

College Disrupted

The Present and Future of Higher Education

February 2017



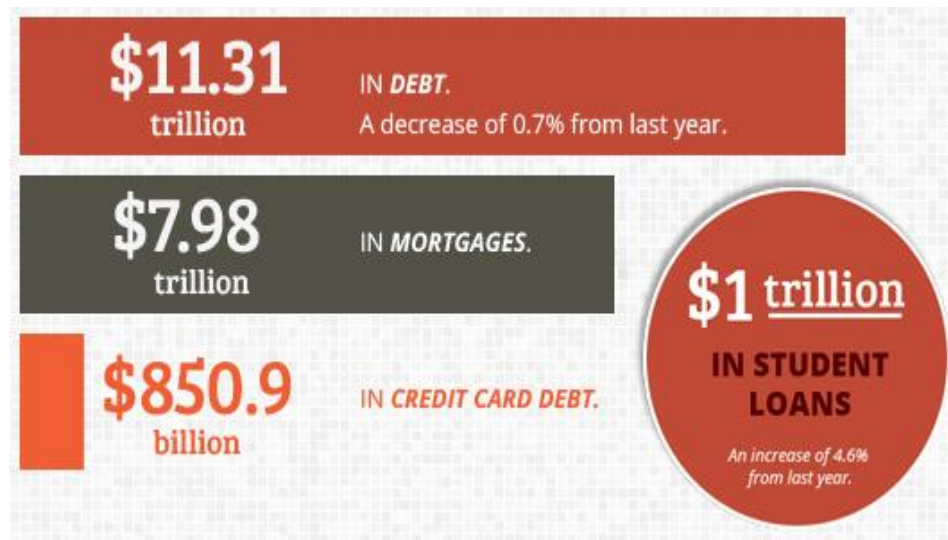
Part I

State of Higher Education

Crisis Of Affordability

- 1970s: typical student could pay tuition by working 182 hours.
- 2013: it takes 991 hours (full-time job for half the year).
- Wealth gap between young and old is at its widest point.

Typical household headed by 65+ year-old has net worth 47x greater than household headed by someone under 35.



- States disinvesting in higher education.
- Likely having a negative impact on economic growth.
- High sticker prices discourage enrollment and matching.

