It’s in the Mission:

How a Focus on Sustainability Transformed a College During Challenging Times
Shannon Havlik | Sustainability Coordinator - History & Overview

Jay McHenry | Director of Facilities – Facilities Transformation & Creation of Living Lab Spaces

Josh Gamer | Dean of Integrated Technology Division – An Administrative Point of View – Academics & Community Engagement

Joshua VandeBerg | Instructor of Building Science & Energy Management- Using our Living Labs
“Our Mission at Western Technical College is to provide relevant, high quality education, in a collaborative and sustainable environment, that changes the lives of students and grows our communities.”
ACUPCC--Critical Role of Higher Education

- Shaping tomorrow’s leaders
- Faculty, staff & student involvement
- Research, action & demonstration projects
- Create living labs for students
- Support green industries & demand for renewable energy
- Job creation
- Innovative financing models
- Local communities engagement

Thomas L. Purce, President of The Evergreen State College, signs the commitment in 2007
Benefits & Opportunities

- Invite stakeholders into meaningful purpose
- Mission fulfillment
- Attract top students, faculty, and staff
- Operate more efficiently – cost savings
- Lead technology race
- Public-private partnerships
- Stay ahead of regulatory curve

Michael Crow, President of Arizona State University and Co-Chair of ACUPCC Steering Committee
## Focus on Sustainability

### Participants

- Paul Albrecht
- Paul Amborn
- Patti Balacek
- Erica Black
- Jennifer Brave
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- Shirley Heffner
- Mary Ann Herlitze
- Connie Hoveland-Belden
- Tim Hyma
- Cindy Kartman
- Kay Kastenschmidt
- Guy Leavitt
- Julie Lemon
- Sally Lister
- Bruce Mathew
Executive Overview Summary

**Top Sustainability Needs**
1. Reduce energy usage across all operations (#11)
2. Increase the use of energy from renewable sources (#12)
3. Obtain adequate funding for sustainability projects (#50)
4. Attract new customers through sustainability initiatives (#48)
5. Provide effective occupant training on energy and environmental issues (#4)
6. Increase the level of waste recycling (#16)
7. Reduce operating costs across the organization (#41)
8. Design, deliver and/or use products or services with reduced environmental impact (#21)
9. Increase use of energy-efficient building systems and equipment (#43)
10. Promote local economic development (#38)

**Top Sustainability Practices**
1. Energy and Environmental Education Program (#23)
2. Distributed Power Generation (#27)
3. Employee Sustainability Communications Program (#41)
4. Sustainability Marketing and Public Relations (#40)
5. Sustainability Funding Grants and Initiatives (#42)
7. Recycling Program (#28)
8. Demand-side Energy Management (#24)
9. Sustainability Strategic Planning (#39)
10. Green Products and Services (#20)
Focus on Sustainability

Goal: Financial Resources - Are We Financially Secure?

OBJECTIVES

1. Provide affordable education to our students
2. Commit to sustainability in College operations
3. Commit to regional strategies in sustainability
4. Establish financial sustainability

1. Decrease student loan indebtedness
2. Meet or exceed LEED Silver for all new and existing buildings
   A. Implement people oriented energy management savings map
3. Buy and invest regionally
   B. Hold vendors/partners/suppliers to the College’s sustainability standards and expectations
4. Broaden community support to help the College meet its challenges
   A. Implement energy mitigation strategy
   B. Align Western Strategic Plan with Foundation Strategic Plan
   C. Balance auxiliary services budgets
   D. Balance staffing levels and total compensation with available revenue
Western’s Sustainability Policy

D0114 SUSTAINABLE CULTURE
Western Technical College is committed to the development of a sustainable culture that meets the needs of the present without compromising the needs of future generations. We recognize that a sustainable culture embraces environmental stewardship, social responsibility, and economic viability.

Western Technical College will enable a sustainable culture by:
- Developing scientific and social literacy in students, faculty, staff, and the regional community concerning environmental, social, and economic issues;
- Leading regional efforts to advance a sustainable culture;
- Promoting and modeling environmental stewardship in personal and institutional choices and behaviors; and
- Inspiring innovative environmental solutions, behavioral changes, and ethical stewardship of the natural world.  
  - Adopted March 15, 2011
Energy Program

F0107 ENERGY MANAGEMENT CONSERVATION
The Board embraces energy conservation and believes it to be our responsibility to ensure that every reasonable effort is made to conserve energy and natural resources while exercising sound financial management. We recognize the importance of adopting an energy management and conservation policy in order to govern this program.

We also affirm the implementation of this policy will be the joint responsibility of the board, administration, faculty, staff, students, support personnel, and energy partners. Success is based on cooperation at all levels.
Reference: F0107p Procedures
Adopted July 12, 2010
Energy Savings to Date: $1,000,000 +
Our Vision is 2020

- Academic Initiatives
- Workforce Development
- Next Generation Facilities
More than 52% of Western Students are from outside La Crosse County
Community Support Needed

- Overall cost of the entire Vision 2020 project roughly $80 million
- Tax levy impact per $100,000 in property value:
  - $3.25 per month
  - $39 per year
**Western Referendum Survey Results**

*Questions were asked in a random order.

