr>
<th>Essential Skills</th>
<th>ACT Holistic Framework</th>
<th>Big Five Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Ethic</td>
<td>Sustaining Effort</td>
<td>Conscientiousness</td>
</tr>
<tr>
<td>Collaboration</td>
<td>Getting Along with Others</td>
<td>Agreeableness</td>
</tr>
<tr>
<td>Resilience</td>
<td>Maintaining Composure</td>
<td>Emotional Stability</td>
</tr>
<tr>
<td>Creativity</td>
<td>Keeping an Open Mind</td>
<td>Openness to Experience</td>
</tr>
<tr>
<td>Leadership</td>
<td>Socializing with Others</td>
<td>Extraversion</td>
</tr>
<tr>
<td>Integrity</td>
<td>Acting Honestly</td>
<td></td>
</tr>
</tbody>
</table>
Research **Advantages** of the **BIG FIVE**

- **Green**
  - compelling evidence

- **Yellow**
  - suggestive evidence

- **White**
  - inconclusive replication studies

Roberts, Olaru, & Martin, 2015
Intended Outcomes

• Examinees will gain insight and understanding regarding their standing on each of the six soft skills
• Examinees will use their score reports to recognize on which soft skills they need to make improvements
• Examinees will make adjustments and improve their soft skills, thus making themselves more career ready and successful in the workplace
• Information may be used by employees to target interventions, conduct workshops, and otherwise determine a candidate's strengths and weaknesses
Item Types

• **Self-report** – Examinees read descriptions of behavior and indicate on a six-point scale how well each characterizes them (48 items)

• **Situational judgment tests** – Examinees read a description of a situation and rate the likelihood of having various responses to the situation (24 items)

• **Forced choice** – Examinees choose which of three statements is most and least like them (20 triads)
Self Report

I am the first to admit when I do something wrong.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Somewhat Agree
- Agree
- Strongly Agree
You are working on a project with a team of coworkers. They choose you to present the team's work to the entire organization at an upcoming meeting.

Instructions: How likely are you to do each of the following?

<table>
<thead>
<tr>
<th></th>
<th>Very unlikely</th>
<th>Unlikely</th>
<th>May or may not</th>
<th>Likely</th>
<th>Very likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refuse to give the presentation because you feel very uncomfortable speaking in front of large groups</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Try to get someone else in the group to take on the role of presenter so you don't have to speak in public</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Agree to give the presentation despite feeling uncomfortable about having to speak in public</td>
<td>●</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Ask the group if anyone is willing to present with you</td>
<td>○</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Feel excited about giving the presentation because you really enjoy speaking in front of large groups</td>
<td>●</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Forced Choice

Please drag the adjective that is MOST like you into the "Most like me" box and drag the adjective that is LEAST like you into the "Least like me" box. Do nothing with the third adjective. Some of these decisions might be difficult; please just do your best.

confident

precise

least like me
Reports and Interventions

**Reports**

**Employee Report**
- Separate score for each of the six constructs
- Feedback using four-star system (Developing, Approaching, Demonstrating, Mastering)
- Additional example behaviors included at each of the four star levels to provide developmental feedback

**Roster Report**
- Comprehensive view for employers of employees taking the assessment

**Interventions**
Set of activities for each of six scales designed to help employees improve their essential skills in each area. Examples:
- Goal setting
- Prioritizing
- Developing confidence and assertiveness
- Effective communication skills
- Being a good team member
ACT Tessera Workforce measures six important skills, described below. Stars indicate your current level on each skill. Remember that all skills can be improved with practice and deliberate effort, so don’t be discouraged if you are at lower levels on any of these skills.

### Work Ethic
Work ethic reflects the extent to which a person’s actions demonstrate persistence, goal striving, reliability, dependability, and attention to detail at work.

### Collaboration
Collaboration reflects the extent to which a person’s actions demonstrate the ability to work on teams; empathy, helpfulness, trust, and trustworthiness.

### Creativity
Creativity reflects the extent to which a person’s actions demonstrate ingenuity, creative thinking, innovativeness, flexibility, open-mindedness, and embracing diversity.

### Resilience
Resilience reflects the extent to which a person’s actions demonstrate stress management, emotional regulation, a positive response to setbacks, and persistence.

### Leadership
Leadership reflects the extent to which a person’s actions demonstrate accountability, influence, optimism, and enthusiasm.

### Integrity
Integrity reflects the extent to which a person’s actions demonstrate honesty, sincerity, fairness towards others, and modesty at work.
What do pilot participants say?
Wayne Fanno
Office of Workforce Investment, State of Oregon

“Tessera Workforce can't be gamed, because you don't know what you're going after.”

Bob Lee
County Workforce Development, St. Louis, Missouri

“Our team was surprised by our low score on Collaboration. But we used the data to start a conversation.”
Use Case 1: Identifying Skills Gaps and Training Needs

- “Results are a starting point to better prepare job seekers for employment”
- “Objective information de-personalizes difficult conversations”
- “Allow HR or workforce professional to dig deeper”
- “Shines a headlight [or flashlight] on the person”
- … get employees ready for jobs of the future
Use Case 2: Employee Self-Awareness

• “If you don’t know what you lack, you’re blind.”

• “Awareness should improve placement rates” for workforce professionals
Use Case 3: Organizational Behavior

“Collaboration was our lowest score. We used the data to kick off an important conversation about collaboration in our team.”
Use Case 4: Measure Growth

• Assess gains from initiatives meant to develop these skills

• IYF’s experience with PTS: self-perception can be put to the test
SAVE the DATE

October 28-30, 2019

The Westin Charlotte
Charlotte, NC

act.org/workforcesummit
#ACTWorkforce
K12, Higher Education, Workforce Boards, and Government Agencies, contact Kyle Jacobsen at kyle.jacobsen@act.org.

Corporations and International NGOs, contact Sheerin Vesin at s.vesin@iyfnet.org.

For research-related inquiries, contact Jason Way, PhD, at jason.way@act.org.

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