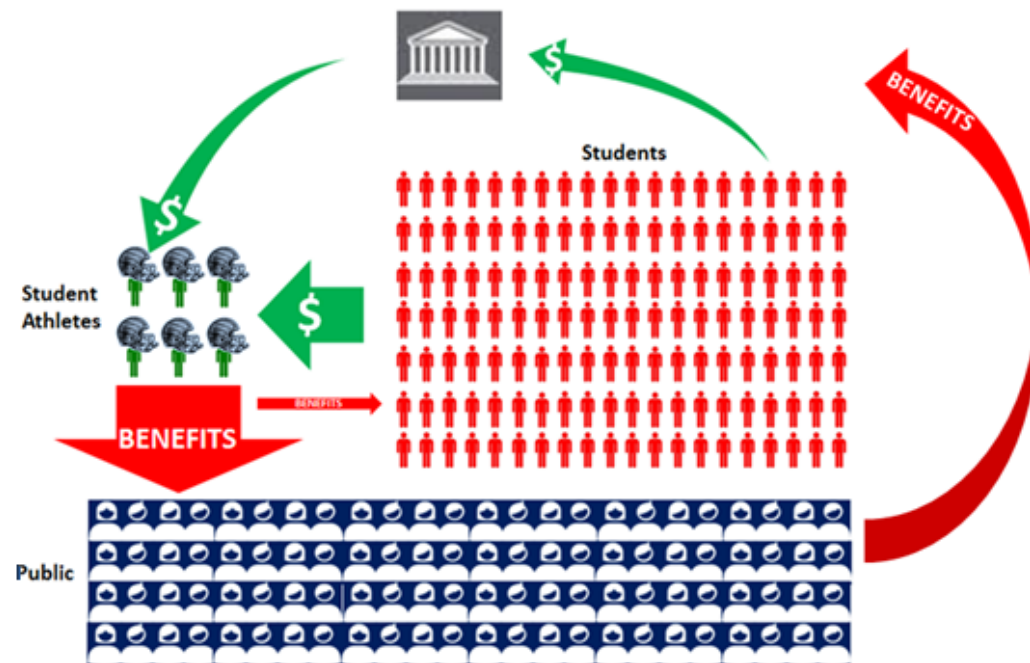
Crisis Of Data



- *“My only question is if he’s that good a hitter, why doesn’t he hit better?”*
- Billy Beane
- “Good hitter” in baseball = 4Rs in higher education
OBP in baseball = ??? in higher education
- Positive steps: New College Scorecard, Brookings Value-Added Ratings, new Gates initiative

Crisis Of Governance

- Missions tend to be multifaceted, complex and vague.
- Sometimes there's a double-bottom line.
- More often, so many bottom lines, there's really no bottom line at all.
- How do fiduciaries exercise appropriate governance?
- Symptoms:
 - Growth in non-instructional staff
 - Athletics
 - Research?



Lazy Rivers

- » Texas Tech spent \$8.4M on a waterpark with a lazy river and waterslide, paying for it with an increase in student fees.
- » Auburn has developed a \$52M waterpark including a 45-student paw-print-shaped hot tub and a 20-foot wet climbing wall, paying for it by raising its student activity fee from \$7.50 to \$200.
- » Pensacola Christian has put in a \$1M wave rider.
- » North Dakota State is building a waterpark with a 36-foot vortex of swirling water, a fireplace on an island in the middle of a pool, a rain garden to mist lounging students, and a zip line atop it all.
- » Clemson is developing a 38-acre Lakefront property to include “blobs” – floating mattresses placed so students can jump “like [on] American Ninja,” says the University’s director of recreation.
- » Missouri State has put in a waterpark complete with zip line and lazy river, but insists on calling the lazy river a “current river” because Missouri State students are “not lazy.”
- » Missouri has a lazy river, waterfall, indoor beach club, and a grotto modeled after the one at the Playboy Mansion.
- » Louisiana State is building a lazy river that will spell out the letters LSU in the school’s signature Geaux font, paid for by quadrupling of student fees.

“Bankruptcy be damned” – LSU

May 20, 2015 06:48 AM EDT /

By Hanna Sanchez

Louisiana State University Starts \$85 Million 'Lazy River' Leisure Project Despite Budget Shortfall

Louisiana State University is pushing through with its \$85 million leisure project despite the institution's budget issues. The project would include a rope-climbing course, an outdoor adventure center, a sun deck, and a manmade “lazy river.”



“We will be the benchmark for the next level”

- LSU Director of University Recreation

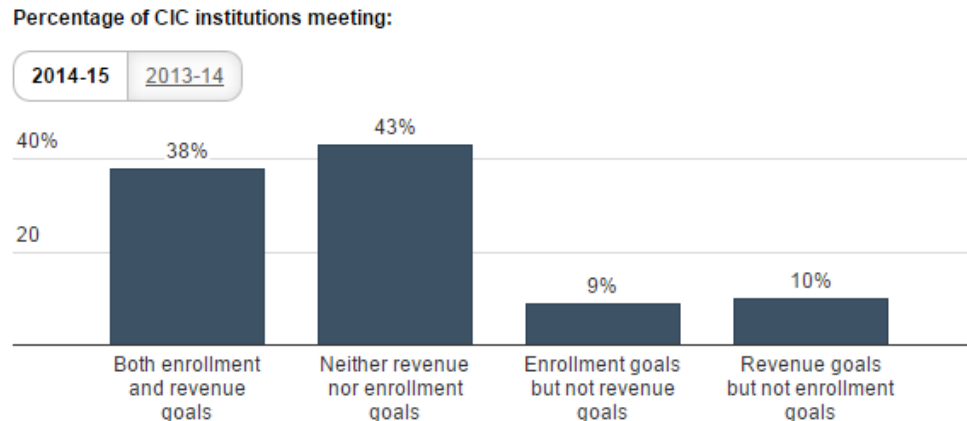
For Half The Population, The System Feels “Rigged.”

