Master Planning for Sustainability:
Envisioning the Future of Our Community Colleges

Wendy Van Duyne, RLA, ASLA, LEED AP, Bartlett & West, Inc.
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The Facts...

- Given current market conditions, community colleges throughout the nation are experiencing a resurgence in their relevance to today’s circumstances.
The Facts...

- Community colleges are in the news just about everywhere these days:

Building American Skills By Strengthening Community Colleges:

“Now is the time to build a firmer, stronger foundation for growth that will not only withstand future economic storms, but one that helps us thrive and compete in a global economy. It’s time to reform our community colleges so that they provide Americans of all ages a chance to learn the skills and knowledge necessary to compete for the jobs of the future.”

- President Barack Obama

Image courtesy of politic365.com
I think the opportunities in this field are going to be huge,” said Rudy Gastelo, a part-time handyman who left the construction industry two years ago. “I’m not getting that 9 to 5 paycheck, so I’m looking forward to maybe getting a job within a solar company.”
Educators focus on green-collar jobs
Community colleges making it core part of their missions

BY ANNE MARIE DISTEFANO
Pamplin Media Group, Oct 14, 2010

Lots of people talk a good line about sustainability principles, but how do you land a job putting them into practice?

A good place to start is local community colleges, where the seeds of Portland’s “green-collar” work force are being cultivated.

Recent developments at Portland Community College (PCC) and Clackamas Community College have them well ahead of most other Oregon colleges and universities in making sustainability a core part of their missions.

“Mt. Hood’s Sustainable Building Advisor Training Program teaches working professionals such as architects, engineers and developers about the newest requirements for state-funded building projects and the growing demand for green buildings.

“Community colleges are “helping to shape the minds and the knowledge of the future leaders that are going out into our communities,” says PCC’s de Roode.

“A strong foundation and understanding for sustainability is key.”

(Right to left) Linda Gerber, Sylvania Campus president; Erin Sanforth, sustainability coordinator; and PCC President Preston Pulliams talk about the college’s Climate Action Plan under the new wind turbine.
COURTESY OF JAMES G. HILL
More community college graduates are needed

Indiana arrived 'very, very late to the community college party.'

11:18 PM, Mar. 23, 2011 | 2 Comments

Holly Zanville, program director at the Lumina Foundation, said during the summit at Ivy Tech Community College. “This Percent is nowhere near high enough to meet the nation’s workforce needs. We want to see the needle move from 40 percent to 60 percent by 2025.”

aerospace/national defense to package delivery, community college graduates, only a quarter of those enrolling in those colleges nationally are graduating on time.

"It's very exciting, the attention and recognition community colleges are getting nowadays," said Josh Wyner, director of the Aspen Institute, which has announced plans to award a $1 million prize to the nation's best community college in December and annually thereafter.
More than ever, high school graduates are considering attending a community college to begin their education.

The Green-Collar Solution

By THOMAS L. FRIEDMAN
Published, October 17, 2007

Van Jones is a rare bird. He’s a black social activist in Oakland, Calif., and as green an environmentalist as they come. He really gets passionate, and funny, when he talks about what it’s like to be black and green:

“Try this experiment. Go knock on someone’s door in West Oakland, Watts or Newark and say: ‘We gotta really big problem!’ They say: ‘We do? We do?’ ‘Yeah, we gotta really big problem!’ ‘We do?’ ‘Yeah, we gotta save the polar bears! You make it out of this neighborhood alive, but we gotta save the polar bears!’

Mr. Jones then just shakes his head. You try that on people without jobs who live in neighborhoods where they’ve got a lot better chance of getting killed by a passing shooter than a melting glacier, you’re going to get nowhere — and without bringing America’s underclass into the green movement, it’s going to get nowhere, too.

“If we can get these youth in on the ground floor of the solar industry now, where they can be installers today, they’ll become managers in five years and owners in 10. And then they become inventors... The green economy has the power to deliver new sources of work, wealth and health to low-income people— while honoring the Earth.”
The Facts...

- Community colleges also serve as an anchor to smaller towns and municipalities, providing much-needed resources, venues and community support.
  - Educational resources
  - Athletic Resources
  - Cultural Resources
“One of the solutions, Kefalas said, is to rethink higher education. She suggests putting more resources into other post-high school education that teach skills necessary for a new local economy. For example, instead of encouraging young people to go to medical school, suggest going to school to become a physician’s assistant to close the gap of medical professionals in rural areas. Community colleges play a vital role in this process, Kefalas said.”
Kansas is uniquely positioned to help lead the wave and resurgence of these trends.
The Facts...

- We owe it to the future success of our community colleges, and our state, to make efforts to provide facilities to support these growing trends and pave the way for future success.
Many community colleges were built in the late 1960’s and would benefit from improvements to enhance both the function of current technologies as well as more sustainable campus layouts.
Some spaces may not directly support the programming needs of today’s instructors.
The Facilities...

- Technology can be somewhat difficult to support in many of the spaces.
The Facilities...

• Recruitment and retention is impacted by outdated facilities.
The Facilities...

• Community spaces need to be made available to facilitate public participation and engagement with these campuses.
• Many colleges are turning to grants (both public and private) to pursue funding for campus enhancements.

• In an effort to prioritize the need for these improvements and develop a roadmap for the future, many colleges are pursuing the facilities master planning process to help evaluate their needs.
The Future...

