

History of Sustainability  
at Ramapo College  
One Step Forward  
Two Steps Back  
**.....It's All in the Balance**

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# Role of Inst. of Higher Ed

## Responsible Actor:

- Direct Impact on Society
- Authentic
- Self-perfecting

## Social Innovator

- Experimental
- Research
- Evaluation
- Monitoring

## Model and Change Agent

- Macrocosm
- Replicable Models
- Outreach & Capacity Building

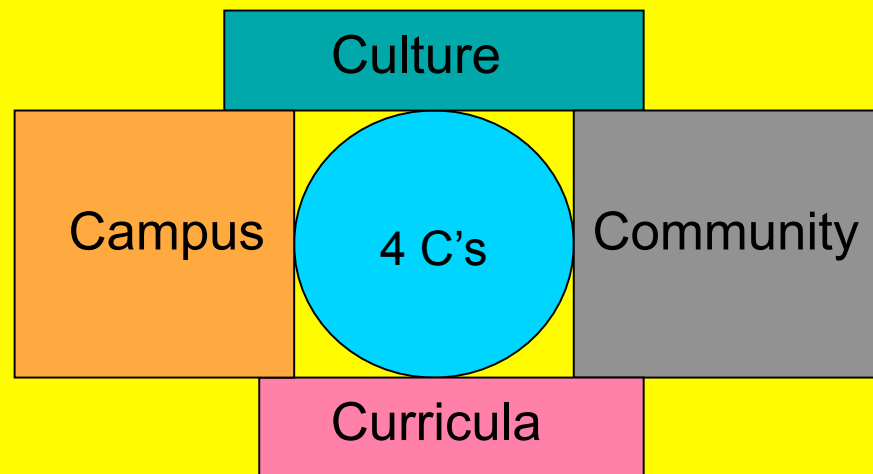
## Education:

Students as Change Agents & Leaders

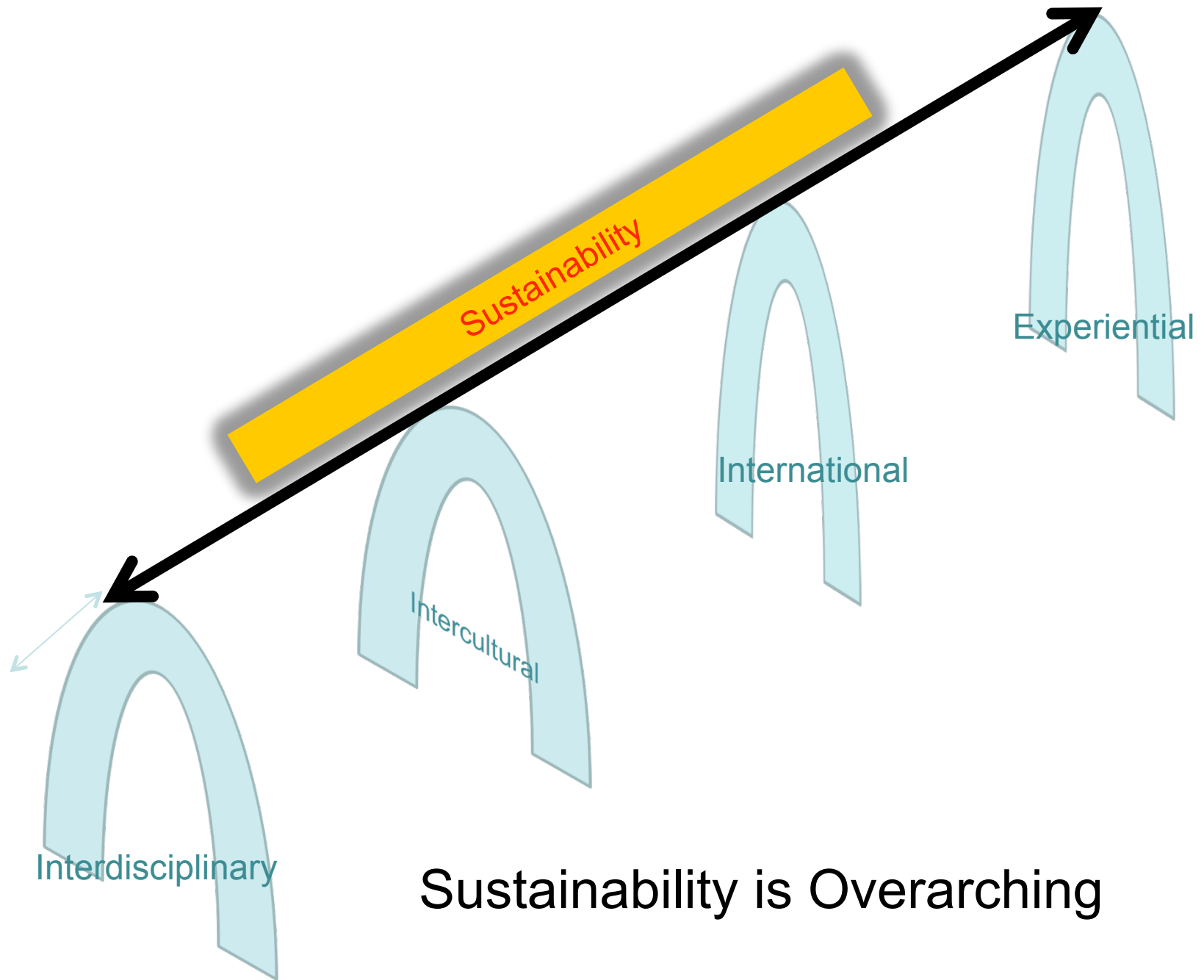
- Now
- Future

# The 4 C's: INFUSING SUTAINABILITY INTO HIGHER EDUCATION:

Edelstein 2004







**Sustainability is Overarching**

# Ramahistory 101: Sustainability Institutional History

1974-1982 **Groundbreaking  
Work in Sustainability**

1983-1989 **Turbulence Dark Ages:  
One Step Forward, Two Steps Back**

1990-2000  
**Sustainability Enlightenment**

2001-11 **Wild Pendulum Swings  
Two Steps Forward, Two Steps Back**

# Sustainable History

## 1 Step Forward 2 Steps Back

- 1974 Schl of Env. Studies
- [Alternative EnergyCenter](#)
- 1979 solar dormitory
- Oct 90 [Talloires Declaration](#), FIPSE Eco Literacy 94-98
- Mid-Atlantic conferences 95-8
- ES focus on sustainability, MS
- Purchase of two fuel cells
- 1999 Dodge Fdn [NJHEPS](#)
- 2000 RCSEC authorized
- 2001 Mission
- 2002 [Greening the Village](#)
- 2003 Strategic Plan, [SBGC](#)
- 2005 Hire Sust. Educator

