General Education for Sustainability: Mitigation, Adaptation, or Salvation?

Paul Morgan
West Chester University of PA

Josh Lasky
US Green Building Council
“What are we going to do a generation from now?”
Thought Experiment
Transform the mission, structure, and content of higher education

What does it look after the crisis?
Thought Experiment

Or a likely scenario?
Mitigation

mit·i·ga·tion
ˌmidəˈɡāʃ(ə)n/

- noun

- the action of reducing the severity, seriousness, or painfulness of something.
Adaptation

ad·ap·ta·tion
ˌadapˈtāSH(ə)n/

• Noun
• a change or the process of change by which an organism or species becomes better suited to its environment.
Salvation

sal·va·tion
salˈvāSH(ə)n/

• Noun
• being saved or protected from harm or being saved or delivered from some dire situation
• something that saves someone or something from danger or a difficult situation
How do we educate students for a sustainability and climate crisis that might demand even more than mitigation and adaptation?
Transform the mission, structure, and content of higher education
HOW

when
A typology of organizational change

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<th>Transformational</th>
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<td>Tuning</td>
<td>Reorientation</td>
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The Incremental Path (INC)

- View sustainability as a ‘normal’ problem
- Use strategies of institutional and social change that are linear, incremental, and rooted in a tradition of social movements
- Focus on positive visions of the future
Senate Support for Same-Sex Marriage

Time

2000
2005
February 2011

10% of Senate

Senators

0
10
20
30
40
50
60
70
Incremental or Transformational?

What makes same sex marriage a ‘normal’ challenge is that it is an extension of a long tradition of struggle (i.e. making good on the enlightenment ideals of freedom and equality)
AASHE Strategy Map
Approved July 18, 2014

**Mission:**
Inspire & catalyze higher education to lead the global sustainability transformation

**Vision:**
AASHE will lead higher education to be a foundation for a thriving, equitable and ecologically healthy world

**Values:**
Transparency, Collaboration, Hope, Stewardship, Innovation, Courage, Accountability, Diversity

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Focus on Excellence in Sustainability for Higher Education

- Identify the customer*
- Develop, prioritize and deliver services to campus change agents
- Facilitate and support new and existing regional and international groups
- Support faculty development

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Strengthen Operational Core

- Improve organizational effectiveness
- Improve customer service experience
- Improve technology and communications
- Improve understanding of organizational challenges & opportunities

Strengthen AASHE’s Value & Capacity

- Strengthen and diversify AASHE’s staff and board leadership
- Engage and leverage AASHE community*
- Optimize governance

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Securing AASHE’s Financial Future

- Diversify and stabilize funding*
- Deliver products and services responsive to market forces and mission*
- Enhance value proposition

---

*2014 priority
The World We Made

ALEX McKAY'S STORY from 2050

PHAI DON
The World We Made describes a planet that is green, fair, connected, and collaborative. Based on extensive research, leading environmentalist Jonathon Porritt reveals how we can achieve a genuinely sustainable world by 2050 if we act immediately.
The Appeal of Sustainability INC

- It’s what we’re already doing!
- We’re making “progress”!
- It accentuates the positive!
- It’s familiar! It’s comfortable! It’s safe!
- It’s about mitigation & adaptation!
Concerns About the Path of INC

• May be naïvely optimistic
• Not as focused on root causes
• Makes an unsustainable system somewhat less unsustainable
• Easily coopted and watered down
• Wishful thinking “If we act immediately”
• And . . . .
Sustainability is . . . uh . . . Boring
Path of Transformation (TRAN)

• Face Reality: Sustainability may be an existential crisis that we can’t “manage” (narratives, assumptions, and entrenched economic & political interests)

• Generate urgency and commitment from the possibility of real crisis

• Develop strategies that lead to/flow from non-linear tipping points
Consequences of gay marriage:

- Gays marry
- Russia invades
- Judgement day begins
- Families are destroyed
- Ice-caps melt
The Collapse of Western Civilization: A View from the Future

