

BSU Land Design Institute: Education for Sustainability

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ABSTRACT

The BSU Land Design Institute (LDI) pursues ecologically and culturally responsible land design through education, research, outreach and service; and integration of efforts into a land-design agenda. It facilitates land design initiatives of BSU faculty, links individual initiatives, and develops educational programs to lead communities (local, regional, global) to sustainable futures. It promotes education in relationships that sustain ecological and cultural resources; employing the teacher-scholar model for classroom experiences that integrate research, service and demonstration projects that enhance quality of life and sustain land-based resources. The LDI brings community-based experiences and national sustainability experts into learning environments to optimize university and community-based education about environmentally responsible, socially equitable, and economically viable land management, planning and design.

The LDI is the Midwest node and potential nerve center of LDI's proposed global network of biome-based regional sustainability centers. Within this network, each regional center networks with other centers in its biome globally to enhance education about how to live sustainably in that biome. The LDI is presently building its capacity as global information clearinghouse through its Global Media Network for Sustainability (GMNS) project. It is building its capacity to partner with other US centers to translate the national desire for sustainability into a system of regional sustainability agenda. The LDI is also building its capacity as regional sustainability education center through its work to integrate the LDI's proposed LandLab green technology demonstration and education site, with BSU's initiatives to optimize its field sites as an integrated resource, build an Environmental Education Building, optimize its GLOBE site for K-12 science learning, and enhance teacher development via its Institute of Professional Development Schools. The LDI is leading the "FSEEC-LandLab as BSU's first green building and green-built site" initiative, including design of BSU's land management system that baselines present ecological performance, benchmarks future performance, makes decisions based on eco-balance, and monitors site conditions to assess whether eco-balance is achieved. Students are integral to this effort, with classroom experiences bringing eco-balancing, ecological footprinting, system dynamic modeling and other sustainability experiences into the classroom.

The LDI initial focus on regional educational programs, including its Ecological Restoration Certificate Program, has expanded to major global sustainability initiatives in the Far East, Latin America, and the UK, including distance education in each global region. Most recently it includes BSU leadership in forming the US-Brazil Sustainability Consortium (4 universities and 2 community-based sustainability education and research entities); and Consortium submission of parallel proposals to the US and Brazilian

departments of education to facilitate student international study in sustainability. The Consortium is pursuing funding for numerous projects including a hierarchical education for sustainability curriculum. The curriculum's *Core Course* will be an Internet-based sustainability course addressing interrelationships of ecology, environmental ethics, and environmental economics in sustainable management, planning, and design. Level 2 includes hands-on and web-based *workshops* on resource-balancing, systems dynamic modeling, GIS, sustainable economics, carbon-balance, and similar topics. Level 3's *Certification Program* includes practical experiences in funded projects; and facilitates entry into the Level 4 *degree extension or cognate* program, where students work with faculty and non-faculty partners including funded project internships applying baselining, dynamic modeling, and footprinting methods. This US-Brazil Sustainability Consortium serves as a model for future LDI consortium in Latin America and beyond.

The LDI has formed a Sustainability Advisory and Development Group (SADG) to: increase BSU effectiveness facilitating sustainability in communities; enhance partnering with community sectors to increase understanding of sustainability; identify community sustainability needs, gaps, roadblocks, and triggers; and conduct projects to realize community potentials, address needs, fill gaps, deconstruct roadblocks, and implement sustainability triggers.