- Higher education has expanded from an elite audience to the mass market.
- Unfortunately, expansion in market size has not been accompanied by a concomitant expansion in product diversity.
- Isomorphic system has swelled under false belief that “monoculture” of bachelor’s degrees would serve all students.
- But it doesn’t: Only about 50% of U.S. students who embark on bachelor’s degree programs actually complete.
- Employers and hiring managers are equally responsible: system of degree- and pedigree-based hiring.
- Result is skills gap:
 - 8 million unemployed
 - ~30 million underemployed
 - 5 million jobs unfilled

U.S. Colleges Are Seeing Impact Now



- First for-profits; enrollment down by half over last 5 years
- Small private and midsize state universities: 70% effectively failed to meet budget for both freshman enrollment and net tuition revenue in 2014-15

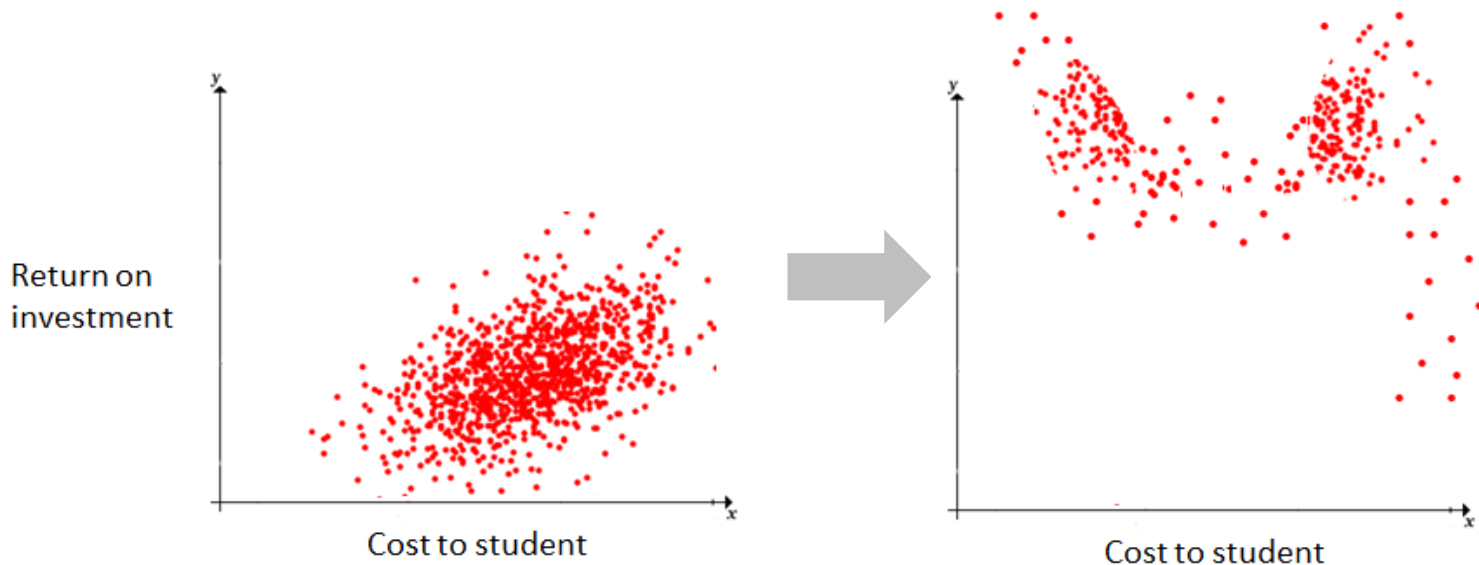


- Gallup-Purdue survey: only half of 30k college alumni strongly agreed that higher education investment was a good one.
 - Only 38% of younger alumni.
- Employers also dissatisfied: Ernst & Young, Penguin Random House, Google.
- Market for 100% online degree programs appears flat.
- "Higher education has to get past the 'take our word for it' era. Increasingly, people aren't." – Mitch Daniels, President of Purdue University

Market View



- **Elite universities will be fine... for an indeterminate period of time**
- **For the rest, starting to see “Great Hollowing Out”**
 - Retail: Sears, JC Penney, Gap, J. Crew
 - Restaurants: Olive Garden, Red Lobster, TGIF
- **Likely connected to decline of middle class**
- **Question: “Discounter or Premium Provider”**
 - With market trend, can you afford to be anything else, or to not choose?