Naomi Oreskes and Erik M. Conway
The year is 2393, and the world is almost unrecognizable. Clear warnings of climate catastrophe went ignored for decades, leading to soaring temperatures, rising sea levels, widespread drought and--finally--the disaster now known as the Great Collapse of 2093, when the disintegration of the West Antarctica Ice Sheet led to mass migration and a complete reshuffling of the global order. Writing from the Second People's Republic of China on the 300th anniversary of the Great Collapse, a senior scholar presents a gripping and deeply disturbing account of how the children of the Enlightenment--the political and economic elites of the so-called advanced industrial societies--failed to act, and so brought about the collapse of Western civilization.
EXISTENTIAL RISK
SURVIVING THE 21ST CENTURY

HUW PRICE  MARTIN REES  JAAN TALLINN
"Interstellar" follows a team of NASA astronauts searching the stars for another planet where humans might be able to relocate, now that climate change has made Earth almost uninhabitable.
KEEP CALM AND FACE REALITY
Leaders can't solve problems if they don't acknowledge their existence

- Bill George
Concerns about the TRAN Path

• It could be naively apocalyptic
• Perversely hopes for/counts on catastrophe
• Not everyone is motivated by crisis
• Can be an excuse to avoid acting now
• The tipping point may never come
Strengths of TRAN

• Avoids the perils of naïve optimism
• Not distracted by micro-successes
• Keeps the pressure on
• Focusses on root causes & the big picture
• Emphasizes SOU (Sense of Urgency)
• Potentially Exciting: A New Renaissance
• May be the path of salvation
Think like Pollyanna and change the world!
Is this progress toward sustainability?
Does it make anyone in power uncomfortable?
NAOMI KLEIN

THIS CHANGES EVERYTHING

CAPITALISM VS THE CLIMATE

AUTHOR OF NO LOGO AND THE SHOCK DOCTRINE
SOU vs. BAU

SOU
Sense of Urgency

Business as Usual
Shlomo's Case for Urgency in Change

Time

Change

Adaptation with urgency

Competitive advantage

Typical organization's adaptation

Stuck organization

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Crisis

Danger  Opportunity
“The words ‘salvation’ and ‘deliverance’ often have a theological association and should probably be avoided.”
The Opportunity

IF the coming years bring an increasing sense of crisis, it will almost surely give rise to an intense questioning, a ripeness for new ways, a desire for new visions, and even an openness to a new world view.

This could be our salvation
So . . . how do we

a) *Catalyze* rapid non-linear change?

b) *Anticipate* rapid non-linear change?
Public Opinion Tipping Point vs.
Climate System Tipping Point

Tipping Point
There may come a time when the warnings become so alarming and so undeniable that there will be a real opportunity to radically transform higher education and other major institutions.
When that time comes, people will turn to the experts (us!) and ask how higher education can be transformed to meet the challenge.

What will be our answer?
“YOU NEVER CHANGE SOMETHING BY FIGHTING THE EXISTING REALITY. TO CHANGE SOMETHING BUILD A NEW MODEL THAT MAKES THE EXISTING MODEL OBSOLETE.”

-R. Buckminster Fuller
Once upon a time...
The Medieval University
The Medieval University

**Truth** located *primarily* in:

**The Classics**
(reason & authority)

**Faith & Meaning** located *primarily* in:

Religion
Transformation
The Modern University

Truth located *primarily* in:

Science

Meaning located *primarily* in:

Economy/Consumption

Faith located *primarily* in:

Technology
Modern University: Current Tension

- **Traditionalists**: education/research focused on abstract, theoretical scholarship
- **Vocationalists**: powerful trend rooted in economism (e.g. University of Phoenix)

- **Problem**: Neither approach is well suited to meeting the challenges of sustainability
Traditionalists

“Because of their commitment to academic disciplines and theory, traditionalists are not much interested in what is going on in the world, at least not in all of its concreteness, and even when they are, they feel they are unable to move from ‘is’ to ‘ought.’ Disciplinary expertise does not enable scholars to make moral judgments regarding what is right and good.”
Fig. 1 Position of model penguin during defaecation and physical parameters used to calculate rectal pressure necessary to expel faecal material over a distance of 40 cm
Explore our undergraduate, graduate and doctoral programs by area of interest:

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Education
Nursing
Health Administration
Criminal Justice & Security
Psychology & Social Sciences
Arts & Sciences
Technology

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View our degrees

Explore individual courses and certificate programs that help you develop skills to enhance your career.

