THREE REVOLUTIONS: WHY EDUCATION LEADERS NEED A PLAN

MARK DAVID MILLIRON, Ph.D.
“I’m not an optimist. That makes me sound naïve. I’m a very serious ‘possibilist’ . . . It means someone who neither hopes without reason, nor fears without reason, someone who constantly resists the overdramtic worldview. As a possibilist, I see all this progress, and it fills me with conviction and hope that further progress is possible . . . It is having a clear and reasonable idea about how things are. It is having a worldview that is constructive and useful.”
Share of the World Population living in Absolute Poverty, 1820-2015

All data are adjusted for inflation over time and for price differences between countries (PPP adjustment).


The interactive data visualisation is available at OurWorldinData.org. There you find the raw data and more visualisations on this topic. Licensed under CC-BY-SA by the author Max Roser.
Higher education is failing to meet the needs of both students and employers, and only a fundamental transformation can put it on the right track.
18 REASONS THE U.S. EDUCATION SYSTEM IS FAILING

BY MATTHEW LYNCH  /  APRIL 3, 2017  /  24
Some researchers are warning community colleges that enrollment isn't expected to improve, even as they grapple with declines in state funding and demand for better performance and outcomes.
Three Revolutions to Watch

Revolutionary Teaching and Learning

Revolutionary Student Success Strategies

Revolutionary Use of Data/Al
Revolutionary Teaching and Learning

Face to Face Infrastructure
- Classrooms
- Lecture Halls
- Training Labs
- Locations
- Simulators
- Office Hours
- Library
- Open Space

Online Infrastructure
- Website
- Learning Mgt Systems
- Content Repositories
- MOOCs
- Social Networks
- Mobile Apps

Activities
- Lecture, Dialogic, Small Groups, Contextual Learning, Simulations, Learning Communities, i-BEST, Project-Based Learning, Self-Directed Learning, Blended Learning, Accelerated Learning, Competency-Based Learning
75% believe using personal devices in the classroom has improved their ability to learn

58% use their phones to take pictures of lecture slides

39% use mobile devices to access a digital textbook
COMPETENCY-BASED LEARNING, PERSONALIZATION, AND THE RISE OF THE ‘MULTIVERSE’ IN EDUCATION

MARIK MILLERON | OCTOBER 9, 2019 | UNCATCATEGORIZED | ADD REPLY

Working at the intersection of institutions, innovators, and issue champions is a blessing. Of course you must be willing to ideate, engage, and explore—not to mention, bring a good amount of tenacity and grit to face tough issues, take a few stands, and learn hard lessons. However, you also have the pleasure of working with people that give you hope that the road ahead for education is bright. Dr. Marni Baker Stein, Provost and Chief Academic Officer for Western Governor University (WGU), is decidedly in this group for me. After listening to the podcast that follows, you’ll understand why.
Still a virtual reality skeptic? Here’s why you shouldn’t be

Posted 4 hours ago by Ian Hetherington

The original PlayStation console, launched when I was the managing director of Sony Computer Entertainment for Europe, shook the gaming world. The 3D environment was unfamiliar to truth as the VR experience was just beginning to take shape. Now, with advancements in technology and innovations in software, VR has evolved into a powerful tool for education and training.

Ian Hetherington is a co-founder and chairman of Meta, a company that is leading the next evolution of personal computing through augmented reality, replacing desktops, laptops, tablets, and smartphones with smart glasses.

CrunchBase

Meta

FOUNDED
2012

OVERVIEW
Meta offers users a total augmented reality (AR) experience: - See, create, and interact with virtual objects and apps inserted in the real environment - Display with wearable glasses - Control with hand gestures Meta’s goal is to lead the next evolution of personal computing through augmented reality, replacing desktops, laptops, tablets, and smartphones.
Revolutionary Teaching and Learning
Learning & Education

Internet of Things for Higher Education
Revolutionary Teaching and Learning

LINK RESEARCH LAB
WHAT DOES IT MEAN TO BE HUMAN IN A DIGITAL AGE?