- ES closed 1984
- AEC bulldozed 2000
- Revert to conventional heat
- Attrition, new faculty, admin. and curriculum loses
- No way follow up
- No support
- Abandoned
- No green buildings
- False starts, 8 year delay
- 2003 revision unclear
- Slow implementation
- No implementation, marginzd
- 2006 lay off

# The Groundbreaking 1974-1982

- 1. The Flagship School of Environmental Studies and Interdisciplinarity**
- 2. Social Ecology**
- 3. Energy/ The AEC**
- 4. Health and Safety Committee**
- 5. ELF**
- 6. Pine Hall**



# Interdisciplinary Context

## 1974 School of Environmental Studies

- Majors in Environmental Studies and Human Ecology
- One of the first programs to embody NEPA's call for integration of Science, Social Science and Design Arts

## Social Ecology

- Murray Bookchin
- Trent Schroyer
- Environmental Psychological Perspective
- Others

# Demonstrating Sustainability: AEC 1974-2000 RIP



# ELF: Ecological Living Facility

- 1977-78
- Result of a discussion with students about what “ecological” housing would be like
- Collaborated of 3 faculty one full year full time academic program to design the “ecological living facility”
- Planned addition to the AEC
- 12 student residents living in ultra-sustainable housing
- Eco-team engaged in experiential learning uniting living, learning and work.
- Maintenance Center
- Host outreach

# Pine Hall: The Pioneer's Risk

Solar Dorm Experiment:  
Heated by trombe wall and  
aetria  
ELF Floor Plan shrunken  
and duplicated for 500  
students



Our work on the ELF was so infectious that Ramapo's founding President, George Potter, became a renewable energy advocate. However, instead of building a twelve-person solar residence, in the late 1970s, he determined to make the college's first high rise dormitory solar-heated.

# 1979-2002 Health and Safety Committee

- AFT and other unions collaborated with the Administration
- Consensual approach to address
  - unsafe working conditions due to environmental causes,
  - fire safety issues,
  - detoxifying toxic chemicals in campus operations, including the science labs.
- The committee increasingly addressed issues of sustainability
- Health and Safety and Fire Safety officers were hired
- The Committee was disbanded

# Turbulent DARK AGES: 1983-1989

1. Reagan Presidency and loss of ES School
2. Form Institute for ES
3. ES major pioneers focus on Sustainability
4. Recognition of Curricular Infusion as Approach

# The Enlightenment 1990-2000

- 1. Signing the Talloires Declaration**
- 2. The FIPSE Ecological Literacy Project**
- 3. Four Mid-Atlantic Conferences**
- 4. Creation of NJHEPS**
- 5. ES Major Focus on Sustainability**

# TALLOIRES DECLARATION:

Developed in the wake of Bruntland  
Commission Report

By Anthony Cortese at Tufts

Signed by

President Robert Scott

October 1990

[http://www.ulsf.org/programs\\_talloires\\_signatories.html](http://www.ulsf.org/programs_talloires_signatories.html)



# THE TALLOIRES DECLARATION

***We, the presidents, rectors, and vice chancellors of universities from all regions of the world are deeply concerned about the unprecedented scale and speed of environmental pollution and degradation, and the depletion of natural resources....depletion of the ozone layer and emission of "green house" gases threaten the survival of humans and thousands of other living species, the integrity of the earth and its biodiversity, the security of nations, and the heritage of future generations. These environmental changes are caused by inequitable and unsustainable production and***

## TALLOIRES Continued

- *We believe that urgent actions are needed to address these fundamental problems and reverse the trends. Stabilization of human population, adoption of environmentally sound industrial and agricultural technologies, reforestation, and ecological restoration are crucial elements in creating an equitable and sustainable future for all humankind in harmony with nature.*
- *Universities have a major role in the education, research, policy formation, and information exchange necessary to make these goals possible. Thus, university leaders must initiate and support mobilization of internal and external*

# TALLOIRES ACTION PROGRAM

1. Increase Awareness of Environmentally Sustainable Development
2. Create an Institutional Culture of Sustainability
3. Educate for Environmentally Responsible Citizenship
4. Foster Environmental Literacy For All
5. Practice Institutional Ecology
6. Involve All Stakeholders
7. Collaborate for Interdisciplinary Approaches
8. Enhance Capacity of Primary and Secondary Schools
9. Broaden Service and Outreach Nationally and Internationally
10. Maintain the Movement

# Infusion of Ecological Literacy Through the CURRICULUM, FIPSE 1993-8

Curricular Infusion of  
Ecological Literacy:  
The wisdom and  
knowledge needed to  
create and maintain a  
sustainable society

On heels of Tele Project  
at Tufts

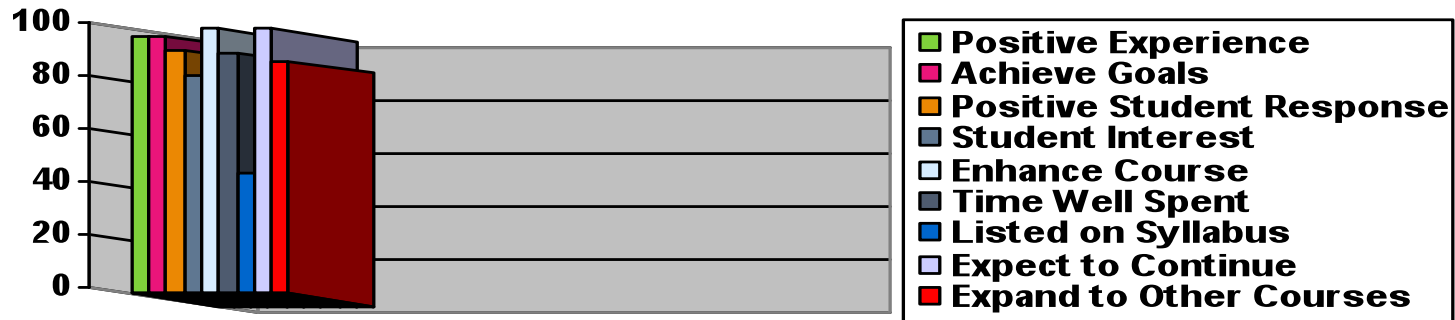
- critical,
- interdisciplinary,
- field oriented (local  
and global),
- promotes the  
knowledge needed for  
sustainable choices,
- and employs an  
innovative learning  
process

