

## Building Sustainability into the College Strategic Plan

Webinar + April 2, 2014



center SEEE 5 Sustainability Education & Economic Development Supporting community colleges in educating for and building a clean and sustainable economy



### www.theseedcenter.org

## **Thank You**

Co-Host: Johnson County Community College's Center for Sustainability (email jantle@jccc.edu to join monthly sustainability webinars)

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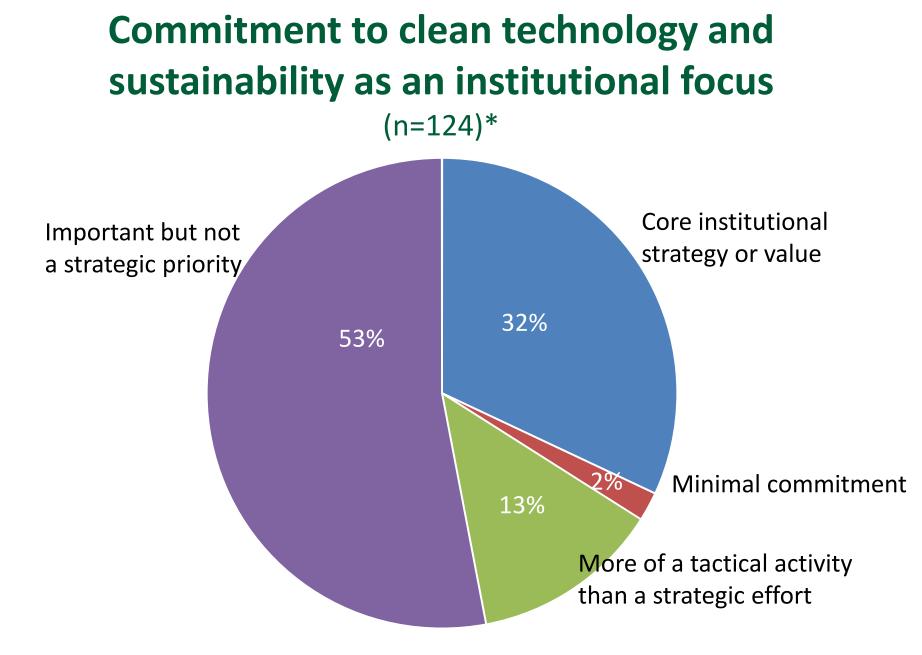




## Quick Take on Sustainability at Community Colleges: More Institutional Integration Needed

- Many "pockets of excellence" across colleges
- Many silos **within** colleges
- Little action on whole systems integration of sustainability-related policies, practices, partnerships, programs, and/or processes





\*SEED member survey 2013

## **Speakers**

**Randy Grissom**, President, Santa Fe Community College (NM)

**Xubi Wilson**, Renewable Energy Programs Coordinator, Santa Fe Community College

**Andrew Kim**, Director of Environmental Stewardship, Austin Community College (TX)



# Santa Fe Community College Growing Green



AACC SEED Center Webinar April 2014

# Santa Fe Community College

Located in Santa Fe, New Mexico

- Second Oldest City in North America
- Elevation of 7,000 feet
- Population 75,000 City and 165,000 County
- Oredit Enrollment 2010-11
  - Headcount 7,555
  - FTE 2,932

• Non-Credit Enrollment – 2010-11

Headcount – 5,111

# Santa Fe Community College's Keys to Success

A Commitment from the Top
Community Involvement and Support
Business/Industry Collaboration
Funding – Public and Private

# ROLE OF COLLEGE GOVERNING BOARD

## Policies

- LEED Buildings
- "Green" Purchasing Policy
- Electricity from Renewable Sources
- Sustainability Plan as part of Campus Master Plan
- Bond Campaigns and Funding
  - Biomass Boiler
  - Green" Projects



## COLLEGE PRESIDENT'S ROLE

- Act as a Role Model
- Sign American College & University President's Climate Commitment (September 15, 2007)
  - Commitment to Education on Sustainability
  - Commitment to Workforce Training
  - Commit to Lower Campus Carbon Footprint

## WHY SUSTAINABILITY AT SFCC?



Community Desire

- City/County Plans
- SFCC Green Jobs Forum
- State Goal
  - The Renewable Energy State
- American College and University Presidents Climate Commitment
   Support National Economic and Security Issues

