Session 2: Delphi Part 3

1. Discuss and compare/contrast to Industry KSAs (competencies).
   - Note key differences and similarities
   - Suggestions to integrate the two

2. Discuss, revise, refine overall competency map

3. Discuss, refine, refine KSAs included in specific competencies.
Session 2: Final Refinement

- 1.) Delphi vs TUEE I and II comparison (45 min)
- 2.) Overall Competency Map review (30 min)
- 3.) Refine KSAs (45 min)
1.0 Professional Competence

1.1 Intrapersonal Competence
   - 1.1.1 Self-Directed, Lifelong Learning
   - 1.1.2 Intellectual, Innovative, Critical Thinking
   - 1.1.3 Ethical
   - 1.1.4 Conscientiousness

1.2 Engineering Competence
   - 1.2.1 Technical, Analytical
   - 1.2.2 Scientific
   - 1.2.3 Mathematical
   - 1.2.4 Innovative, Creative, Design Thinking

1.3 Interpersonal Competence
   - 1.3.1 Communication
   - 1.3.2 Teamwork
   - 1.3.3 Leadership, Project Management
   - 1.3.4 Social, Intercultural

OVERALL COMPETENCY MAP
Working Draft 16 April 2017

Phase I and II TUEE Program Table 2, pg 18
Session 2 - 1

Similarities

4 - 7

Differences

4 - 7

Integration Suggestions

1 - 2
Session 2 Part 2

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OVERALL COMPETENCY MAP
Working Draft 16 April 2017
Session 2 - 2

TUEE IV Workshop Session 2 Worksheet 2
Discuss, revise, refine overall competency map: Write out suggestions below or sketch it out on the back.

<table>
<thead>
<tr>
<th>Competency</th>
<th>Comments</th>
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Session 2 Part 3
KSAs of Intrapersonal Competencies
Working Draft 16 April 2017

1.1 Intrapersonal Competence

1.1.1 Self-Directed, Lifelong Learning
- **K**—Knowing how to learn and where to find resources; Understanding lifelong learning;
- **S**—Doing self-assessment, management, development; Practicing life-long learning
- **A**—Curious; Motivated; Pro-active; High achiever; Introspective;

1.1.2 Intellectual, Innovative, Critical Thinking
- **K**—Knowing/understanding other disciplines (beyond STEM); Multi-literate; Understand problem solving; Comprehending value of diversity;
- **S**—Adept problem finder/manager/solver; Making informed/good decisions; Apply knowledge; Deal with ambiguity/conflict/plurality; Make inferences/judgments
- **A**—Innovative; Creative; Insightful; Open-minded; Resourceful; Growth/entrep. mindset

1.1.3 Ethical
- **K**—Understand what constitutes ethical/moral behavior and professional responsibility; Understand civic responsibility;
- **S**—Accept responsibility; Act with empathy; Respect others; Consider broad contexts; Make informed, equitable, inclusive judgments; Embrace diversity, inclusion
- **A**—Honest; Having high integrity/EQ; Reliable; Dependable; Concern for positive impact;

1.1.4 Conscientiousness
- **K**—Understanding value of stakeholders/needs; Understand professional standards/constraints; Understanding personal attributes/capabilities
- **S**—Acts professionally, with integrity and high standards; Critique self; Manage time, priorities, risks, motivations, integrity, learning; Develop mastery;
- **A**—Reflective; Responsible; Self-aware; Persistent; Humble; Motivated; Careful; Punctual
Definitions
Merriam-Webster.com

“Can do” competencies

Knowledge—a
countainment with or
knowing/understanding something
(See cognitive taxonomies)

Skills—ability to use one’s knowledge effectively, especially in the performance of a task
(See psychomotor skills taxonomies)

“Will do” competencies

Attitude—a feeling or emotion toward something
(See affective taxonomies)
**Session 2 - 3**

*TUEE IV Workshop Session 2 Worksheet 3*

Discuss, refine, refine KSAs included in specific competencies. Write out suggestions below.

<table>
<thead>
<tr>
<th>Competency</th>
<th>KSA (2 - 3 in each)</th>
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</thead>
<tbody>
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