# Infusion of Ecological Literacy

- Use of Institute for Environmental Studies and ES faculty to manage and as coaches.
- Curricular target for each of 8 semesters based upon curricular structure of college:
  - College seminar
  - Basic Studies
  - School of American and International Studies
  - School of Contemporary Arts
  - School of Theoretical and Applied Science
  - School of Social Science and Human Services
  - School of Business

# FIPSE Project Outcomes: All Schools, half faculty (80), 120 courses mostly gen ed

**Figure 1: Faculty Survey in %**  
(N=43 of 70 participating faculty changing 102 courses)



Student (225x2)	Pre 1995	Post 1997-8
Values	high	equal
Concern	modest	lower
Knowledge	low	higher
Behavior	low	higher

# Mid-Atlantic Conferences

- Ralf Nader 1996
- David Morris 1997
- Jerry Brown 1998
- Climate Conference 1999

More than 4,000 attendees

Also Video: Ecological Literacy at Ramapo  
College 2000 Jennie Bourne

# 2000 NJHEPS

- New Jersey Higher Education Partnership for Sustainability [www.njheps.org](http://www.njheps.org)
- Outgrowth of FIPSE Project and Mid-Atlantic Conferences
- Collaboration of Cliff Peterson, Don Wheeler and Mike Edelstein
- Edelstein authored Geraldine Dodge Foundation grant and served as first Director



# Pendulum Swings 2001-11

1. 2001 AEC Bulldozed
2. 2001 Mission
3. 2003, 7 Strategic Plan
4. 06 SSHS Sustainability Requirement
5. FIPSE attrition, Curricular Mayhem
6. World Sustainability course
7. 07 Update Strategic Plan
8. 10/07 Groundbreaking RCSEC open 2009
9. 11/30/07 BPU: Green Meets Green Expo and Climate for Change conference
10. Presidents Climate Commitment
11. 1/08 Climate Taskforce
12. 5/08 MASS Approved
13. NJHEPS Lost and Found

# Last Farewell for the AEC



# Greening Phase VII

- 2001 525 person Village: two term Social Design Project
- The Dilemmas-Siting Tradeoffs
  - Speed versus Green Design
  - Critical Environmental Areas
    - wetlands
    - old growth forest
    - Wood turtle habitat

# Greening the Village



## THE PLEDGE

Students electing to dwell in Phase Seven housing will commit themselves to a program of sustainable living.

COOP Positions

5 key *indicators of sustainability*:

- Materials Cycling: Recycling, Composting
- Consumption: Food and Purchasing, cooking, gardening, markets, community sharing, Poison Ivy Store
- Efficiency: Energy and water use and transportation
- Place Identification: Participatory Landscaping, trail access and historical appreciation
- Health and Safety

# The Sustainable Living Facility

2011 third year of program

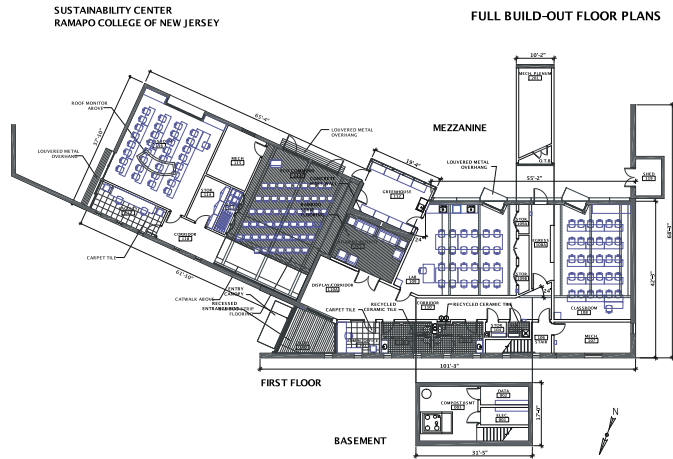
50 students living n SLF  
designated apartments in Village  
and College Park

Two working gardens

Dedicated common course work  
on sustainability

Facilitator: Emma Rainforth

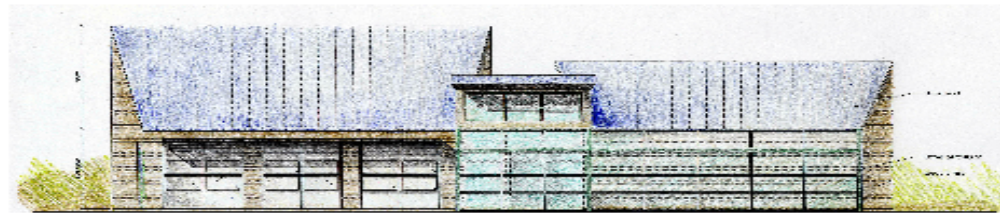
# Plan One: Sustainability Center



# Revised Sustainability Center



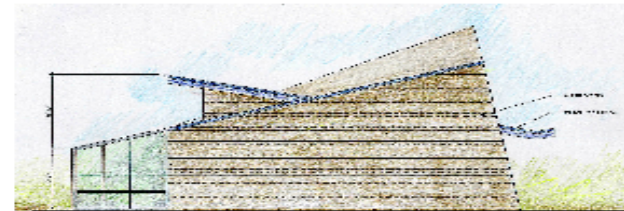
1 NORTH ELEVATION



2 SOUTH ELEVATION



3 WEST ELEVATION



4 EAST ELEVATION

STEPHEN WILLY,  
ARCHITECT  
1000 W. 10th St.  
Wichita, KS 67202

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1000 W. 10th St.  
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ARCHITECT'S REGISTRATION  
Kansas Registration No. 0000000000

CITY OF WICHITA  
Wichita, KS 67202

TOWN OF  
NEWCASTLE  
WICHITA, KANSAS

DATE: 2014

BY: [Signature]