<table>
<thead>
<tr>
<th>Project Types</th>
<th>Very Important</th>
<th>Somewhat Important</th>
<th>Not Very Important or Not At All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Efficiency</td>
<td>47%</td>
<td>35%</td>
<td>15%</td>
</tr>
<tr>
<td>Health care/tech programs</td>
<td>35%</td>
<td>39%</td>
<td>23%</td>
</tr>
<tr>
<td>Indoor air quality</td>
<td>34%</td>
<td>41%</td>
<td>20%</td>
</tr>
<tr>
<td>Adaptable labs</td>
<td>32%</td>
<td>38%</td>
<td>27%</td>
</tr>
<tr>
<td>Security</td>
<td>28%</td>
<td>38%</td>
<td>32%</td>
</tr>
<tr>
<td>Shared space/resources</td>
<td>23%</td>
<td>42%</td>
<td>32%</td>
</tr>
<tr>
<td>Collaborative learning</td>
<td>21%</td>
<td>37%</td>
<td>39%</td>
</tr>
<tr>
<td>Parking ramp</td>
<td>12%</td>
<td>28%</td>
<td>55%</td>
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</tbody>
</table>
Community Support Needed

- Referendum presented to voters at the November 6, 2012 election. It Passed!
Focus on Sustainability

IMPROVED FACILITIES

SPACE UTILIZATION
FLEXIBLE - EFFICIENT - CAPACITY
Coleman Center

- Address the 60% growth in general studies course offerings
- Expand academic support services
- Create a center for general studies programming
- Address long term effects of ongoing repurposing of space and improve operational efficiency, safety and security

Project Budget: $26.5 million
Coleman Center – Then | Now
Kumm Center

- Address a 47% increase in the number of transfer students, and the ongoing demand for healthcare programs
- Create 11 additional academic spaces for science and simulation labs to enhance clinical experiences for students without increasing building size
- Accommodate new technology and improve operational efficiency, safety and security

Project Budget: $10.1 million
Integrated Technology Center

- Create state-of-the-art occupational centers
- Create living laboratories through LEED Platinum building design
- Designate space for business and community partnerships that attract students to cutting edge programs in building systems and advanced manufacturing

Project Budget: $32.6 million
Integrated Tech Center – Then | Now
Integrated Tech Center – Then | Now
Truck & Heavy Equipment Facility
Addition to replace leased annex space, that will allow for program expansion to meet the needs of a growing industry with a new focus on sustainable practices in transportation.

Horticulture Education Center
New facility to replace leased space. Utilized by horticulture, landscape, culinary and science programs including conventional and organic growing areas. Expansion of community partnerships.

Parking Ramp
Additional parking to support student housing and enrollment growth; lack of adequate parking is number one complaint of students.

Project Budget: $10.6 million
Diesel and Heavy Equipment Technology Center – Then | Now
Western’s Hydro Power Station – Then | Now
Why was it a good time to transform our campus?

- Regional businesses and organizations in need of highly skilled workers now and into the future. It’s our mission to address regional workforce needs.

- Interest rates were at historically low levels; the estimated savings in interest costs alone on this project is over $20 million over 20 years.

- The project itself created over 900 jobs in the area and generated $112 million in local economic benefit.

- Our region needs additional graduates in high paying careers, staying in our communities, growing our regional economy.
What Happens if Voted “NO”?

- Needed improvements would have continued to be deferred, thus only get more expensive
- Western would have been limited in its ability to truly be efficient, which wastes precious taxpayer dollars
- Growth would have been stifled, which reduces opportunities for local students and thus hurts our local economy
An Administrative Point of View
Changing how we think and what we think about
Program Management - Sustainable Programs

Traditional program management is often an isolated process. Decision making and program planning can take place in silos, by individual unit administrators and faculty. Our stakeholders can easily be lost in this.

How does a focus on people, planet, and profit then change the culture of program management? Consider these elements...
Access is challenging for students due to cost and availability.

We live in a social society where diversity adds to perspectives.

Leaders have a responsibility to lead.

We are only as strong as our weakest link.

Resources are scarce.

Environmental advocates are needed.

Products can have 2nd lives.

Facilities are essential but consume resources.

A campus is an environmental system of its own.

Budgets are limited.

Others face this same dilemma.

When students succeed, they contribute to the overall economy.

