Trends in Higher Education

The Future of Human Learning and Learning Institutions

Randy Bass
(georgetown university)

LaGuardia Community College
February 1, 2019
Shifting Demographics
Decline and Growth of students for two-year colleges through 2029
“Drawing almost no attention, the nation crossed an ominous milestone last year that threatens more economic polarization and social division: For the first time, public colleges and universities in most states received most of their revenue from tuition rather than government appropriations.

This historic shift away from tax dollars funding the bulk of public higher education comes precisely as the nation’s youth population is crossing a succession of milestones to become more racially diverse than ever.”
A Lost Decade in Higher Education Funding
State Cuts Have Driven Up Tuition and Reduced Quality

AUGUST 23, 2017 | BY MICHAEL MITCHELL, MICHAEL LEACHMAN, AND KATHLEEN MASTERSON

State Spending on Higher Education Well Below Pre-Recession Levels
Total state spending, adjusted for inflation

Source: CBPP analysis of data from Grapevine survey and State Higher Education Executive Officers Association, 2017
Public Funding

Figure 4: Percent Change in State Support for Public Higher Education (All Colleges and Universities) per Full-Time Equivalent Student, in Constant 2014 $, since 2000

Figure 5: Higher Education (All Colleges and Universities) and Medicaid as Share of State General Fund Expenditures

Digital Ecosystem
The Onrushing Digital Revolution

Scale
Automate
Reduce instructional costs
Remember 2013?

How California’s Online Education Pilot Will End College As We Know It

gregory Ferenstein 6 years ago

The Economist explains
Will MOOCs kill university degrees?
Diversifying Higher Ed Ecosystem
College designed for the 21st Century

Earn your Bachelor's in Applied Computer Science immersed in a community of makers empowered to shape the world
DOMINICAN ANNOUNCES COMPUTER SCIENCE PARTNERSHIP WITH MAKE SCHOOL

Dominican University of California and San Francisco-based Make School are collaborating on a creative new venture that will reimagine the bachelor's degree for today's students and tomorrow's workforce.
California's online community college will break new ground in higher ed

Plans for college blend influences from universities, companies and for-profit colleges

“The new fully online college draws from a variety of sources, including public universities’ online degree programs, corporate worker training initiatives and programs at for-profit colleges. California plans to blend those existing influences to create something without precedent: A statewide, online-only public college focused on short, career-oriented certificates.”
Learn how to change things.

At Flatiron School you learn how the future is being built, so you can change anything, starting with a new career in code, data science, or UX/UI design.

WeWork and 2U, Inc. Announce Strategic Partnership to Enhance the Future of Work and Learning

January 22, 2018

Partnership Expands on Both WeWork and 2U’s Commitment to Providing New Pathways for Lifelong Learning; Enhances WeWork Member Experience Through 2U’s World-Class Digital Education Programs; Grows Community for Students in 2U-Powered Programs

01.23.18

WeWork Is Going Back To School

Education has become a priority for the coworking giant, which has announced a collaboration with online educator 2U.
External Forces of Potential Disruption

- Changing Demographics
- Public Funding
- Digital Landscape
- Diversifying HE Ecosystem
Design is the sum of all constraints.

Charles Eames
Future Trends of Higher Education

CHALLENGES
Higher Ed Context and Forces of Disruption

RESPONSES
Institutional change in an uncertain World

OPPORTUNITIES
Changing conditions of human learning and work
What will the conditions of knowledge, technology, learning and work be in 15 years?

What kind of graduate would we want to produce?

2030: Designing for context not content
This generation of college learners is the first in history with a 50% chance of living to 100.
Humans in the age of artificial intelligence.

“The human labor market will center on three kinds of work: solving unstructured problems, working with new information (including complex communication), and carrying out non-routine manual tasks.”
3 myths about the future of work (and why they're not true)

Machine Superiority
Machine Substitution
Machine-Human Complementarity
Growing

- Analytical thinking and innovation.
- Active learning and learning strategies.
- Creativity, originality and initiative.
- Technology design and programming.
- Critical thinking and analysis.
- Complex problem-solving.
- Leadership and social influence.
- Emotional intelligence.
- Systems analysis and evaluation.