Part II

What Matters To Students: Employability

Most Significant Change in Higher Education



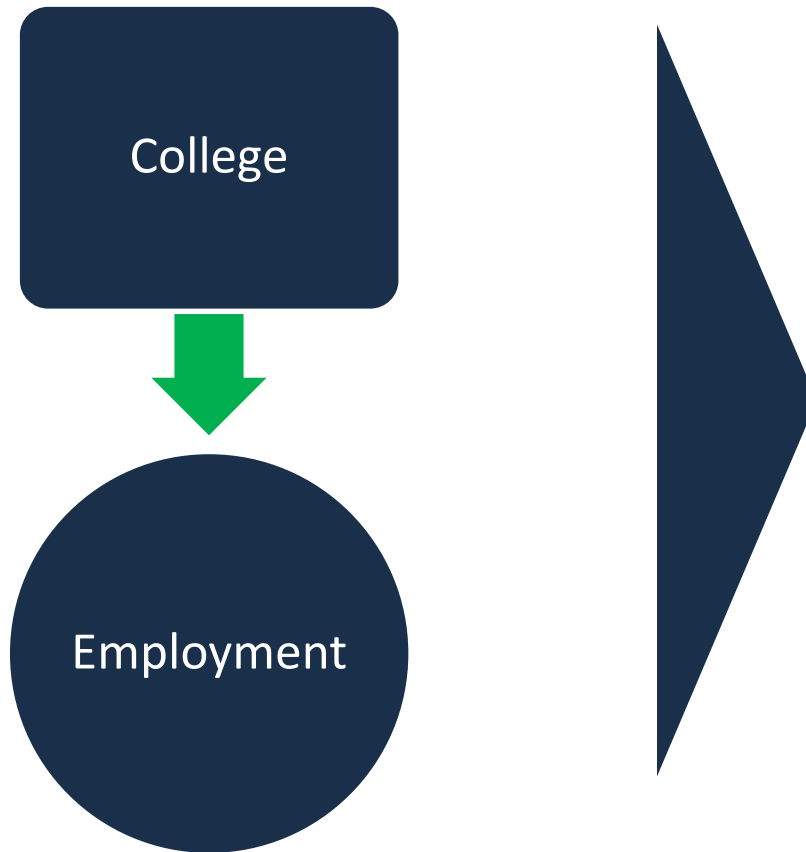
- Only ~50% of matriculating students reported that their primary or sole motivation for commencing postsecondary education was employment/income related.



2016

- 92%+ report primary or sole motivation is employment/ income related.

