Liberal Arts in Flux: the 21st Century Landscape

Bill Koulopoulos & Shel Sax
Middlebury College
Today’s Roadmap

• Pressures/Forces

• Changes: Adding Value

• Changes: Teaching and Learning
Shrinking Cohort!
Affordability of College

Percentage increase in consumer prices since the first quarter of 1978

- Tuition & Fees: 1,225%
- Medical care: 634%
- Shelter: 370%
- CPI: 279%
- Food: 257%

Source: Bureau of Labor Statistics

Bloomberg Visual Data
Still Falling: Average Earnings of Young College Grads*
(in Constant 2011$)

*Mean Earnings of Full-Time Workers Age 25-34 with a Bachelor's Degree only

Source: Census Bureau, PPI
53% of Recent College Grads Are Jobless or Underemployed—How?

A college diploma isn’t worth what it used to be. To get hired, grads today need hard skills.
Student Indenture
Total Debt Balance and its Composition

Source: FRBNY Consumer Credit Panel/Equifax
Total Student Loan Debt Outstanding in the United States

- Federal direct loans
- Other loans (private loans guaranteed by the federal government, private loans, others)
- Student loans, total

Source: Mitsubishi UFJ Morgan Stanley
Colleges Struggling to Stay Afloat

Moody's now has negative outlook for all U.S. universities

Reuters – 6 hrs ago
Figure 6: Relative expenditures in US higher education (1995-2010)

Relative share of expenditures per FTE enrollment

Sources: IPEDS, Bain & Company and Sterling Partners analysis
The Sustainable University?

SCHOOL TYPE: Elite liberal arts

Elite liberal arts (37)

Increase in expense ratio (2007-2012)

Decrease in equity ratio (2007-2012)

> 0

0-5

< 0

> 0 0% 0% 27%

0% 0% 54%

0% 0% 19%
Growth of Contingent Faculty

Share of U.S. college and university faculty by tenure, 1969 and 2009

- 1969:
  - Tenured and tenure-track: 78.3%
  - Non-tenure track: 21.7%

- 2009:
  - Tenured and tenure-track: 65.5%
  - Non-tenure track: 33.5%
Fewer Tenure Track Positions

Adjuncts +27%  
Tenured faculty -27%
Competition: The Minerva Project

The Atlantic
FEATRUES: The Future of College?

The Future of College?

A brash tech entrepreneur thinks he can reinvent higher education by stripping it down to its essence, eliminating lectures and tenure along with football games, ivy-covered buildings, and research libraries. What if he's right?

By Graeme Wood
SEPTEMBER 2014
Globalization

“In a networked global environment in which every university is visible to every other, and the weight of the global dimension is increasing, it is no longer possible for nations or for individual higher education institutions to completely seal themselves off from global effects.”

Marginson, S. & Wende

“Through the pursuit of knowledge unconstrained by national or disciplinary boundaries, students who come to Middlebury learn to engage the world.”
Federal Policy

“Succeeding globally through international education and engagement”

US Department of Education International Strategy 2012-16

Source: http://www2.ed.gov/about/inits/ed/internationaled/international-strategy-2012-16.html
America’s Global Future: Are College Students Prepared?

• What do our students need from their college studies
  – to contribute and thrive in a 21st-century economy?
  – to deal with major challenges in virtually every sphere of life?

• What does the US society need from higher education
  – to respond to the new realities of global interdependence, economic innovation, demographic transformation, digital opportunities, and fiscal constraints?

• Source: http://www.aacu.org/meetings/annualmeeting/am15/symposium
• High cost of education for students/parents
• Difficulty of sustaining the current financial model
• Employers searching for graduates with practical skills
• Slant towards STEM disciplines
• Global competencies
Research on Teaching & Learning

• Working Memory
• Cognition
• Multimedia Learning
• Learning Analytics
Brain Research

• Technological breakthroughs in brain research
• Experimentation at the K-12 level
• Application of brain research to teaching and learning
• Learning analytics (big data)
Working Memory

Dual Channel
Limited
Active Processing

Phonological loop - temporal lobes of the left hemisphere
Visuospatial memory – right hemisphere
Central executive – dorsolateral prefrontal cortex
Growth Mindset

Carol Dweck
Professor of Psychology, Stanford

You Can Learn Anything
Big Data & Learning Analytics
Big Data: What is it?

Big Data is like teenage sex:

- Everyone talks about it
- Nobody really knows how to do it
- Everyone thinks everyone else is doing it
- So, everyone claims they are doing it.
New Effort to Understand Learning Outcomes

• Public and for-profit institutions collaborating on common data collection and analysis

• Student-level data from six institutions, stripped of identifying information merged into one dataset

• Identify variables that affect student progress

Source: http://www.insidehighered.com/quicktakes/2011/05/16/new-effort-understand-learning-outcomes#ixzz2A9TIXf1u
EVIDENCE-BASED DESIGN

The Open Learning Initiative (OLI) creates courses based on the findings of learning science and then evaluates those courses based on actual student performance in real classrooms.
Data Driven Curricular Design

Source: http://oli.cmu.edu/get-to-know-oli/learn-more-about-oli/
Pressure to Add Value

• Cognitive research
• Teaching innovations
• Big data (learning analytics)
What is Middlebury Doing?