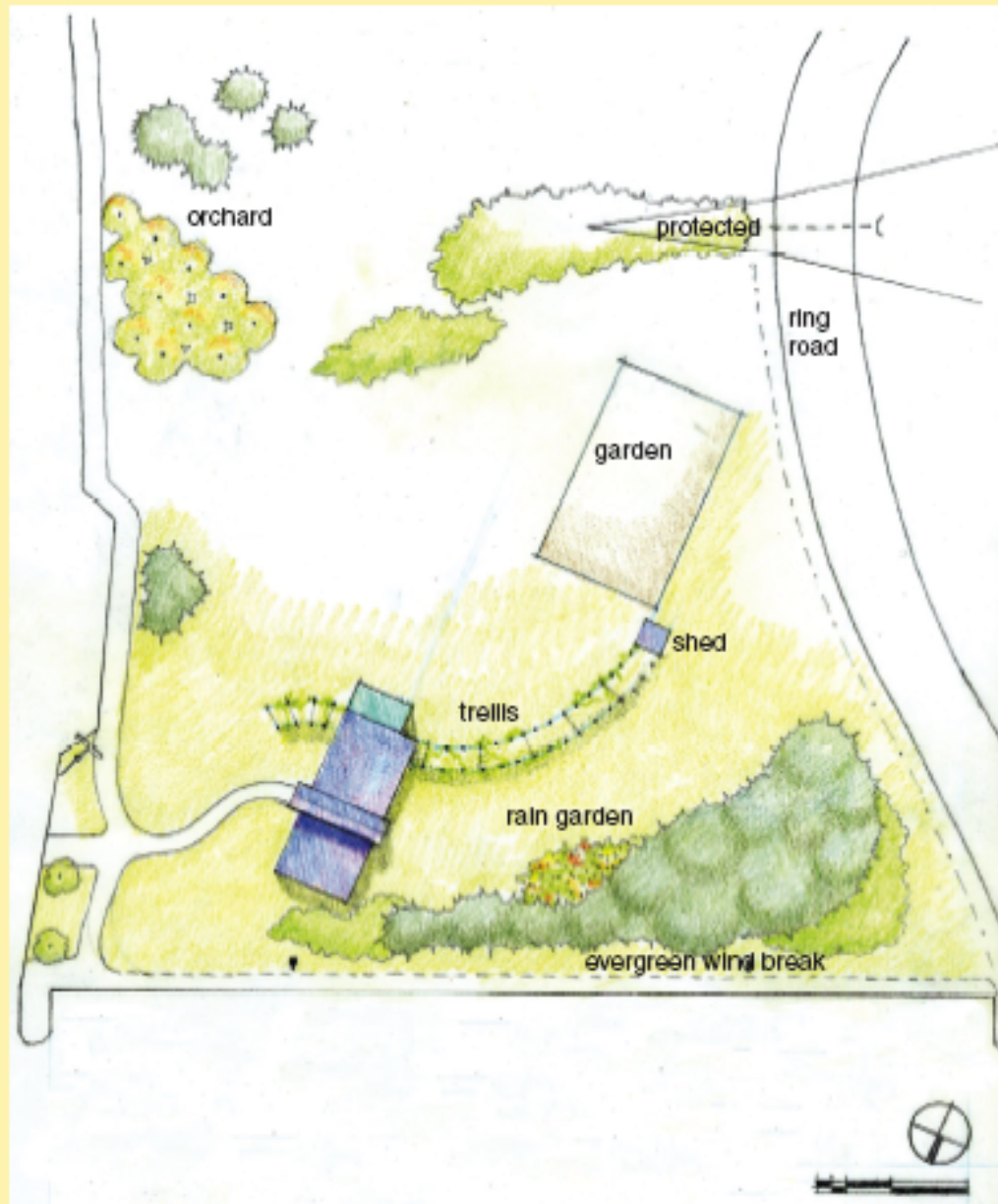
Project: SUSTAINABILITY  
CENTER  
1000 W. 10th St.  
Wichita, KS 67202  
PHONE: 316-251-1101

For: NEWCASTLE  
Town of Newcastle

Asn: ARCHITECT

Scale: 1/8" = 1'-0"

A-201



site plan of modified roof comb scheme: A



# 2003-7 SBGC: Sustainable Building and Grounds Committee



A SUSTAINABLE LANDSCAPE  
MASTER PLAN FOR  
RAMAPO COLLEGE OF NEW JERSEY

- OUTDOOR CLASSROOM PROJECT
- CAMPUS CONNECTIVITY
- SOLAR ROOF PROJECT
- RAMAPO COLLEGE ARBORETUM
- GREEN BUILDINGS
- SUSTAINABILITY CENTER
- INDOOR AIR POLLUTION
- REGIONAL GREENHOUSE GAS INITIATIVE

# Mission-Grounded Sustainability

2001

Ramapo's well credentialed faculty... emphasize critical thinking and the awareness of value questions, such as the importance of promoting a sustainable environment.

2003

...curricular emphasis include the liberal arts and sciences, social sciences, fine and performing arts and the professional programs within a residential and sustainable living and learning environment.

# 2003 Strategic Plan Envisioned

- ... safe, healthy, sustainable and intellectually stimulating environment.
- ...a campus wide re-commitment to efforts at developing and maintaining a sustainable or green environment,
- ...creation and maintenance of an aesthetically pleasing and intellectually rewarding sustainable living and learning environment.....
- ...model teaching and learning facility, the Sustainability Center, to advance sustainable building and learning practices..... as a resource for sustainability for the campus, K-12 levels, and the general public.
- A Sustainability Resource Center to provide a Center as a grant funded national clearinghouse

# 2013 Mission Change

**Mission:** Ramapo College is New Jersey's Public Liberal Arts College, dedicated to providing students a strong foundation for a lifetime of achievement. The College is committed to academic excellence through interdisciplinary and experiential learning, and international and intercultural understanding. Ramapo College emphasizes teaching and individual attention to all students. We promote diversity, inclusiveness, sustainability, student engagement, and community involvement.

# 2003 Strategic Plan Envisioned

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# Strategic Plan Continued

## **2003 Plan Long Range Goal:**

By 2012 Ramapo College will be recognized nationally for its sustainability actions, facilities and programming.

## **2007 Plan Definitions:**

Sustainability broadly reflects the recognition that our actions today reflect our prospects for tomorrow, and increasingly, these actions will affect the quality of life and prospects for future generations.

It also added definitions of social economic and ecological sustainability

# IES: Institute for Environmental Studies

- Ran AEC
- FIPSE Project
- NJHEPS
- Sustainability Lectures and Conferences
- Trust Grants Russia and Aral Sea
- BPU Grant 2006-2007
- Sustainability Educator
- Study Energy Conservation and LeedEB
- Proposed Center for Sustainability

# Green Meets Green



## GREENING THE REGION: "WHERE GREEN MEETS GREEN"

at The Bill Bradley Sports and Recreation Center in Ramapo College

Please Plan to Participate:

**November 30, 2007: Conference/Expo**  
**December 1, 2007: The Green Expo**

Meeting the climate challenge requires thinking outside the box. These two vitally important days unite citizens, consumers, government officials, activists, service providers and green businesses for a conference and 2-day expo to guide and activate the region.