Yawning Gap Between College and Employment



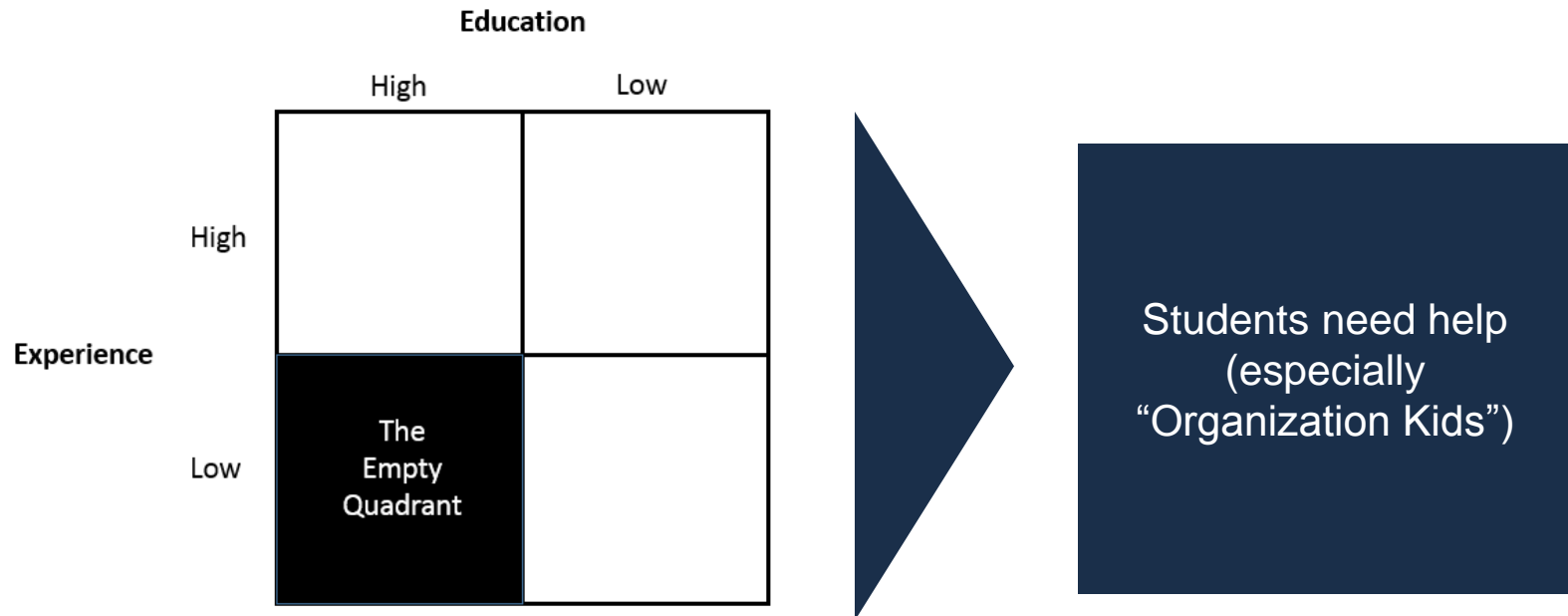
Casualties of gap:

- Dissatisfied students
 - ~ 20% of graduating seniors with job offers before graduation
- Dissatisfied employers
 - Only 11% think graduating students have competencies their businesses need

Major Cause of Skills Gap



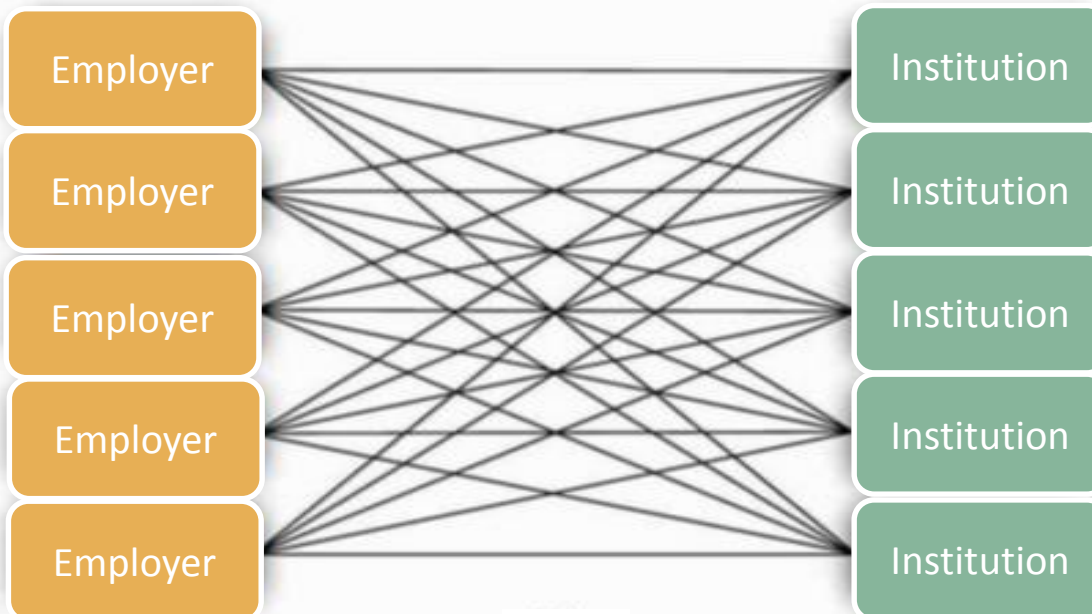
- In job descriptions, technical skill requirements now outnumber cognitive + non-cognitive skills in virtually every sector of the economy.
- Colleges and universities have not incorporated technical training into existing programs, continuing to believe that they “prepare students for their 5th job, not their 1st job.”
- Result: The Empty Quadrant



