The College Campus as a Sustainable Living Laboratory

March 2015
Supporting community colleges in educating for and building a clean and sustainable economy
SEED: 485 Member Colleges
The Campus as a Sustainable Living Laboratory

- Student learning opportunities that incorporate the college campus built environment
- Performed in conjunction with traditional classroom learning to make instruction more relevant to students
“The idea underpinning the living laboratory theme is that the entire UBC campus is an experiment in sustainability...in which staff, students and faculty can test, teach, learn, apply and share the outcomes of their inquiries”

--John Robinson, Associate Provost | UBC Sustainability Initiative
**FOOD SERVICES**
Redesign college composting procedures, analyze cost of recyclable bottles and flatware, turn waste into bio-diesel fuel

**BUILDINGS**
Install building sensors, monitor energy use, calculate return on investment for renewable sources

**CONSTRUCTION AND LAND USE**
Assess waste remediation practices, benchmark facilities against LEED criteria, restore native plants

**GROUNDS**
Assess campus pesticide use, build rainwater harvesting tank

**TRANSPORTATION**
Develop business plan for alternative-fuel campus fleet

**PARKING**
Develop financial models for lighting retrofits, study student attitudes toward ride-sharing
Why? A Core 21st Century College Strategy

• Leads to on-the-ground sustainability outcomes
• Fosters internal relationships
• Generates important business/higher-ed partnerships
• Makes curricula relevant through experiential learning
• New, innovative model for higher education (also a core completion strategy)
Addressing Key Challenges

• Engaging facilities
• Identifying key programs
• Identifying key campus opportunities
• Coordinating body/person
• Faculty commitment
“Our students don’t even know they’re mastering algebra and geometry. They know they’re reducing a home’s energy consumption, and that’s what’s interesting for them.”

Dean, applied technology, Alfred State, discussing students’ work to optimize a net-zero home’s small wind energy source
“Students who have been trained on these living labs, solving real sustainability problems, no doubt have the hard and soft skills that are urgently needed in our industry”

Executive, commercial building technology company
80% of highered institutions conducted green retrofits and operational improvements in 2012*

59% of community colleges say they are interested in using these projects as student learning opportunities

<5% of community colleges are actually doing it today **


**2013 SEED member survey