**THE CLIMATE FOR CHANGE:** An all-day conference November 30. Keynote events feature **Governor Jon Corzine** (invited) on climate leadership, Former Governor **James Florio** on the Lessons of SUPERFUND for Addressing the Climate Crisis, President **Jeanne Fox** of the NJ Board of Public Utilities on the N.J. State Energy Plan, visionary **Edward Mazria** of Architecture 2030 on Reshaping the Built Environment and award-winning author and Step-It-Up activist **Bill McKibben** on Rethinking Society. Participants will help outline action steps for a green transition. Pre- or on-site registration. Fee.

**THE GREEN EXPO:** (Friday 4:30 p.m. – 7:30 p.m. and Saturday 10 a.m. – 4 p.m. **Free to the public!**) showcases leading vendors of renewable energy, green building and green services and products, exhibits of the latest green technology, and short presentations and demonstrations aimed to inform the public as green consumers. **The Green Holiday Boutique** will feature sustainable gifts. Also **KIDSPO**, an expo for the kids.

USGBC of NJ will offer a LEED (Leadership in Energy and Environmental Design) training program: LEED for homes technical review. Separate fee and registration required.

Don't wait! Register now. Go to:  
[www.ramapo.edu/news/specialevents/green/greeningtherregion@gmail.com](http://www.ramapo.edu/news/specialevents/green/greeningtherregion@gmail.com)  
or 201.684.7745





# American College & University Presidents Climate Commitment



We, the undersigned presidents and chancellors of colleges and universities, are deeply concerned about the unprecedented scale and speed of global warming and its potential for large-scale, adverse health, social, economic and ecological effects. We recognize the scientific consensus that global warming is real and is largely being caused by humans. We further recognize the need to reduce the global emission of greenhouse gases by 80% by mid-century at the latest, in order to avert the worst impacts of global warming and to reestablish the more stable climatic conditions that have made human progress over the last 10,000 years possible.

<http://www.presidentsclimatecommitment.org/html/commitment.php>

# President's Climate Taskforce

Recycling (from Greening the Village)

Presidents Climate Task Force

Ramapo Green Website

Car pooling---NURIDE listed on website

Greenhouse Inventory completed 2009

Green Purchasing---Modest effort

SLF 50 students in 2 apartment areas with seminar and active service learning

New Building

# Unfinished Business

- Need to integrate Sustainability Center, Institute for Environmental Studies and MASS
- Sharp Sustainability Center:
  - not dedicated
  - Not finished
  - Grounds not developed
  - Act like class facility

# ATTRITION AS of 2008

## FACULTY 50% turnover

- Still at Ramapo/not doing 4
- Still at Ramapo and possibly doing 33
- Deceased, retired, departed, etc. 40

## ADMINISTRATION

- 5 Presidents
- 5 VPAA/Provosts
- All Deans
- 100% Board of Trustees

# Curricular Mayhem

- Attack on pillars
- Ramapo adopts “Units” over credits
- General Education revamped removing 2/3 ecological literacy offerings
- Walls between Schools
  
- Also Gen One Fuel Cell fiasco

# New Curricular Innovations

## **World Sustainability**

200 level course developed to meet the SSHS sustainability requirement as well as Gen Ed International Requirement and other categories

8 sections/term

Growing cadre of faculty

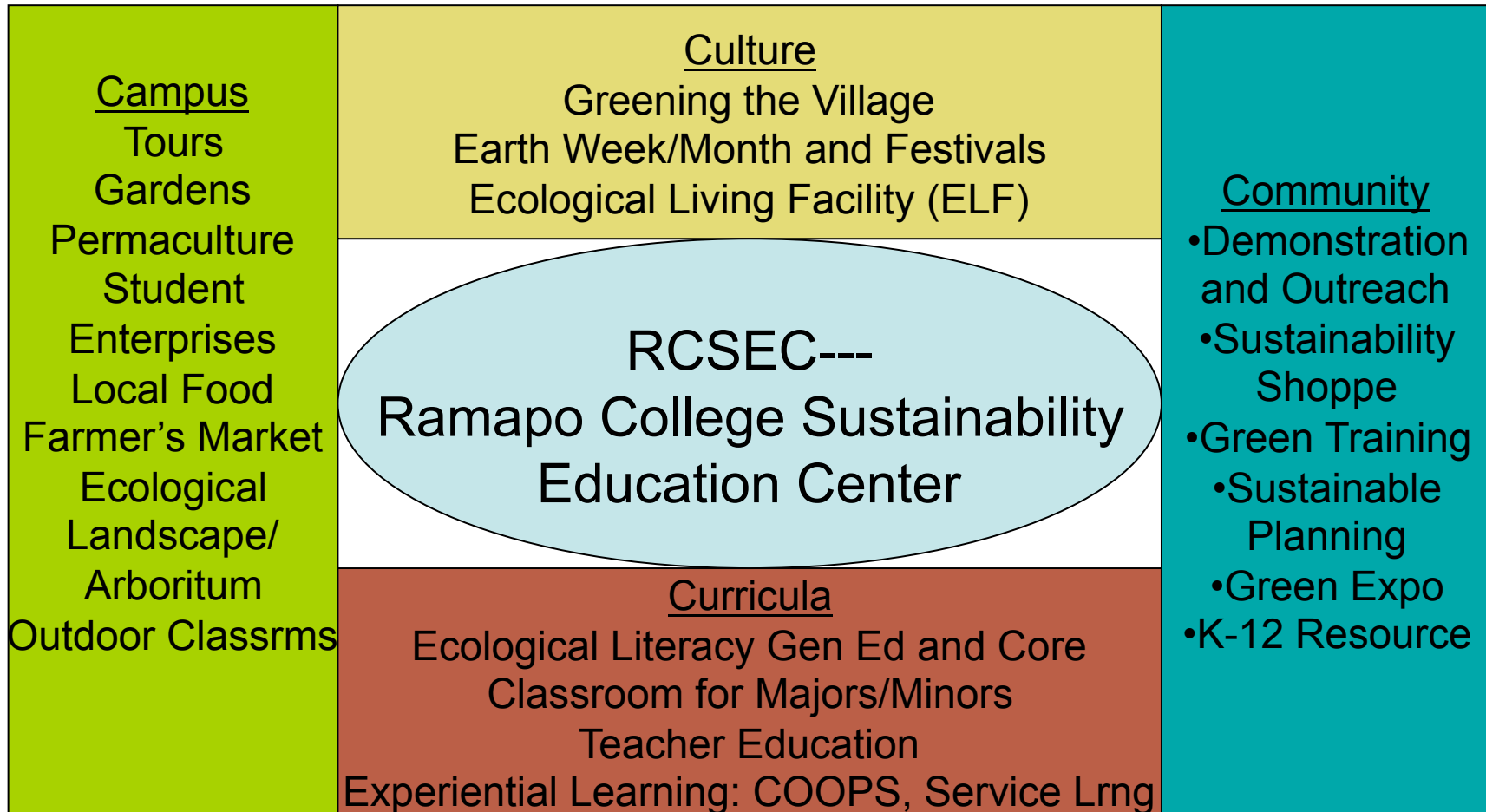
## **MASS (Masters in Sustainability Studies)**