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Career guidance tool
Use the Phoenix Career Guidance System™ to learn how to align your education with a meaningful career.

Take the next step
Request information
Live chat
Call us 866.766.0766

Stay connected
Technopoly: A story that emphasizes “progress without limits, rights without responsibilities, and technology without cost. The Technopoly story is without a moral center. It puts in its place efficiency, interest, and economic advance. It promises heaven on earth through the conveniences of technological progress. It casts aside all traditional narratives and symbols that suggest stability and orderliness, and tells, instead, of a life of skills, technical expertise, and the ecstasy of consumption. Its purpose is to produce functionaries for an ongoing Technopoly.”
The Modern University

- Disciplinary/Vocational
- Ostensibly value-neutral
- Abstract and narrowly practical
- Anthropocentric and individualistic
- Apolitical
- Universal
- Education for rootlessness
- Reinforces/Augments the status quo
The Modern University

- Disciplinary/Vocational
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The Postmodern University?

- Problem-based/Place-based
- Explicitly value-laden
- Complex and broadly practical
- Biocentric and social
- Favors democratic forms of government
- Localized
- Education for rootedness
- Seeks to bring about substantial change
Inspiration #1
Inspiration #2: Integral Theory

- **I** (Subjective): thoughts, emotions, memories, states of mind, perceptions and immediate sensations
- **IT** (Objective): material body (including brain) and anything that you can see or touch (or observe scientifically) in time and space
- **WE** (Intersubjective): shared values, meaning, language, relationships and cultural background
- **ITS** (Interobjective): systems, networks, technology, government and the natural environment

Individual

Collective

Interior

Exterior
First Year Experience
First Year Experience Themes?

Design and Society
Globalization
Human/Nature
Life Unlimited?
Delaware Valley
Power & Imagination
Race & Social Justice
Sustainability
Ways of Knowing
The Work of Art
First Year Experience Themes?

- Awareness and Presence
- Awareness in a Technological Society
- The Aesthetic Experience
- The Self
- What is ability and disability?
- Wellness and Health
- Making and Creating
- Scientific Literacy for 21st Century Citizenship
- Science and Society
- West Chester/Delaware Valley
- Technology, Tradition, Security, and Human Rights
- Families and Society
- **Sustainability**
- What does it mean to be human?
- Nature/Human Nature?
- International/Cultural Experience
- Global/Planetary Perspectives
- Diversity
### Team Taught

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<thead>
<tr>
<th>Individual-Interior</th>
<th>Individual-Exterior</th>
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<tbody>
<tr>
<td>Somatic</td>
<td>Scientific</td>
</tr>
<tr>
<td>Psychological</td>
<td>Acoustic</td>
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<tr>
<td>Therapeutic</td>
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**Theme**
Engaged Learning
Second Year

- 12 credits, two 3-credit courses per semester
- Students select 4 themed courses, one rooted in each quadrant
- Distinct learning outcomes for each quadrant
- Early field-based experiences (?)
- Transfer Students: <30 credits, >30 credits
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**Consciousness**

"What I experience"

Areas studied:

"I", subjective realities, e.g. self and consciousness, states of mind, psychological development, mental models, emotions, will.

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**Behavior**

"What I do"

Areas studied:

"It", objective realities, e.g. brain and organism, visible biological features, degrees of activation of the various bodily systems.

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**Culture**

"What we experience"

Areas studied:

"We", intersubjective realities, e.g. shared values, culture and worldview, webs of culture, communication, relationships, norms, boundaries, customs.

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**Systems**

"What we do"

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Meanwhile

• No sense of urgency to drive more radical transformation, so for now, we are making incremental changes (e.g. curricular changes within existing structures). What we offer here is a sense of the very beginnings of an epochal shift toward a post-industrial university. This is a shift that will rival the change from the medieval to the modern university.
The Postmodern University?