Open Learning Initiative
at Stanford University

Transforming higher education through the science of learning.

Improvements in post-secondary education will require connecting teaching from a solo sport to a community-based research activity.

- Herbert Simon
Revolutionary Student Success Strategies
¼ of students state that it will be difficult or very difficult to finish
The Big List

Top challenges faced by students in their higher ed experience:

- Choosing my major
- Choosing which classes I need to take
- Finding a course schedule that works for me each term
- Balancing classes and work
- Affording tuition, fees and textbooks
- Affording non-academic expenses like rent, transportation, and groceries
- Navigating financial aid
- Navigating my academic pathway to graduation *(e.g. term-over-term planning)*
- Registering for classes
- Completing all the administrative requirements *(paperwork, meeting deadlines, etc.)*
- Meeting academic deadlines
- Balancing social activities and classwork
- Making time to study
- Knowing where to go when I need help with my studies
- Adjusting to college life *(on my own, new friends, etc.)*
- Balancing college classes and work at the same time
- Balancing college classes and family commitments
COMMUNITY INSIGHT 2
GAINING DEEPER UNDERSTANDING OF HIGH GPA DEPARTURES

98% of institutions in this study are losing more students above 2.0 GPA than below it.

This benchmark is based on a data set of 4 million students from 62 institutions.
CAMPAIGN: HIGH GPA, LOW-MODERATE PERSISTENCE

Outreach Goal

• Come to advising, persistence

Students Targeted

• Undergraduate, GPA 3.0-4.0 w/ low persistence likelihood

Outreach Owner

• Illume Working Group pulls student list, creates case for advisors

Strategy

• Sent before spring midterms

Sample Email: We’re Proud of You!

Hi <student first name>,

I wanted to send you a note to see how your semester is going. College can be challenging this time of year and even the most successful students can struggle. Common challenges for students include job commitments, family responsibilities, financial pressures, transportation issues, or a combination of these and other issues. Do any of these sound familiar to you?

If you are experiencing any of these issues, or other things, I am here to help!

I am proud of your progress and excited to support your continued success.

Sincerely,

<Advisor Name>
Revolutionary Student Success Strategies

OER Commons is a public digital library of open educational resources. Explore, create, and collaborate with educators around the world to improve curriculum.


Create OER with Open Author

Open Author helps you build Open Educational Resources, lesson plans, and courses (on your own, or with others) — and then publish them, to the benefit of educators and learners everywhere. Select one of our authoring formats to get started:
A Radical Idea To Help College Students Succeed: Child Care

Wesley Whistle  Contributor @
Education
I write about education, including policy, student debt, and more.
ABOUT
THE HOPE CENTER
Too many students leave college without credentials because life, logistics, and a lack of money got in the way. These #RealCollege students are the new majority, but they are often ignored. The Hope Center for College, Community, and Justice is home to an action research team using rigorous research to drive innovative practice, evidence-based policymaking, and effective communications to support #RealCollege students.

LISTENING TO STUDENTS' VOICES4CHANGE
MARK MILLION | JULY 24, 2018 | UNCATTERGORIZED | ADD REPLY

Last week, we saw the announcement of the Hope Center for College, Community, and Justice, the next generation of the highly successful Wisconsin Hope Lab. The new center, located at Temple University, will continue and deepen the research and innovation aimed at helping striving students succeed in higher education, even as they are wrestling with serious challenges such as housing insecurity, food insecurity, transportation, childcare and more.
GE's Adventure Series redesigns imaging equipment including MRIs, X-ray machines and CT scanners like the pirate-themed machine pictured here to make the procedures less scary for kids.
Designing Clear Educational & Advising Experiences

- 89.9% increase in degrees & certificates
- 60.3% increase in completers
- $3.1 million in tuition savings from reduced credits
- 254% increase in IPEDS rate
Student Transformative Learning Record (STLR)

An overview of STLR, targeted to UCO students, Summer 2018

stlr.uco.edu
Revolutionary Use of Data/AI
CAMPAIGN: NEAR-COMPLETERS & THE FINISH LINE

Outreach Goal
• Catalyze completion among students more than 75% of way

Students Targeted
• Students who had accumulated 75% of credits on ANY degree path, segmented by persistence likelihood

Outreach Owner
• Student success team

Strategy
• Identify optimal student group, segment outreach by persistence quartile – top/email, middle/calls, lowest/face to face

‘Nudge campaign’ yields big jumps at Del Mar

Del Mar College students celebrate their graduation.