After 14 years of resistance from the administration, in 2007 asked to fast track

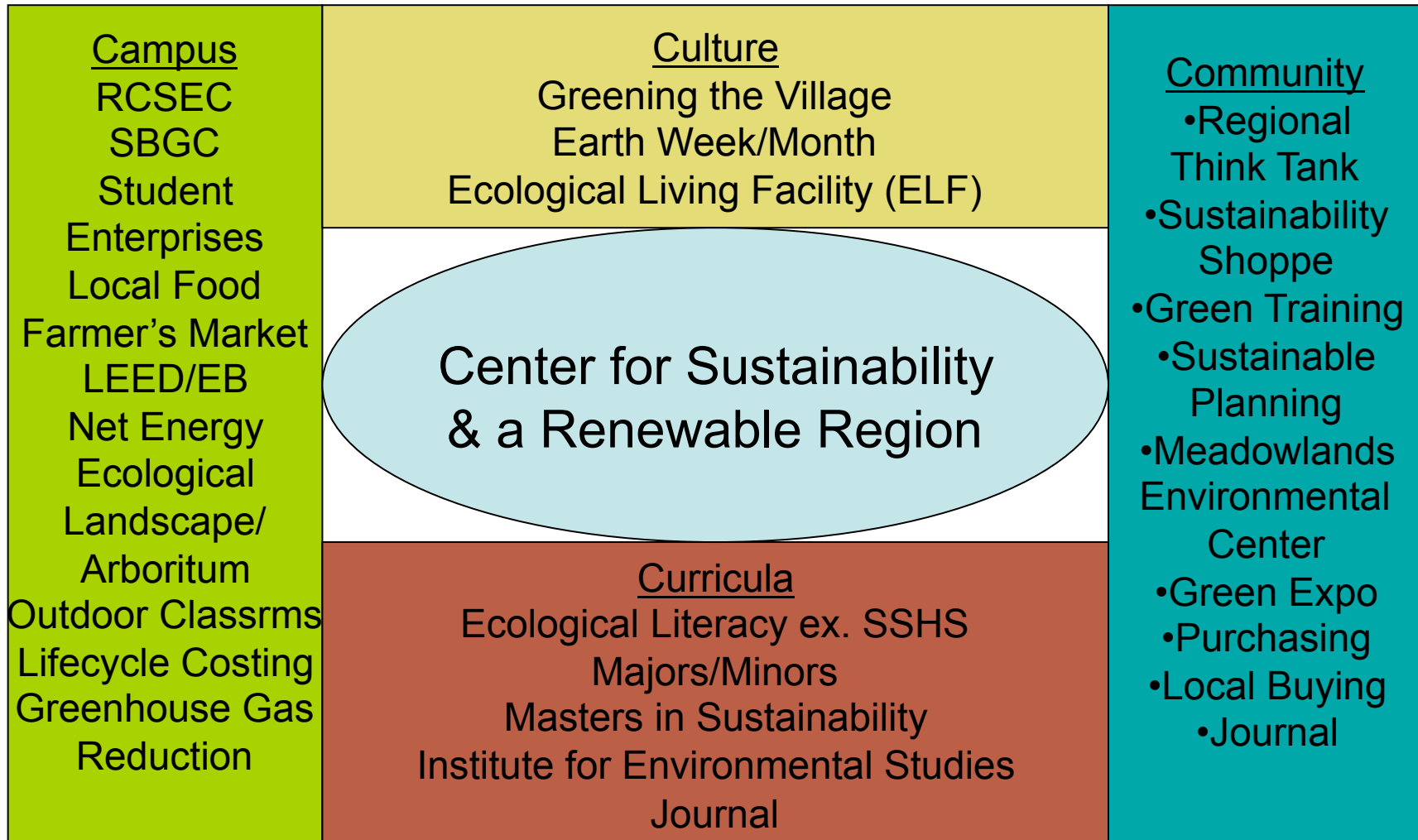
Under Wayne Hayes, got approval in record time