- Problem-based/Place-based
- Explicitly value-laden
- Complex and broadly practical (?)
- Biocentric and social
- Favors democratic forms of government
- Localized (a wee bit)
- Education for rootedness
- Seeks to bring about substantial change
SHOP CLASS AS SOULCRAFT
AN INQUIRY INTO THE VALUE OF WORK

MATTHEW B. CRAWFORD
“I think there's fewer occasions to be responsible for your own physical environment. And, with that, I think comes less expectation of responsibility.”
Transform the mission, structure, and content of higher education

What does it look after the crisis?
assume nothing
“Thoroughly conscious ignorance is the prelude to every real advance in science.”

James Clerk Maxwell, 1831 -1879
“We ended up breaking the rules of shoes, not for the sake of breaking them, but simply by not knowing them”

Rem D Koolhaas
Founder & Creative Director United Nude
Questions

1. How serious are our sustainability and climate challenges? Similar to other social problems? Game changing? An existential threat?

2. To what extent should higher education for sustainability be driven by the probability of (apocalyptic) catastrophe? To what extent should it be driven by positive visions and possibilities?
Questions

3. Is Education for Sustainability, as it is now conceived and practiced, capable of 
   a) bringing into being a positive vision of a sustainable society? 
   b) preventing the collapse of Western civilization? Both? Neither?

4. How would colleges and universities be structured, and what would they teach, if they 
   were focused solely on 
   a) realizing a positive vision of a sustainable society and/or 
   b) preventing the collapse of Western civilization? Is there a difference?
Questions

1. How serious are our sustainability and climate challenges? Similar to other problems? An existential threat?

2. To what extent should higher education for sustainability be driven by the probability of (apocalyptic) catastrophe? To what extent should it be driven by positive visions?

3. Is Education for Sustainability, as it is now conceived and practiced, capable of a) bringing into being a positive vision of a sustainable society? b) preventing the collapse of Western civilization? Both? Neither?

4. How would colleges and universities be structured, and what would they teach, if they were focused solely on a) realizing a positive vision of a sustainable society and/or b) preventing the collapse of Western civilization?
“Just like the people of the Middle Ages, we’re absolutely sure that people will go on thinking the way we think forever, and people will go on living the way we live forever. The people of the Middle Ages thought this way because it seemed impossible to them that people could think a different way. . . . Of course, we smile at that—but in fact we believe exactly the same thing. We too believe that the history of thought has come to an end with us.” --Daniel Quinn

Can we imagine higher education in ways that aren’t just extensions of the reigning worldview?
“You could say that if the Middle Ages had been able to predict the Renaissance, then it would have been the Renaissance.”

-Daniel Quinn, The New Renaissance
“If there are still people here in 200 years, they won’t be *thinking* the way we do. I can make that prediction with equal confidence, because if people go on *thinking* the way we do, then they’ll go on *living* the way we do—and there won’t be any people here in 200 years.”

“The extraordinary thing that’s going to happen in the next two or three decades is that a great second renaissance is going to occur. Nothing less than that is going to save us.” – Daniel Quinn
If a postmodern, sustainability focused university is ever realized, it will not be because we made a good argument for it. It will be the byproduct of a worldview transition catalyzed by the planetary ecological crisis, inspired by a new civilizational vision, rooted in scientific understanding, and accelerated through transformative learning practices.
BIG HISTORY PROJECT
Take your students on a 13.7 billion year journey

Ask the big questions about our Universe, our planet, life and humanity. Explore where we are going in the future and challenge your students to develop the skills and knowledge they need to get there.

REGISTER NOW
Big History, Big Questions

• What kind of world is this?
• How do we fit into the world?
• How did we come to be?
• What is most of value in life and how is it achieved?
Paths Converge
once we’re out of the woods
Yes, there are two paths you can go by, but in the long run
There's still time to change the road you're on
Education for Sustainability

A Worldview Changing Experience
A GENTLEMAN'S GUIDE TO SURVIVING THE 21ST CENTURY

click to download your digital guide for only .99 cents

GOOD LUCK SURVIVING WITHOUT IT.
Gay Marriage ≠ Collapse of Civilization

[Comic text]

Notice anything different the past few weeks?
HMM... NO
NOTHING?