Programs and Opportunities:
- Liberal Arts Plus
- MIDDCore
- Center for Social Entrepreneurship
- Study Abroad
- Internships
- Summer Study
- Digital Liberal Arts

In the Classroom:
- Engaged Discussion
- Flipped Classroom
- Clickers
- Hybrid Courses
- Team Teaching
- Guided Inquiry Learning
- Collaborative and Group Work
- Project-based Learning
But for my purposes, I wanted “liberal arts plus” to be more expansive, to include more than what happens inside the classroom, be it with our dedicated faculty or with both our faculty and practitioners. I believe it is important—crucial—that one’s education extends beyond the classroom walls; what happens outside that realm is the difference between a liberal arts education today and yesterday, and it has to be if our graduates are to succeed in the 21st century.

- President Liebowitz, 2014 Baccalaureate address.
This Credit Bearing College Program Offers:

A highly collaborative learning environment
Mentors who are top-tier professionals
Problem-solving that is focused on the real-world
Exposure to worldwide businesses and organizations

See Core Strengths
• Summer grant program
• Fellowships
• Integration into curriculum
• Weekly forum on relevant selected topics
• Students link what they learn in the classroom with applied work in the community.

• Through community-connected projects, students will meld theory with practice

• Connect their Middlebury education to the wider goals of our global society.
Africa

Asia & the Pacific

Australia & New Zealand

Europe

Latin America & the Caribbean

Middle East

United Kingdom & Ireland
Winter Term internships for credit

Summer internships with transcript notation
The Digital Liberal Arts Initiative (DLA) is a campus-wide opportunity for faculty to explore the digital methods that are changing scholarship – to discover new modes of collaboration – to learn new skills for research and pedagogy – and to discuss and debate what digital technologies mean for our teaching and scholarship.
Digital Liberal Arts Projects

Arctic Stories
Peter Lourie, Creative Writing

Battle of Gettysburg
Anne Knowles, Geography

Chicago Freedom Movement
Jim Ralph, History
Teaching with (and about) Digital Technologies

Monday January 12, 2015, 11:00 – 12:00 am

- How can students engage critically with technology in the classroom?
- How can digital assignments further pedagogical goals?
- A discussion of these questions, and some practical examples of implementing digital technologies in the classroom.
"Literature cannot meaningfully be treated as data. The problem is essential rather than superficial: literature is not data. Literature is the opposite of data." In particular, "algorithms, exactly like fascism, work perfectly, with a sense of seemingly unstoppable inevitability, right up until the point they don’t.

- Stephen Marche
Engaged Discussion
Thursday January 8, 2015 11:00 – 12:00

- Deepen and unify discussion in the classroom:
  - Informal writing assignments
  - Initiating and shaping discussion
  - Facilitating a conversation
Navigating Controversial Topics

Monday January 19, 2015, 11:00 – 12:00

- Dealing with student’s deeply held preconceptions and convictions and may arouse powerful emotional responses.

  Thoughtful, well-facilitated discussion can have many benefits

- Encouragement of mutual respect during the course of disagreement
Flipping the Classroom
Clickers – Personal Response Systems
Clickers

Use questions at a variety of cognitive depth

Do the questions you use intellectually challenge your students or simply assess their factual knowledge?

- Creating
- Evaluating
- Analyzing
- Applying
- Understanding
- Remembering

Higher order

Lower order

handout
Hybrid Classes

Insurgency and Security Policy - 22576 - PSCI 0392 - A

Middlebury students will be in class until 4:05 p.m. and must also register for PSCI 0392Z (Discussion). Monterey students will be in class until 5:00 p.m. and DO NOT register for PSCI 0392Z (Discussion). To align the Middlebury/MIIS schedules, Middlebury students will need to begin their coursework prior to their return to campus for spring semester.

Associated Term: Spring 2015
Hybrid Learning

Thursday, January 29, 2015, 11:00 – 12:00

We will soon consider learning as existing along a continuum of different levels of technological integration; all will be considered learning.
Pedagogical Challenges in Online Education

- dramatic shift to online education in UVM’s summer session
- implications for teaching practices in view of the differences in the online environment.
Team Teaching Across the Disciplines

Thursday January 22, 2015, 11:00 – 12:00

- Benefits and challenges of team teaching across the disciplines?
- Andi Lloyd, Chris McGrory Klyza, Tim Spears, and Steve Trombulak will offer perspectives.
- a discussion about innovating as teachers and pursuing the full potential of a liberal arts education.
Guided Inquiry Learning

Students learn better when they are working together in self-managed teams.
Process Oriented Guided Inquiry Learning

Thursday January 15, 2015, 11:00 – 12:00

- explore a student-centered pedagogical strategy
- emphasizes deep thinking, deep learning, and the creative process.
As We Move Forward ...

Clay Christensen:
“Success in an increasingly competitive higher education environment requires each institution to identify and pursue those things it can do uniquely well”

Disrupting Class: How Disruptive Innovation Will Change the Way the World Learns, 2010