How does an entire college work together to have a culture that values and cultivates these?
ROBOT-PROOF

HIGHER EDUCATION IN THE AGE OF ARTIFICIAL INTELLIGENCE

JOSEPH E. AOUN
Humanics

The New Literacies
- Technological Literacy
- Data Literacy
- Human Literacy

The Cognitive Capacities
- Critical Thinking
- Systems Thinking
- Entrepreneurship
- Cultural Agility
We have seen that when learners put their knowledge into practice in real-life situations, they develop a better understanding of themselves, their strengths and weaknesses, and their drives and possibilities. They also sharpen their cognitive capacities, leading to the robot-proof qualities of creativity and mental flexibility...

...By contrast, no computer has yet displayed creativity, entrepreneurialism, or cultural agility.

As machines get better at being machines, the primary purpose of higher education has to be helping humans get better at being human.
Future Trends of Higher Education

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OPPORTUNITIES
Changing conditions of human learning and work
1. The future of human learning is dispositional learning.
Purdue-Gallop Poll on Engaged Work and Flourishing

Two most important predictors of success:

1) Adult mentor who cared about you
2) Sustained project
Educating the whole person?

Knowledge + Skills + Dispositions (+ Values)

Dispositions:
- Learning to learn
- Critical thinking
- Creativity
- Curiosity
- Resilience
- Empathy
- Humility
- Ethical Judgment

“HARD SKILLS”

Striving to cultivate a balanced person, with intellectual, affective, imaginative and reflective capacities.
KNOWLEDGE AS ICEBERG

LIVES IN BOOKS AND HEADS

EXPLICIT (KNOW WHAT)

TACIT (KNOW HOW)

LIVES IN PEOPLE AND THEIR PRACTICES

Image from John Seely Brown, “Minds on Fire” (2008)
Using ePortfolio to Document and Deepen the Impact of HIPs on Learning Dispositions

**Knowledge as Iceberg**

- **Explicit** (Know What)
  - Lives in books and heads

- **Tacit** (Know How)
  - Lives in people and their practices

Performance Metrics such as graduation rates, persistence rates, time to degree, matriculation into graduate school, and job placement

- Easily Identified Learning via test scores and standardized exams

- Application of skills such as:
  - Attention Regulation
  - Emotion Regulation
  - Growth Mindset
  - Resilience
  - Prosocial Behavior
  - Implicit Stereotype Threat
  - Regulation
  - Openness
  - Reflective Learning
  - Conscientiousness
  - Effortful Control
  - Academic Self-Efficacy
  - Deliberate Problem Solving


**2004**

**2018**
Growing

• Analytical thinking and innovation.

• Active learning and learning strategies.

• Creativity, originality and initiative.

• Technology design and programming.

• Critical thinking and analysis.

• Complex problem-solving.

• Leadership and social influence.

• Emotional intelligence.

• Systems analysis and evaluation.
Designing for dispositional learning

Sense of belonging

Metacognitive study skills

Project-based learning / social pedagogies

Opportunities to integrate, connect, synthesize.
1. The future of human learning is dispositional learning.

2. We need to adopt new forms of planning and transformation.
Design Unbound
Designing for Emergence in A Whitewater World

Ann Pendleton Jullian and John Seely Brown
Planning for a different kind of future requires a different kind of planning.

UNLEASHING A 21ST CENTURY NARRATIVE, Ken Hunter, Bill Miller, & Rick Smyre.
Planning for a different kind of future requires a different kind of planning.

As the pace of change accelerates, networks and ecosystems of people, organizations and communities need to be designed for rapid, speedy adaptability. “Adaptive Planning” complements strategic planning and is an essential leadership skill that supports the emergence of new concepts and methods that are effective and transformational for the longer run.
Every institution needs a combination of slow change and fast change strategies.
1. The future of human learning is dispositional learning.

2. We need to adopt new forms of planning and transformation.

3. Variation is the best way to survive change.
Punctuated Equilibrium
2030

A period of significant shifting and sorting for higher education, in a volatile and uncertain world.
As machines get better at being machines, the primary purpose of higher education has to be helping humans get better at being human.
Design is the sum of all constraints.

Charles Eames