# Examples of Community Involvement

- Development of Santa Fe Green Building Codes
- Joint City/County Energy Task Force
- Santa Fe High School of Sustainability
- Regional Economic Development Initiatives
- Annual Solar Festival at SFCC
- Statewide Biofuels Plan

• NM Consortium Technology Development

- New Mexico Green Collaborative
- New Mexico Green Chamber of Commerce

## Cultivating Santa Fe's Future Economy



Cultivating Santa Fe's Future Economy

Economic Development Strategy

April 2004



#### **Acknowledgements**

Name

The project team conducted interviews and focus groups with more than 200 individuals and organizations from the Santa Fe region, including those listed below. Their input shaped this strategy, and their future support will be critical to the implementation of the City's economic development initiative and achievement of long-term economic health.

Organization

Focus Group and Interview Participants Santa Fe Economic Development Strategy

Name	Organization
Larry A. Delgado	Mayor, City of Santa Fe
Councilors:	
Carol Robertson-Lopez	Mayor Pro Tem, Dist 4
Patti J. Bushee	Dist. 1
David Pfeffer	Dist. 1
Karen Heldmeyer	Dist. 2
Rebecca Wurzburger	Dist. 2
Miguel M. Chavez	Dist. 3
David Coss	Dist. 3
Matthew E. Ortiz	Dist. 4
Jim Romero	City Manager
All other participants:	
Al Lucero	Maria's Resturant
Al Padilla	Boys and Girls Club
Alan Teitelbaum	Morgan Stanley
Alex Martinez	SER - Jobs for Progress
Alexandra Ladd	City of Santa Fe
Ana Gallegos y Reinhardt	Warehouse 21
Annie O'Carroll	O'Carroll Assoc.
Anita Pisa	TRADE
April Woods	Santa Fe Circle Magazine
Barbara Deaux	NCNMEDD
Barbara Hagood	Museum of NM
Barbara Harrelson	Four Winds Antiques
Barton Bond	Santa Fe Community College
Belinda Wong-Swanson	Innov8, LLC
Bergit Salazar	NM Dept of Cultural Affairs
Bernadette Salazar	Santa Fe County Government
Bill Field	Spanish Colonial Museum
Billie Blair	Santa Fe Community Foundation
Bob Martin	Lensic Performing Arts Center
Bob Samuel	Living Wage Committee

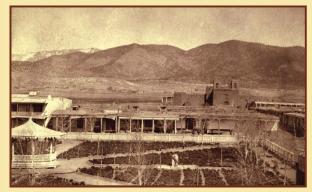
Appendix

# Quote from: Cultivating Santa Fe's Future Economy

- A. Develop curricula that helps Santa Fe become a water and energy conservation role model for other cities.
  - Create a water conservation curriculum.
  - Adopt an alternative fuels curriculum.

# Sustainable Santa Fe Plan

Sustainable Santa Fe Plan



Building a More Sustainable Future by Looking to the Past





#### Sustainable Santa Fe

#### SUSTAINABLE SANTA FE COMMISSION

Carrilla Bustamante, Chair Louise Pape, Vice Chair Robert Haspel Ben Luce Claudia Pavel Arina Pittman Taylor Selby Kim Shanahan Jim Stanton Grace Mattinez

#### SUSTAINABLE YOUTH ADVISORY BOARD

(Coordinated by Earth Care International) Grace Martinez, Chair Avree Fe Koffman, Vice Chair Maria Dorniquez, Secretary Carrille Chambers Miles Toland Luke Hyde Maya Valdez Jose Vasquez Danielle Romero

#### CITY OF SANTA FE GREEN TEAM

Katherine Mortimer Nick Schiavo Anne Lovely Claudia Borchert Kathy McCorrrick Lou Baker Jim Salazar Marissa Barrett Jack Hiatt

#### **OTHER CONTRIBUTORS**

Santa Fe Water Conservation Committee Scott Pittman Arry Pilling Hugh Driscoll Faren Dancer Robert Rodarte Patrida Hodapp Richard Fiedler Bianca Sopod-Belknap

Logo and Graphic Design by Valerie Chelonis.