Under Ashwani Vasishth, accepted first class in Fall 2010

# RCSEC and the 4 C's:

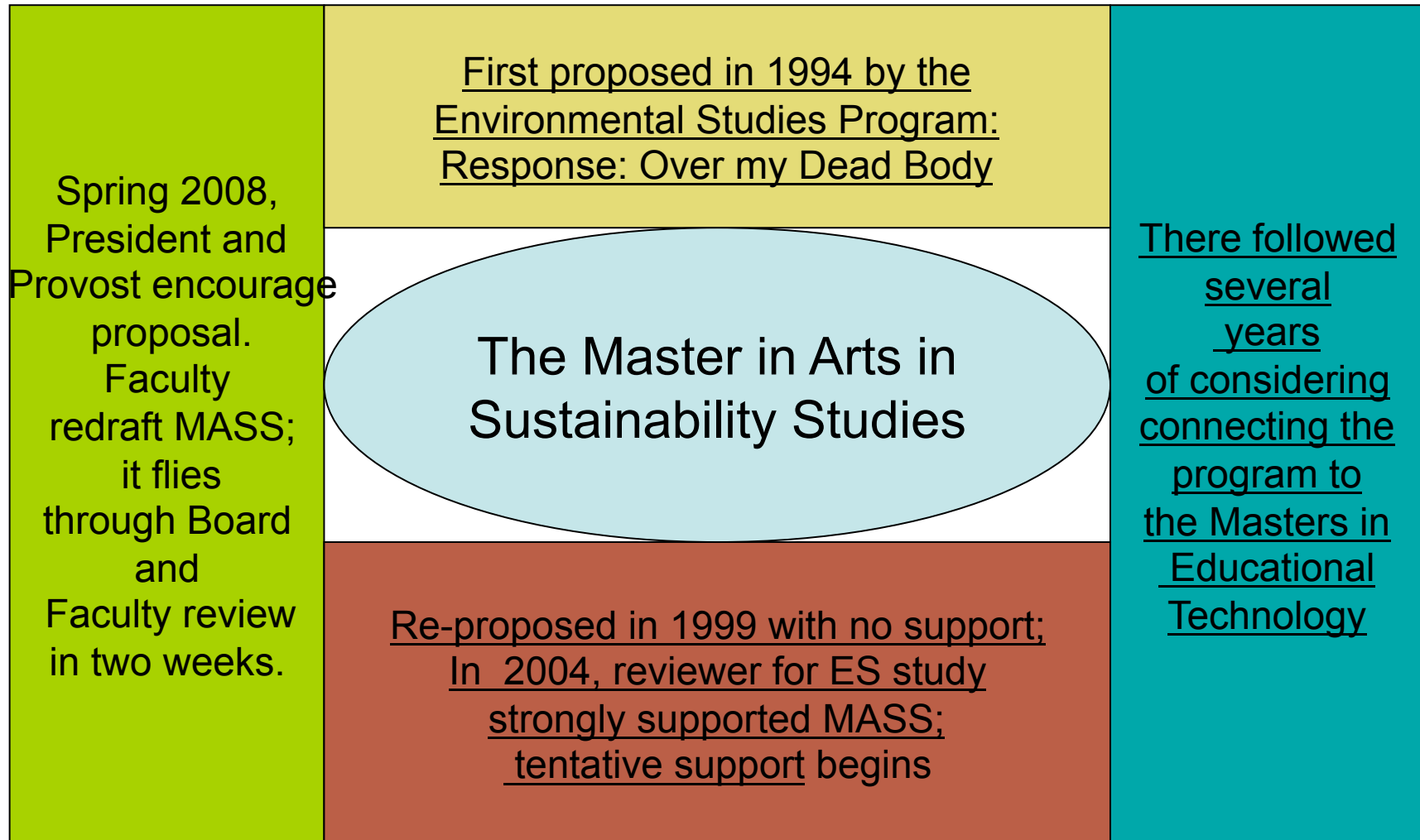


# CENTERING SUSTAINABILITY





# The MASS MOVEMENT



# LEGITIMIZATION TIPPING POINT

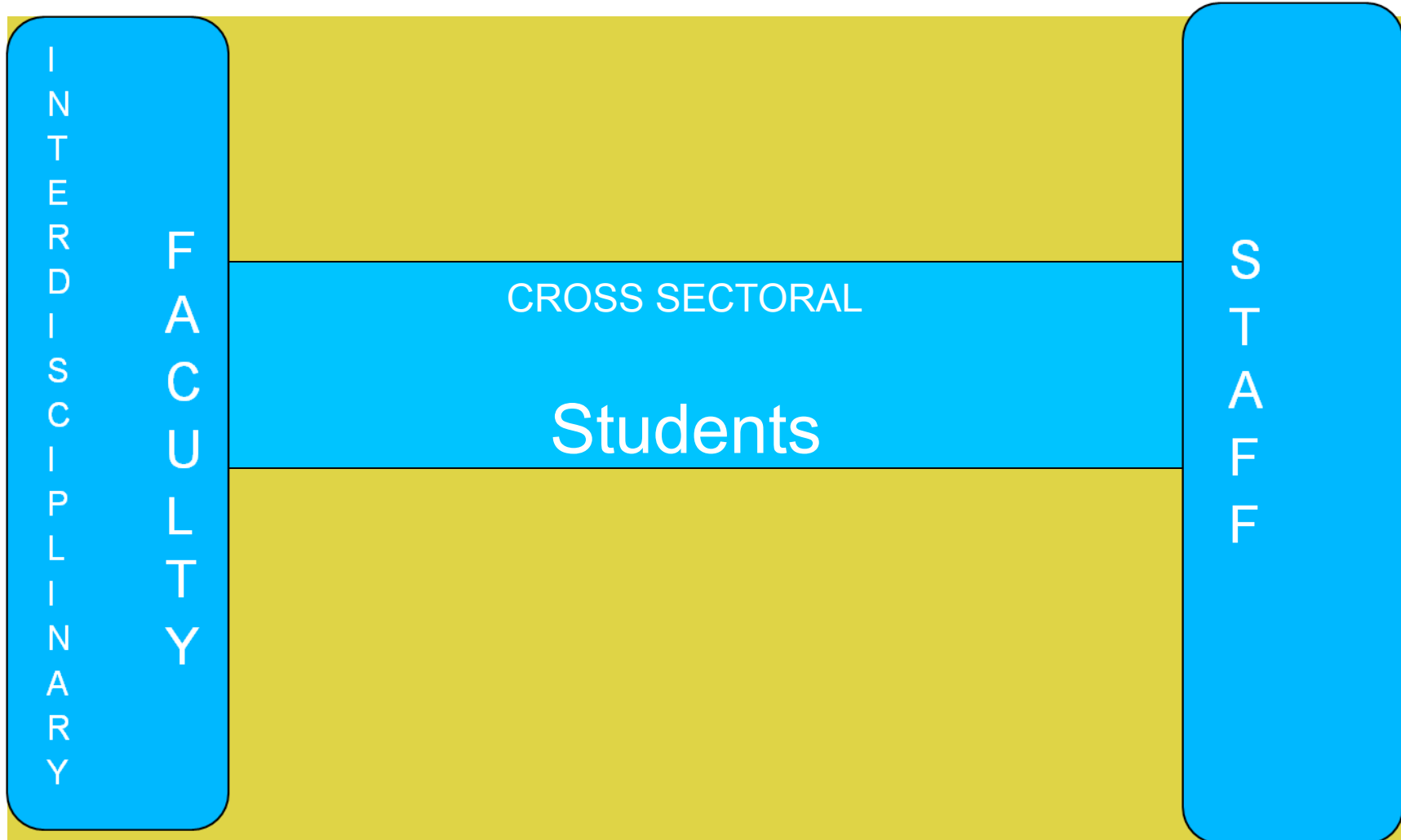
Mission + Strategic Plan +  
President's Commitment + Czarina