Cloud County Community College, Facilities Master Plan
Prepared March, 2006
The Future...

- Existing Conditions
  - Outdated, inefficient heating and cooling systems
  - Overcrowding of Student Housing
  - Cramped office space/lack of storage
  - Inadequate instruction facilities
The Future...

• The design team initiated the project with a two-day design charrette involving students, faculty, staff, and the public.

• Online questionnaires were also distributed to receive feedback on the project.

• Subsequent public meetings were held at 50%, 75%, and 90% completion.

• Open communication was facilitated throughout the process to maintain consistent feedback throughout the design timeline.

Student Responses: 47 Total Questionnaires Collected

Summary:

1. The majority of the responses addressed the need for larger athletic facilities and areas that can accommodate multiple practices all at once (track, basketball, baseball, soccer, spirit teams, volleyball teams, intramurals, etc.) Game rooms and recreational facilities were also of importance.

2. The second most popular responses were in regard to housing improvements—generally in concern to maintenance and parking concerns as well as non-traditional student housing.

3. The remainder of the respondents felt that parking improvements and general facilities need to be updated—exterior improvements.

If you could improve anything about the CCCC campus, what would it be?

• Better game room
• Bigger everything
• Have another gym
• Bigger athletic training room
• Make an indoor track that would make it so we could run inside and not get hit by a door
• Better accessibility for handicapped individuals
• Better accessibility for sporting events
• Better cafeteria food
• A bigger gym
• Apartment improvements—bigger bathroom and showers
• More paintball tournaments
• Bigger showers
• The funds for the soccer program should be dropped—a football program would be more suitable.

• The Process
• Address student housing shortage with additional units

• Implement interior improvements and reorganization of spaces to facilitate current technology and learning

• Address the need for immediate space for the growing wind energy curriculum

• Immediate Needs
The Future...

- Multipurpose addition to provide increased room for community and corporate events
- Enhanced athletic facilities to support future expansion of athletic programs
- Equine range and boarding facility for large-animal/ag science studies

- Long-term needs
The Future...

- Expanded Wind Energy facility to accommodate increased enrollment in program
- Locate wind turbines on-campus for future desire to be completely off the Concordia grid
- Manage stormwater runoff and collect drainage for campus irrigation
- Sustainability Considerations
The Future...
The Future...

- Existing Conditions
  - Drainage and flooding of stormwater on campus
  - Outdated classroom facilities
  - Inadequate Humanities facilities
  - ADA considerations lacking
The Future...

- The design team initiated the project with a two-day design charette involving students, faculty, staff, and the public.

- Online questionnaires were also distributed to receive feedback on the project.

- Subsequent public meetings were held at 50%, 75%, and 90% completion.

- Open communication was facilitated throughout the process to maintain consistent feedback throughout the design timeline.

- The Process
The Future...

- Address stormwater drainage issues with rain gardens, bioswales, and pervious paving
- Relocate some outdoor athletic facilities to help remediate stormwater issues
- Facilitate existing building improvements and reorganization to provide needed space and expand nursing facility to meet industry demand

• Immediate Needs
The Future...

• Increase available space by providing LEED certified Humanities and Student Services additions to existing buildings

• Provide new facility for solar tech program

• Include space for community recycling and urban farming opportunities

• Long-term Needs
The Future...

- Include geothermal fields to enhance heating/cooling capacity of building systems
- Encourage community participation on-campus with recycling center and outreach
- Manage stormwater runoff and collect drainage for campus irrigation
- Sustainability Considerations
The Future...

Seward County Community College
+ Area Technical School
Facilities and Land Use Master Plan
March 2, 2011
The Future...

Phase 1
Phase 10
Phase 18
The Future...

- The design team initiated the project with a four-day design charrette involving students, faculty, staff, and the public.

- Online questionnaires were also distributed to receive feedback on the project.

- Subsequent public meetings were held at 50%, 75%, and 90% completion.

- Open communication was facilitated throughout the process to maintain consistent feedback throughout the design timeline.

<table>
<thead>
<tr>
<th>Monday October 4th, 2010</th>
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<tbody>
<tr>
<td>Tour/Observe Campus from 8:00 am to 6:00 pm</td>
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<td>Board of Trustees Meeting (BOT) 7:00</td>
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<tr>
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<td>Student Leaders**</td>
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<td>Evening/Adjunct Faculty</td>
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<tr>
<td>Community Presentation</td>
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<td>8:00 PM</td>
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- The Process
The Future...

- Address pedestrian connections with bike paths, reconfigured parking areas, and delineated sidewalk patterns
- Provide facilities to promote community involvement and public activity
- Implement immediate improvements to technical spaces to accommodate increased demand and adequate instruction space

• Immediate Needs
The Future...

- Further increase community outreach and student services through LEED certified building additions
- Implement wind and solar considerations throughout campus
- Enhance vehicular infrastructure and building infrastructure to reflect current technologies

- Long-term Needs
The Future...

- Include geothermal fields to enhance heating/cooling capacity of building systems
- Implement LEED certification measures to enhance the energy efficiency of existing buildings
- Collect stormwater runoff for irrigation of plantings throughout campus and implement xeriscaping and low-water consuming plants native to the area
- Sustainability Considerations
What do you envision for the future of our community colleges?

• Questions?