

Educating for Sustainability

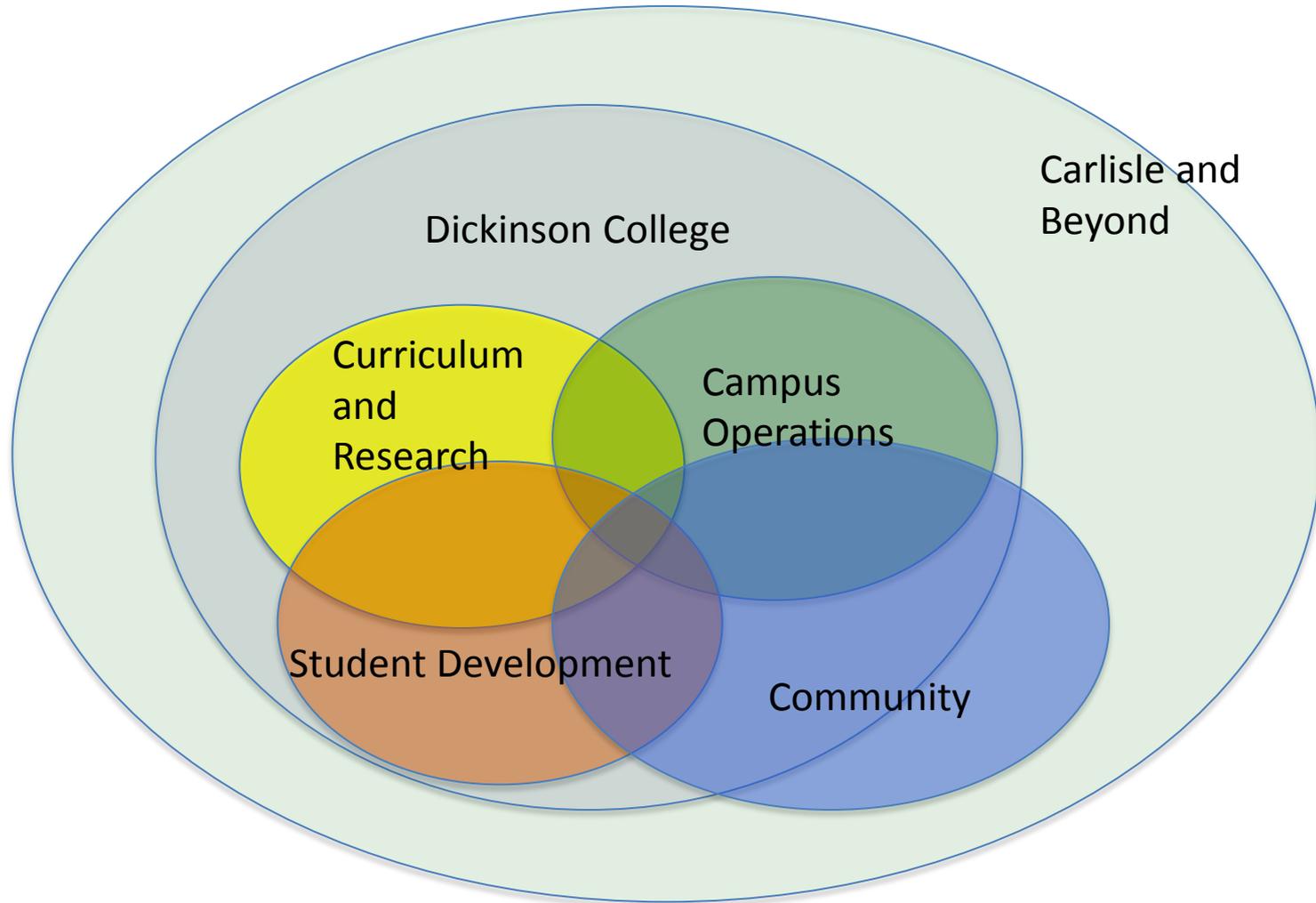


Sustainability & liberal education

- Holistic, systems thinking
 - Asks big questions
 - Invites nearly all disciplines into dialogue
 - Emphasizes skills of knowledge translation, integration, synthesis
- High impact educational practices
 - Service learning, community-based research, internships, learning communities, place-based learning, problem-based learning
 - Campus as living laboratory
- Bridges between communities
 - Academic and student development
 - Students/faculty and campus operations staff
 - College and off-campus communities
- Citizenship
 - Compels reflection on how we live as individuals and as members of communities

Weissman, 2012

Spheres of sustainability learning



Curriculum

- Integrating sustainability across the curriculum
 - arts & humanities, social sciences, physical sciences
- > 100 sustainability courses offered 2012-2013
- 1455 students (62%) took one or more courses
- Class of 2013 – 80% took one or more courses last 2 years