One-to-One Relationship



Generally not scalable solution

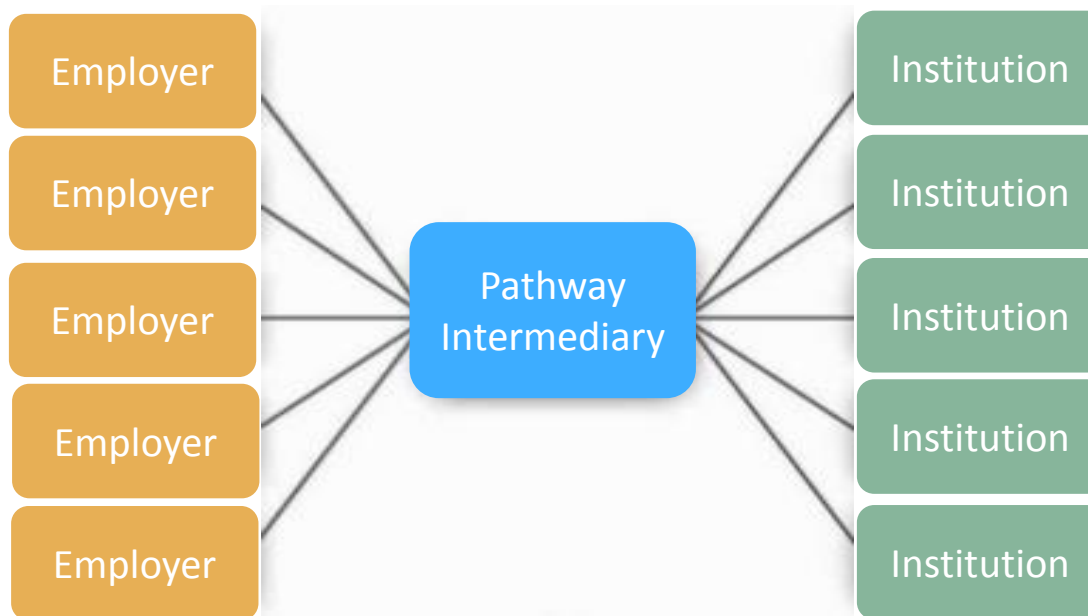


Career Services Has Not Met Challenge



“Career services must die”
- Andy Chan, VP Career Dev’t at Wake Forest

Emergence of Intermediaries



Last-mile Training (“Bootcamp”) Model

galvanize





University of
New Haven

Master of Engineering in Big Data

Powered by University of New Haven in partnership with Galvanize

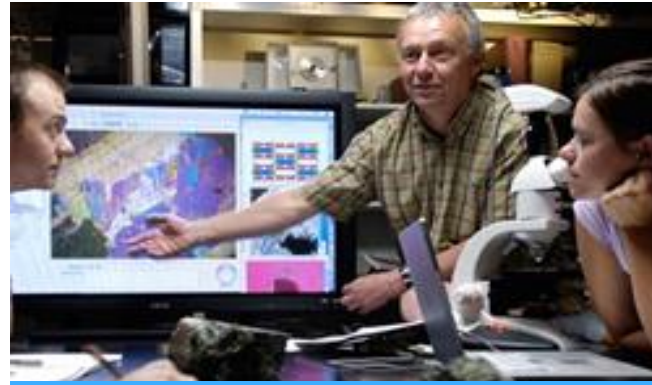
A NEW CLASS OF DATA SCIENTISTS



Last-Mile Training Model for...