## Quote from: Sustainable Santa Fe Plan

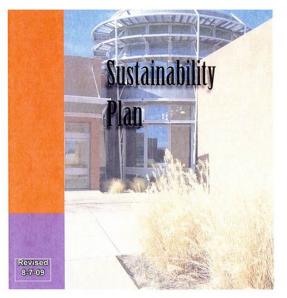
In addition to degree accreditation, continuing education opportunities at Santa Fe Community College are a valuable resource. The Center for **Community Sustainability at Santa Fe Community** College offers trades skills education that serves both workforce as well as individual needs for sustainable housing, water conservation, and design. In spite of the existing programs, there is considerable room for additional programs and activities.

## SFCC SUSTAINABILITY PLAN

### Structure/Areas of Focus

- Reduce Natural Resource Depletion
- Reduce Pollution
- Ensure Healthy Indoor Environments
- Model and Teach
   Sustainable Concepts and Practices
- Sustainability Steering Committee
  - Linked to Internal and External Groups
  - Tied to Curriculum







### Strategic Approach

- Facilities Master Plan/Utilities Master Plan
- Funding Strategy
- Based on Measured Carbon Emission Measures

### • Plan Organization

- Goals
  - Objectives
    - Impact of Issue
    - **Current Practices**
    - Barriers
    - Targeted Future Practices (short and mid/long-term)
    - Partnerships and resources

# Strategic Plan

### • Key Performance Indicators

- Energy Consumption:
  - Electricity, Natural Gas, Biomass
    - Measured in

Kilowatt Hours, Dollars Spent and Carbon Equivalents

#### Waste Reduction

- Dumpster Hauls, Recycling Pick-ups
  - Measured in

Tonnage, Dollars Spent / Income

### Water Use

- County Water Purchases, Effluent Re-Use
  - Measured in

Gallons purchased /Dollars Spent Gallons Repurposed / Dollars Spent/Saved

# Strategic Plan

### Strategic Initiatives

- Energy Consumption:
  - Photovoltaic array
  - Lighting Retrofits
  - HVAC Controls Optimization
  - Office Energy/Comfort Audits

### Waste Reduction

- Campus Waste Audit
- Recycling Bailer Purchase / Operation
- Composting

### Water Use

- Water Audits
- Irrigation Optimization

# Practices

### Ourrent Key Practices

- Use of Solar (Trades and Advanced Technology Center)
- Water Treatment Plant Gray water irrigation
- Biomass Boiler
- Bicycle Trail Connection
- Recycling
- Campus Composting
- Lighting Design and Retrofits
- Ride-share parking incentive
- Standard LEED Checklist for new buildings
- Replaced 2 300 ton chillers with efficient ones

# Practices

### Short Term

- PV Array/1.5 MW with prominent monitoring stations
- Tracking Demo Arrays for Educational Demonstrations
- Peak saver program participation
- Commuter Station Bicycling
- Culinary Garden Engaging Agriculture and Culinary Collaboration
- Electrical Use Monitoring Systems
- Water Harvesting and Re-use
- Green Purchasing
- Phase I electrical vehicle replacement campus vehicles
- Biomass and Solar Thermal Heating and Cooling
- Plastic Single-Use Bottle Reduction Initiative

### SFCC Common Student Learning Outcomes

Student learning is the central mission of SFCC. Learning that enhances students' ability to interact effectively in diverse environments and use appropriate resources and technologies is integrated throughout courses and degree programs at the college.

Those outcomes, known as common student learning outcomes because of their broad value across the curriculum, consist of:

- **Effective Communication** Students will communicate qualitative and quantitative ideas and information appropriately and effectively using a variety of methods.
- Active Learning and Thinking Students will demonstrate a creative, engaged and critical approach to their thinking and learning.
- Responsible and Sustainable Living Students will demonstrate personal accountability and cultural and global awareness that will enhance their ability to articulate practical solutions to social, environmental and economic issues.

# SFCC General Education

2. Six (6) credit hours of the A.A. and A.S. must come from an approved list of courses that satisfy the following requirements. These are not meant to be additional hours in the degree but are, instead, existing courses that satisfy the requirement and appear anywhere in the degree.

