UMass Sustainability Education Framework and Outcomes

1-6. Proposed Framework Statements
- Draft summary outcome statements (April 2013)
  - (Grouped but unedited) outcome statements generated by workshop participants (Fall 2012)

1. Sustainability education grapples with 21st century national and global challenges
- Graduates understand the scope, scale, and complexity of global sustainability issues
- Graduates apply social justice perspectives to sustainability issues
- Graduates accept the challenge to be informed, reflective, and active
  - interconnectivity of realms of sustainability (personal, global, across disciplines, team teaching)
  - consider ‘needs’ and ‘future’ => values => behavior
  - analyze problems => recommend changes (e.g. policies, practices)
  - rethink "needs"
  - knowledge of why they should care about sustainable development
  - empowerment
  - experiential learning
  - orientation towards learning
  - good values
  - authenticity
  - understand equity w/ regard to environmental goods

2. Sustainability education emphasizes systems-thinking
- Graduates consider the interconnectivity of economic, ecological, and social dimensions in their analysis of issues
- Graduates recognize the assumptions and values at work in issues
- Graduates propose holistic solutions at appropriate scales
  - understand inter-connectivity of health, economics, environment, so as not to propose piecemeal solutions
  - comprehensive understanding of environment, economics, and equity
  - making systems connections
  - help people see linkages between social/natural systems
  - see the social/human context of the physical/natural sciences
  - teach students to take critical approach (critical analysis/inquiry) to complex issues
  - Interdisciplinary understanding & systems thinking
  - life cycle analysis
  - KNOWLEDGE of sustainability underpinnings
  - inter-connectivity of realms of sustainability (personal, global, across disciplines, team teaching)
• recognize true cost of everything
• identify bias (perceive with multiple perspectives)

3. Sustainability education connects disciplines across the University

- Graduates apply the perspectives of the sciences, social sciences, and humanities as they consider issues
- Graduates are able to apply research techniques from more than one academic discipline
- Graduates are able to form and work effectively in interdisciplinary teams

  • comprehensive understanding of environment, economics, and equity
  • weighing environmental and societal costs and benefits (pesticide use and value judgments)
  • make planning professionals more aware of the social/human impacts of their designs
  • cross disciplinary literacy
  • value fields other than your own
  • orientation towards learning
  • connecting rather than segregating
  • interdisciplinary teams

4. Sustainability education addresses local sustainability issues

- Graduates have hands-on experience with sustainability issues in Amherst and western Mass
- Graduates bring scholarly research to collaborations addressing local sustainability issues
- Graduates have on-the-ground experiences of the complexity of sustainability issues
- Graduates integrate their academic knowledge into their understanding of civic issues

  • hands on EXPERIENCE (Community service learning)
  • active engagement outside University (civic life)
  • collaborative work with diversity and community where possible
  • learning to collaborate with professionals from other disciplines
  • application of research

5. Sustainability education cultivates personal agency and professional responsibility

- Graduates continuously reflect upon, test, and develop their personal and professional values
- Graduates integrate academic knowledge with their values as they develop courses of action
- Graduates integrate action and reflection in practice
Graduates take proactive, positive stands as individuals and as members of professions

- consciousness of individual choice
- know power of their own demand individually and corporately
- Interdisciplinary set of sustainability VALUES
- active engagement outside the university (civic life)
- collaborative work w/ diversity and community where possible
- recognize and value authenticity (what is greenwashing?)
- help students reflect and draw from their own experiences
- learn and live values
- consider "needs" and "future" ---- values ----> behavior
- be aware of their own values (implicit assumptions --> explicit)
- develop coherent and holistic opinions on key sustainability issues

6. Sustainability education fosters civic engagement

- Graduates are able to find the information they need using a variety of research strategies
- Graduates consider a variety of viewpoints and values to understand issues
- Graduates are able to imagine a variety of solutions
- Graduates have experience with applying a variety of effective strategies for citizen service and action

- application of research
- problem solving and implications
- how to do research, find answers they don’t already know
- apply the things they LEARN in concrete, experiential ways
- learn models for deliberation --> policy --> action
- "this is not a drill!"
- understand/analyze social justice
- understanding practical considerations/implications for disciplines across campus
- self-organizing and models of deliberation
- deliberation --> policy --> action (how to talk about things)
- collaborative work w/ diversity and community where possible
- capability to implement "sustainability" professionals
- recognize politics of the environment
- positive problem-solving mindset