Student Empowerment

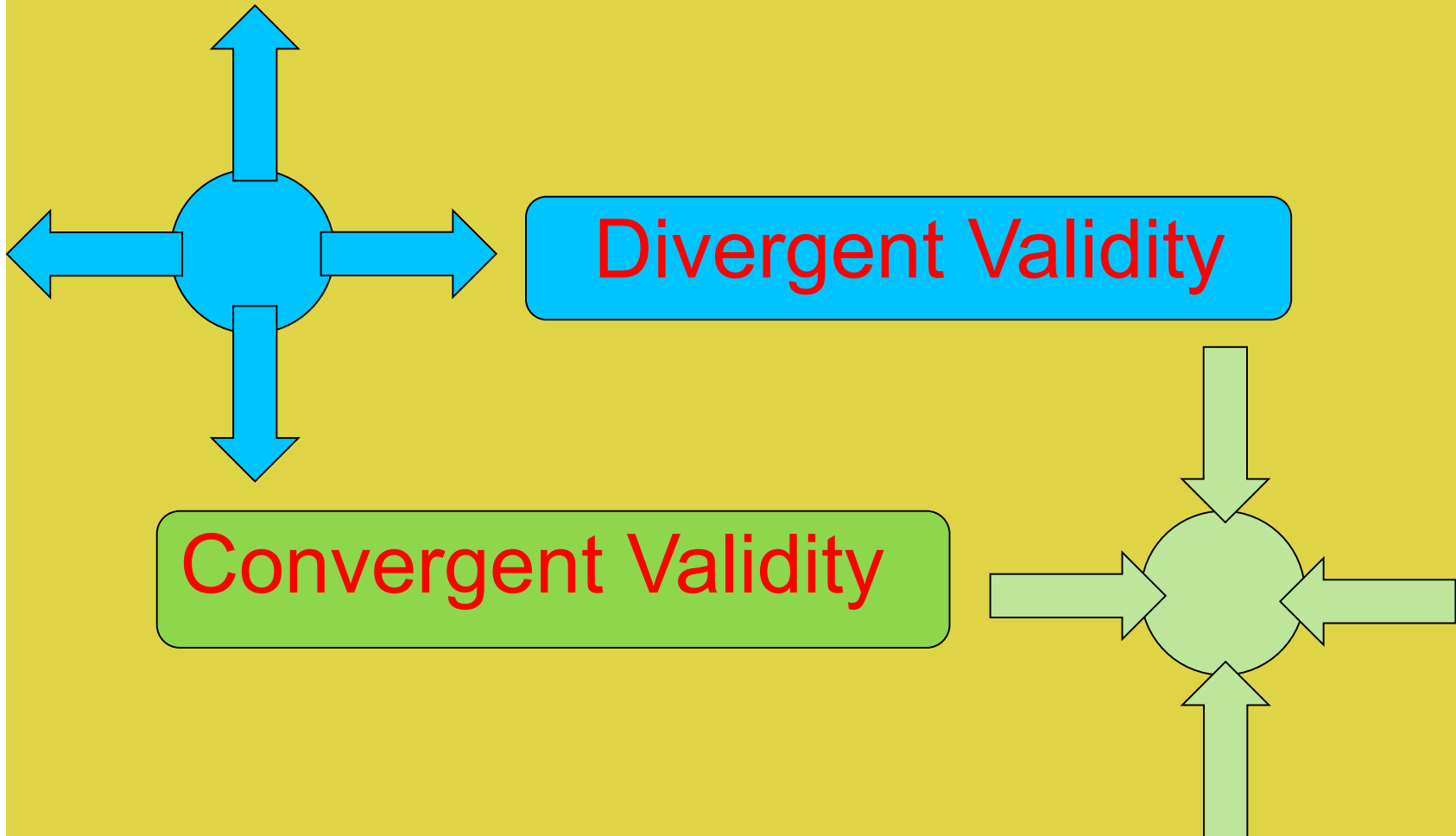
Faculty Empowerment

Staff Empowerment

# INTEGRATIVE VECTORS



# Transforming Academic Validity



# Key Conclusion 1: Sustainability Threshold

After a sufficient level of institutional experience and success occurs, sustainable actions beget more sustainable actions and sustainability becomes self-fulfilling.

- there is movement from one or a few sustainability activists to a much broader ownership of the mission,
- concrete actions toward sustainability have been identified, understood, and seen as desirable,
- these actions fit with the varied areas of responsibility, competence, and agenda-setting held by multiple institutional actors.
- Institutionalization of a sustainability mission is the eventual outcome.

# Key Conclusions 2: Sustainability is an exercise in social learning

1. It may be necessary to build the learning capacity before sustainability actions can succeed.
2. Sustainable change requires unlearning conventional approaches while learning new ones.
3. Links between institutional partitions are necessary to create an “interdisciplinary and integrated” approach. Ramapo’s success has a lot to do with its being internally linked.
4. Ramapo’s idiosyncracies have been conducive to sustainable experimentation:
  1. it is a young institution,
  2. inherently interdisciplinary,
  3. advantages of scale,
  4. had comparatively little turn over of faculty and staff to build long term relationships
  5. climate of experimentation and learning
  6. Cohesion
  7. Students have historically played an elevated role in the college

# Key Conclusions 3: Sustainable Culture Building

- Ramapo shows that sustainability allies can be found at every level and every corner of the institution.
- Building a sustainable campus has everything to do with culture building. The goal is to reach a critical point where the culture of the institution supports sustainability as an implicit and even explicit goal.
- Social capital, physical resources, institutional memory and image formation, the shape of key milestone events, accessible learning opportunities, and many other elements go into this acculturation for sustainability.
- Mission centrality is key because administrators are responsible for “real time” decisions.

# Key Conclusions 4: Sustainability is a Collective Project

1. It demands consensus or respectful disagreement.
2. Top down support is essential, but so is grass-roots support.
3. Key individuals make all the difference.
4. Until such time as sustainable thinking and actions become socially normative, a great deal of energy will be required to nurture --or even force --even modest efforts into existence.
5. Every innovation requires innovators. And herein lies an achilles heel of sustainable change. The tendency for projects to become associated with dominant movers and shakers creates a susceptibility for the project to falter if the leader is removed or if a leader gets too far out in front of his **or her** peers on a crucial issue.
6. A lesson of sustainability that must be followed is to create cooperative ventures, both for secondary benefits of participation, but also to allow redundancy and resiliency of social systems. It is often easier to go it alone, but never better in the long run. Depth of field is key.



# Key Conclusions 5: Sustainable Turnover

- 1. Ramapo has turned over five Presidents in some 7 or 8 years, and about as many VPAA/Provosts.**
- 2. Many retirements have occurred and new faculty now predominate.**
3. Continual relearning of key institutional actors must be addressed if sustainability efforts are to succeed.
4. Along with other challenges, the message may be that if we want the path to sustainability to be made of cobblestones rather than asphalt then we have to expect bumps in the road.
5. Learning to patiently and creatively address these challenges is a key requisite of success. For, in the end, it may seem like a oxymoron, but sustainability must be sustained.

# Additional Key Conclusions

1. Solve Institutional Problems
2. Culture Building
3. Collective Enterprise
4. Social Learning
5. Threshold
6. Sustainability Must be Sustained

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