**Academic Integration Breakout Session**

**7/14/15; Detailed notes from Subgroup 2a: Developing/Integrating Curriculum.**

1. What do we mean by “curriculum” and “integration”?
   1. Concentration
   2. Minor
   3. Course
   4. Lecture
   5. Relationship to accreditation
   6. Relationship to student/career development (jobs, industry)
2. Pathways to building curricula:
   1. Connect research to coursework
   2. Engage students in the decision process
   3. Interest students through problem solving
   4. Promote curricula through benefits to jobs and career development/opportunities
   5. Students are passionate about solving the world’s problems, therefore attract them this way
   6. Connecting to a real-world problem (capstone) can be attractive
   7. Attract students who are interested in the topics but perhaps not in a career
   8. Begin talking to students as freshmen and then strategically discuss in courses along the way
3. Types of curricula:
   1. Sustainability-related topics in a course
   2. Sustainability courses
   3. Sustainability concentrations
   4. Discipline-specific vs. multi-disciplinary (integrated)
   5. Competitions, camps, projects, exhibits, etc.
4. This is such a diverse problem—what are we trying to achieve?
   1. Inform/inspire degree-seeking students to use these principles in their work and eventually take leadership positions and accelerate progress
      1. They are better citizens/workers
      2. They become leaders
      3. Progress is accelerated
   2. Must be an integrated, systematic approach because no piece/component is sufficient. That is, one course/topic is necessary but not sufficient.
      1. Challenge is to bridge social sciences, liberal arts, and professional studies
      2. Broaden/expand the language beyond discipline only
      3. Challenge is to engage some faculty members who believe developing research-specific courses in their area will give them a better chance at tenure
      4. Engage students outside the classroom
5. Challenges differ in different types of programs
   1. Technically specific
   2. Social/cultural aspects tied to different drivers
   3. Philosophy/ethics
6. Techniques to gain permission
   1. Engage students to think about value (multiple aspects)
   2. Engage students to think critically
   3. Engage students to study abroad
   4. Make course(s) satisfy various Gen Ed (general education) requirements
   5. Engage students to think globally and long term
   6. Engage students to think innovatively
   7. Engage students to think as entrepreneurs
   8. Engage industry to address importance
7. What about departments that see limited connections to energy and sustainability?
   1. How to inspire? 🡪 graduates more valuable
   2. How to engage? 🡪 provide release time and/or money
   3. How to overcome resistance? 🡪 assist and not demand
   4. How to incentivize faculty? 🡪 team teaching with other faculty or industry to reduce load per person