BY DAILY STAFF  JUNE 20, 2017  PRINT

Over the past year, Del Mar College in Texas has doubled down on identifying and supporting students who were close to earning a degree but at risk of not completing.

“We educate a diverse, and typically underserved population of students, including adult learners and commuters,” said Rito Silva, the college’s vice president of student affairs. “We knew that many of these students were close to completing their degree, but still dropping out due to academic or life challenges. We needed to find a way to identify those students earlier.”

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34% increase in graduates in one year

38% increase in credentials awarded
5.9% Lift in Persistence  
**Writing Center Tutoring Services**  
5,556 analyzed participants  
Improve persistence rates, particularly for first year students, by offering free 1-on-1 tutoring...  
Spring 2014 → Fall 2016  
Added on April 6, 2017 by Grace Gee

0.8% Lift in Persistence  
**Supplemental Instruction**  
2,591 analyzed participants  
Does participation in at least one SI session increase persistence for students in Biology...  
Fall 2014 → Spring 2016  
Added on September 12, 2016 by John Anderson

8.5% Lift in Persistence  
**Student Activity Involvement**  
3,264 analyzed participants  
Does Student Activity involvement increase persistence  
Fall 2013 → Spring 2017  
Added 2 weeks ago by Craig Moser

4.2% Lift in Persistence  
**Workforce Training**  
2,735 analyzed participants  
Do low-income students who receive workforce training and financial aid have higher persistence?  
Spring 2013 → Spring 2016  
Added on March 27, 2017 by Grace Gee

6.3% Drop in Persistence  
**Academic Concern Flag Email**  
5,710 analyzed participants  
Testing impact of automated emails from academic concern flags on persistence.  
Fall 2014 → Fall 2016  
Added 1 month ago by Jacob Rios

0.8% Drop in Persistence  
**First Year Experience Seminar**  
1,397 analyzed participants  
Improve first year persistence rates by offering a small class environment to introduce key...  
Fall 2014 → Fall 2015  
Added on March 27, 2017 by Grace Gee
THE OVERALL IMPACT OF STUDENT PROGRAMS
— BASED ON OVER 1,000 INITIATIVES RUN BY 55 INSTITUTIONS —

60% of initiatives show a statistically significant positive impact...

...but 20% of the students participating in these “successful” initiatives WERE NOT positively impacted.

40% of initiatives show little to no statistically significant impact...

...but 16% of the students participating in these “unsuccessful” initiatives WERE positively impacted.
TOP 5

1. Advising
   - While advising services demonstrate the highest overall average lift in persistence, analysis shows that this is harder to do well, with only 71% of advising program analyses showing a statistically significant result.

2. Club Involvement
   - Student participation in clubs, activities and organizations demonstrate the second highest average impact to date and is done well consistently. 100% of club-related analyses showed a statistically significant positive impact.

3. Tutoring: Writing
   - Tutoring services focused on writing skills demonstrate the third highest overall average lift in persistence, with 89% of analyses showing a statistically significant result.

*Nudging
LEARNING BRIEF

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USING ANALYTICS TO BREAK THROUGH PERFORMANCE PLATEAUS

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Three Revolutions to Watch

Revolutionary Teaching and Learning

Revolutionary Student Success Strategies

Revolutionary Use of Data/Al
Three Revolutions Intersections

Teaching and Learning

Use of Data/AI

Student Success Strategies
Three Revolutions Follow Up

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