- Cultural Perspectives 3 credit hours
- Sustainable Living 3 credit hours
- Healthy Living 3 credit hours

# Sustainable Living: 3 credit hours

A. Define the principles, skills, and perspectives related to sustainability.

B. Demonstrate increased personal accountability and heightened global awareness.

C. Articulate practical solutions to social, environmental, and economic issues.

D. Describe the knowledge, tools, and methodologies used in guiding and motivating people to participate in a democratic society, to assess their core values, and to live in a sustainable manner. E. Explain the way in which sustainable thinking and decisionmaking contributes to the process of creating solutions for current and emerging social, environmental and economic instability.

F. Employ knowledge of sustainability and technology to articulate practical solutions to realworld sustainability challenges.

G. Analyze social, economic, technological, and environmental systems and reason holistically.

H. Articulate a view of self as embedded in the fabric of an interconnected world.

## SFCC's Sustainable Technologies Center

"Where 21st Century Trades Meet Advanced Technology"

### 21<sup>st</sup> Century Trades:

- Construction
- Electrical
- HVAC
- Mechanical
- Plumbing
- Welding



#### Advanced Technologies and Green Curricula:

- Biofuels
- Biomass
- Green Building
- Smart Grid
- Solar
- Water Conservation
- Wastewater Treatment
- Agro-Ecology

# Collaborations and Funding Support

- Los Alamos National Laboratory
- Caterpillar/CleanAir Systems
- City/County Regional Water Treatment System
- EPA Green Jobs Training
- National Science Foundation
- NM EPSCoR Infrastructure Seed Grant
- New Mexico Energy\$mart Academy
- Centers of Excellence (New Mexico)
  - Biofuels
  - Green Building/Energy Efficiency



## TATC Opens to Fanfare

From the celebratory ribbon cutting in May to a festive Green Gala on July 29, SFCC's newest facility has been inaugurated in style.

#### In This Issue

**Green Gala:** See photos of the celebration from July 29 that was attended by more than 400 supporters. (Page 2)

**LEED Gold:** the Health and Sciences Building is SFCC's first to win this coveted designation. (Page 3)

**HEC Pilot Opens:** Now a bachelor's degree is both accessible and affordable – right here in Santa Fe. (Page 3)

**Commencement Coverage:** Record numbers received degrees and certificates this year. (Page 4)



Success Stories July 2011

#### Santa Fe Community College: Organizational Change Built Around Sustainability



Santa Fe Community College (NM) (SFCC) was one of the first community colleges in the country to develop an explicit institutional "green" vision and mission, in this case tied to the deep-rooted environmentally conscious beliefs of the greater community. Sustainability and ecological awareness have now become guiding principles for all institutional practices from facilities planning to workforce development to academic programming. By incorporating these

standards into campus policies, master plans, and mission statements, SFCC's green activities are aligned together as part of a broader institutional mandate and likely to endure. The new *Trades and Advanced Technology Center* (opened in May 2011), which houses the campus's <u>Sustainable</u> <u>Technology Center</u> (STC), is the culmination of this commitment to train the next generation's green workforce.

#### **History of Sustainability on Campus**

Since 2000, through various planning documents including the Santa Fe Community College District Plan and the city's development strategy, the city of Santa Fe, the county and the community college district have closely aligned themselves together and around a strong belief for resource conservation, community connectedness, and local economic development.

# Contact Us

## • Randy Grissom – <u>randy.grissom@sfcc.edu</u>

### • Xubi Wilson- <u>xubieric.wilson@sfcc.edu</u>

# **Apply Now for a SEED Green Genome Award**

## \$70,000 in cash and Snap-On ag toolsets to community colleges

Applications at <u>www.theseedcenter.org</u>

Deadline: April 30, 2014





## **Green Genome: Five Categories of Awards**

Community Engagement

1

Program Design and Delivery

2

Strategic Partnerships

3

Governance

4

Community engagement strategies to advance clean economy growth, employment, and an inclusive, sustainable community The education of a qualified clean economy workforce through high quality, effective sustainability-related education and training programs based on industry needs

Maintaining responsive and collaborative external relationships that help advance the college's efforts to create a sustainable and economically viable workforce, community, and college The establishment of the colleges' structure, facilities, policies, plans, resources, processes, and practices to reflect a commitment to sustainability

#### 5 Overall

Effective, comprehensive, and integrated approach to clean economy-related workforce and economic development and sustainability at their college and in their community

## Also inquire at: sustainability@aacc.nche.edu

# **QUESTIONS?**