Healthcare



Energy

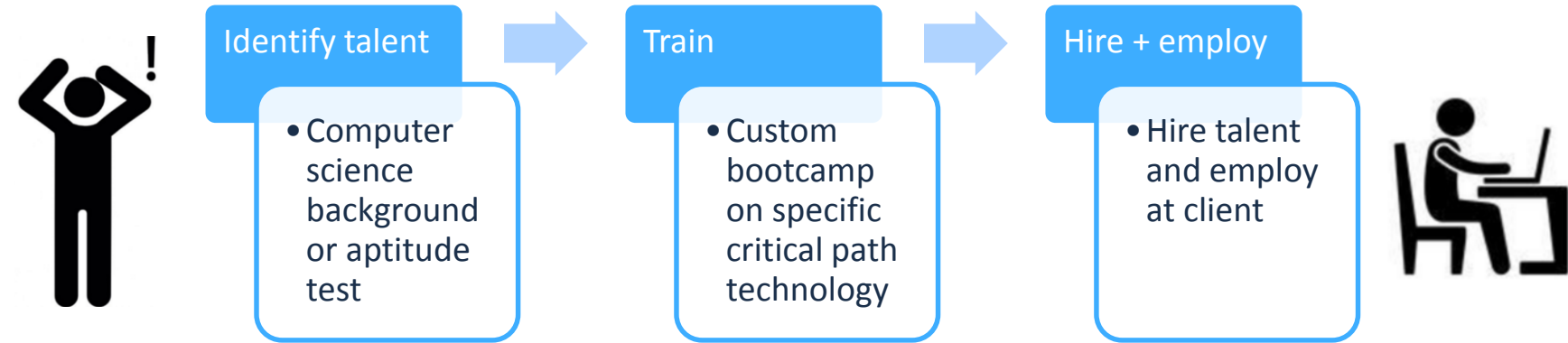


Biotech



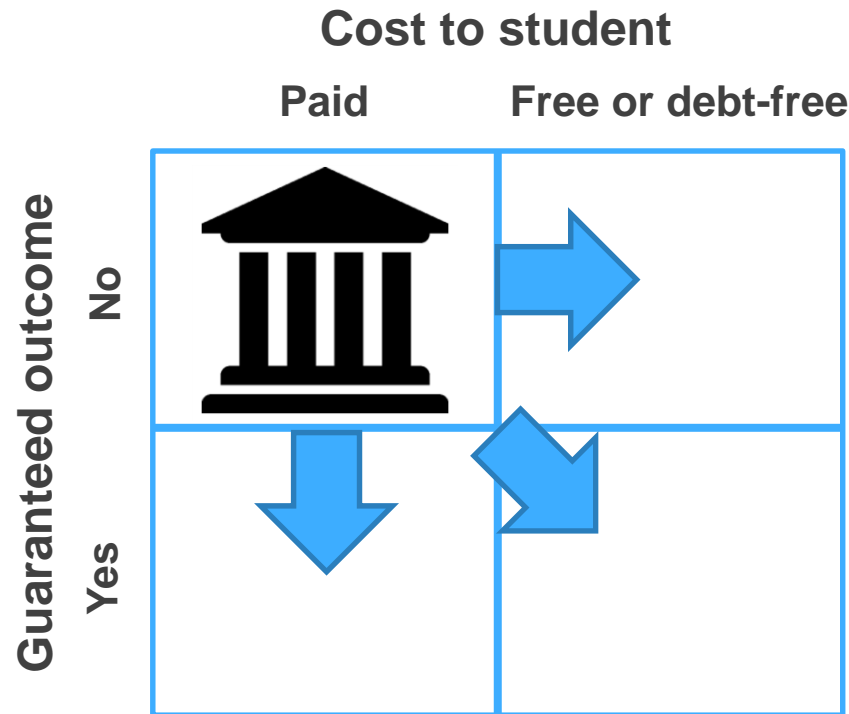
Financial services

Revature Model



- ✓ Training entirely free to candidates.
- ✓ Revature hires candidates who complete training and then assigns to client projects.
- ✓ Candidates commit to Revature for two years in return for training.
- ✓ Revenue model: spread between billed rate and employee comp.
- ✓ Clients hire employees after one year at no additional cost; most employees hired by clients.