You sure?
YEP

Don't you think the gay marriage apocalypse should've started by now?

Well... there has been some weird weather lately...
Keep your eyes on the stars, and your feet on the ground.

~Theodore Roosevelt
ANTHROPOCENE
Welcome to the Fabulous Anthropocene Era
FOSSILS FROM THE ANTHROPOCENE

SUV PARTS
(BRAKE PAD-BRACHIOPOD)

FACTORY FARM
CHICKEN
(DISGUSTUS INGESTUM)

SMALL ARMS
(PROLIFERUS ABSURDUM)

TV REMOTE
(DISTRACTUM COLLUSUS)

CLIMATE-CHANGE
DENIER
(CRANIUM IMPENETRUS)

CONFERENCE I.D.
(PRESSURUS GLOBALUM)
Root Causes

Transforming higher education (and the rest of society) to meet the challenge of sustainability might amount to an unprecedented attempt at deliberate worldview transition.
Is it possible to “manage the transformation” that is needed to reorient higher education toward sustainability?
“This is your wake-up call—change or die.”
A. THE SPECTRUM OF THE TRADITIONAL ACADEMIC RESEARCH DISCIPLINES

<table>
<thead>
<tr>
<th>Arts</th>
<th>Humanities</th>
<th>Social and Behavioral Sciences</th>
<th>Natural Sciences &amp; Math</th>
</tr>
</thead>
<tbody>
<tr>
<td>Painting</td>
<td>Literature</td>
<td>History</td>
<td>Biology</td>
</tr>
<tr>
<td>Sculpture</td>
<td>Languages</td>
<td>Archaeology</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Music</td>
<td>Linguistics</td>
<td>Political science</td>
<td>Geology</td>
</tr>
<tr>
<td>Dance</td>
<td>Philosophy</td>
<td>Sociology</td>
<td>Physics</td>
</tr>
<tr>
<td>Theater</td>
<td>Religion</td>
<td>Geography</td>
<td>Astronomy</td>
</tr>
</tbody>
</table>

B. THE SPECTRUM OF THE APPLIED PROFESSIONAL DISCIPLINES
CORRESPONDING TO THE RESEARCH DISCIPLINES

<table>
<thead>
<tr>
<th>Commercial art</th>
<th>Writing</th>
<th>Law</th>
<th>Genealogy</th>
<th>Business</th>
<th>Public admin</th>
<th>Clinical psych</th>
<th>Medicine</th>
<th>Agriculture</th>
<th>Geo engr</th>
<th>Accounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Musical perf.</td>
<td>Translating</td>
<td></td>
<td>Ministry</td>
<td></td>
<td></td>
<td>Social welfare</td>
<td></td>
<td>Horticulture</td>
<td>Aero engr</td>
<td>Finance</td>
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<td>Dancing</td>
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<td>Public health</td>
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<td>Forestry</td>
<td>Civil engr</td>
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<td>Acting</td>
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<td>Family science</td>
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<td>Wildlife mgmt</td>
<td>Elec engr</td>
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<td>Architecture</td>
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<td>Design</td>
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</tr>
</tbody>
</table>

Fig. 1: Traditional Disciplines and Corresponding Professional Disciplines
Nine columns in (B) map the same spectrum described in eight columns in (A)
“It answers [Allan] Bloom by saying that the story of Western civilization is irrelevant; it answers the political left by saying there is indeed a common culture whose name is Technopoly and whose key symbol is now the computer, toward which there must be neither irreverence nor blasphemy. It even answers [E.D.] Hirsch by saying that there are items on his list that, if thought about too deeply and taken too seriously, will interfere with the progress of technology.”
Restructuring: The Postmodern Transdisciplinary University
The Modern University

“Universities seek knowledge, but do not devote themselves to helping humanity learn how to create a better world. Judged from this standpoint, they are a disaster.”

Nicholas Maxwell, August 2009