In order to sustain programming, we need to be innovative.
Program Management- Sustainable Programs

By taking into account the 3 P’s- we begin to:

- See facilities as a valuable learning tool for students and staff as well as an educational space for the public by strengthening community relations through service learning
- Move away from individually owned capital equipment and move towards shared spaces and equipment, minimizing duplication of resources
- Move programs closer together through career clusters, allowing for collaborative projects, social networks to build, and synergy of ideas
- Encourage common pathway entry points, increasing access for students, while utilizing faculty across multiple programs, and maximizing marketing dollars
- Identify where students can connect with programming while in high school to save time and money
- Identify where programs and students can be leveraged to participate in community organizations related to sustainability
Sustainability Across Academics

- Broad Objective- Embed sustainability across academics
- What does this actually mean?
- What does a living lab actually entail?
- This is where our focus currently is in order to truly bring campus wide.
Cultivating Community Interest

As a community leader, it is our job to engage the community in actions which promote a focus on people, planet, and profit.

We have the SME’s on staff to make a difference through education and opportunity. We also have the ability to reach large audiences, from secondary schools to civic organizations. Modeling specific action on a small scale can build synergy which can grow beyond what we can do ourselves.
Community Engagement- Get Growing

Western partnered with Mayo Clinic and Hillview Urban Agriculture on a joint venture to promote sustainable food production and to bring resiliency to our communities.

Teaching what we can do on our own, and what to do with it, is a critical component.

Students can experience service learning.
Community Engagement - Get Growing
Community Engagement - Renewable Energy

Western is proud to have a Building Science and Energy Mgt. program which focuses on:

- Energy auditing
- Energy management
- Renewable energy systems
- Integrated design

In order to build interest and awareness, we have begun to design high school academies around energy, utilizing facilities to peak interest.
Community Engagement - Renewable Energy

Over 200 students annually participate in our Exploratory Energy Academy
Community Engagement - Renewable Energy

We’re also hosting various community groups and engineers in addition to serving on the Midwest Hydro Users Group (MHUG) to:

- Identify training needs
- Investigate potential hydro solutions at local municipalities
- Share lessons learned

Our own students also get exposed to measuring elevations, calculating flow, and estimating potential output.
Community Engagement - Sustainability Institute

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ALUMNI

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HEALTH SYSTEM®

ORGANIC VALLEY

Western Technical College

E3 COALITION
Your Energy Partner

Empire

Habitat for Humanity
ReStore

SUSTAINABILITY INSTITUTE

BUSINESS CHAMPIONS

SUSTAINABILITY INSTITUTE

westernntc.edu
Bringing the Environment to the Class

With over 60 programs college-wide, there is always opportunity to utilize the learning experience to affect our own communities. That said, Josh V. will introduce you to how several programs are doing just this in a large way, changing the thought processes of our industry and community overall.
Sustainability in the Classroom
Western’s Center for Building Innovation

Consists of five programs:
Landscape Horticulture
Air Conditioning, Heating and Refrigeration
Architectural Technology
Wood Tech
Building Science and Energy Management
Focus on Sustainability

Common Core Curriculum

Principles of Sustainability
Construction Fundamentals
Resource Efficiency
Building Science
Energy Conservation
Focus on Sustainability

Living Laboratories:
Community-based educational projects that matter

westernntc.edu
SwiPHt House: Passive House Instructional Facility
Focus on Sustainability

Passive House Instructional Facility: SwiPHt
La Crosse Habitat for Humanity
La Crosse Housing Replacement Program

Annual Energy Costs

<table>
<thead>
<tr>
<th>Description</th>
<th>$/yr</th>
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<tbody>
<tr>
<td>Heating</td>
<td>230</td>
</tr>
<tr>
<td>Cooling</td>
<td>37</td>
</tr>
<tr>
<td>Water Heating</td>
<td>103</td>
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<tr>
<td>Lights &amp; Appliances</td>
<td>476</td>
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<tr>
<td>Photovoltaics</td>
<td>0</td>
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<tr>
<td>Service Charges</td>
<td>120</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>960</strong></td>
</tr>
<tr>
<td>Average Monthly ($/Month)</td>
<td><strong>81</strong></td>
</tr>
</tbody>
</table>
Student Club/Community Engagement

Focus on Sustainability

BETTER BUILDINGS: BETTER BUSINESS® WISCONSIN CONFERENCE
Focus on Sustainability

RECOGNITIONS

U.S. DEPARTMENT OF EDUCATION
GreenRibbonSchools

CLIMATE LEADERSHIP AWARDS
WINNER 2015

CLIMATE COMMITMENT

CAMPUSS CONSERVATION NATIONALE 2015

TREE CAMPUS USA

Western Technical College

It's easy being green

westernntc.edu
We received these awards because of the efforts of many, many people at this college & in our community, and because so many people believe in the mission of the college.

“Our Mission at Western Technical College is to provide relevant, high quality education, in a collaborative and sustainable environment, that changes the lives of students and grows our communities.”

And as these recognitions confirm, we are doing just that.
Western Sustainability

**WHY Sustainability?**

STRENGTHENS our college, students and communities.

Improves Quality of Our Lives.

It Transforms Us.
Thank you!
“Our Mission at Western Technical College is to provide relevant, high quality education, in a collaborative and sustainable environment, that changes the lives of students and grows our communities.”