High impact pedagogies

Living laboratories

Courses, internships, independent research, workshops, self-directed projects, volunteer opportunities

Service learning and community-based research courses

Mosaics, globally integrated courses

Place-based learning

Semester & year-long study abroad



Global study and engagement with sustainability

- Semester & Year-long programs
 - University of East Anglia
 - Yaounde University
 - University of Bremen
 - University of Queensland
- Summer immersion
 - Toulouse, Bremen, Yaounde, Shanghai, Israel
- Globally integrated courses



Research

- Student-Faculty Research projects
 - 34 projects funded since 2008
 - > 60 students
 - \$148,000 awarded
- Faculty research, 2011 survey
 - Primary focus or significant dimension: 13%
 - Minor dimension: 12%
 - Related: 20%



Campus operations & student learning

- LEED Buildings
 - ‘Crystallized pedagogy’ - buildings that teach
- Modeling sustainable practices
 - Energy & water conservation, waste reduction, renewable energy, local foods, landscaping
- Working with students
 - Dickinson Farm, SHOP, Climate Action Plan, Idea Fund
- In the classroom
 - INBM, SUST



Student Development



- Residential experience
 - Neighborhoods
 - Learning Communities
 - Treehouse
 - Eco-Reps
- Student organizations
- Participation in governance
- Internships

Community

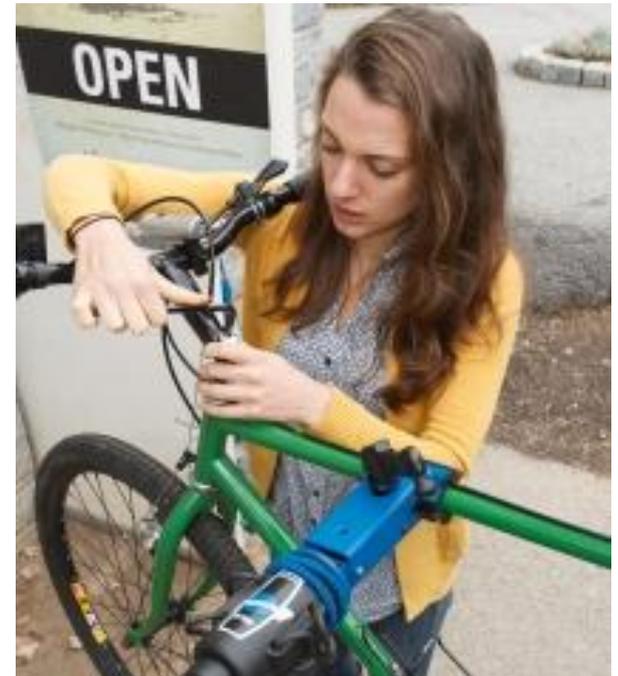
- ALLARM
- Dickinson Farm
- Farmers on the Square
- Project SHARE
- Clean Air Board
- Rails-to-Trails
- Downtown Carlisle Association
- High – I Partnership
- Greater Carlisle Project



Center for Sustainability Education

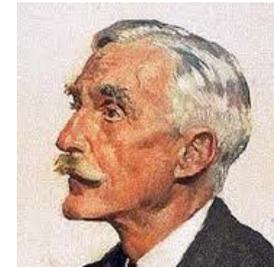
Create, enhance & connect opportunities for learning in & out of the classroom

- Valley & Ridge
- Sustainability Education Fund grants
- Workshops, study groups, speakers
- CSE Interns & volunteers
 - Handlebar
 - Biodiesel
 - Eco-Reps
 - Waste minimization
 - Communications
 - Events
- Baird Sustainability Fellows
- GHG inventory & climate action plan
- Outreach, reporting

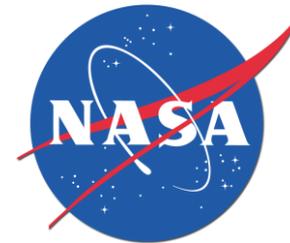




- Valley & Ridge EfS Study Group
- Sustainability Education Fund
- Cooling the Liberal Arts, Campaign for Climate Change Education
- Luce Initiative on Asia and the Environment



Andrew W
Mellon
Foundation



Dickinson Organic Farm

- 50 acres
 - Vegetable & livestock production
 - Supplies Dining Services, 130 family CSA
 - Composts 800 lbs/day of waste from dining hall
- Student farmers
- Site of research, class visits, tours
- Community education
 - SEED, Farm-Cook-Eat, DIG
 - PASA workshops



Alliance for Aquatic Resources Monitoring (ALLARM)



- Citizen-science to protect PA waters
 - Student staff work with community watershed associations
- Shale-gas monitoring protocol
 - 45 workshops, 900 volunteers trained
- Outreach & education