

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