What Staffing Models Allow



Better value proposition to student required to gain acceptance for new pathways/credentials

Two Short Steps to Disruptive Credentials



Step 1:



University partner like CUNY or ASU works with Revature to turn “4 + last-mile training/placement” into something more like “1 + last-mile training/placement.”

Step 2:



Staffing/placement provider extends training to cognitive + non-cognitive skill development – displacing role of university.

Disruptive Credential: The College “MVP”



INSIDE HIGHER ED

opinion

In Search of a College MVP

What is higher education's version of the minimum viable product -- the smallest, simplest unit that meets the public's needs? Developing it will be a key goal for college leaders over the next decade, Ryan Craig argues.

By [Ryan Craig](#) // December 2, 2016

12 COMMENTS

“This largely technical training is increasingly referred to as last mile not only because it leads directly to employment, but reflecting the last mile in telecom, where the final telephonic or cable connection from trunk to home is the most difficult and costly to install, and also the most valuable.”



Many Different Pathways to Good Jobs



- Bachelor's degree
- College MVP + last-mile training

- For those with College MVP, subsequent pathways will emerge to equip new employees with the higher-order thinking capabilities required for more complex and managerial positions.
- Higher education will go from a one- or two-time purchase for most students to a product employees consume as needed throughout their professional lives.

What SaaS Has Done to Enterprise Software...



Adobe® Creative Cloud

SaaS MODEL

One-time purchase



Customer for life

Alternative Framework For Community Colleges



Academic Paradigm

- Faculty-centric
- Curriculum-centric
- Little focus on assessment of competencies
- Outcomes not measurable
- Little to no focus on placement (“prepare for fifth job, not first job”)



Placement Paradigm

- Assessment of competencies
- Employer-connected
- Placement-centric
- Education/training viewed as instrumental to placement, not as end in itself
- Clear, measurable outcomes

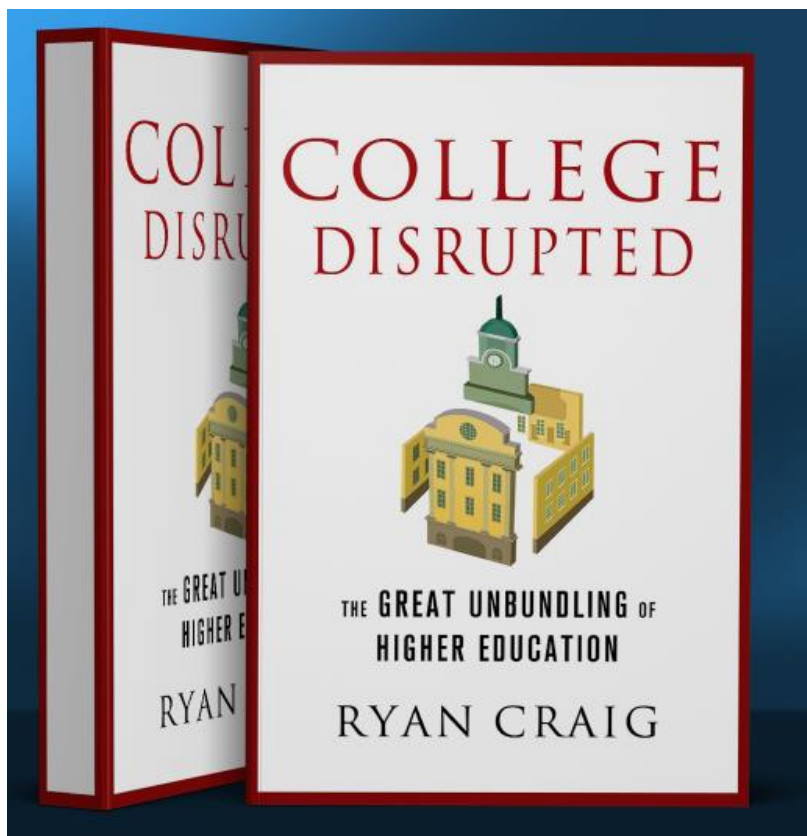


Students at community colleges and non-selective universities would be better served if institutions were reconstituted along placement/workforce paradigm.

Part III

The Great Unbundling

The Great Unbundling



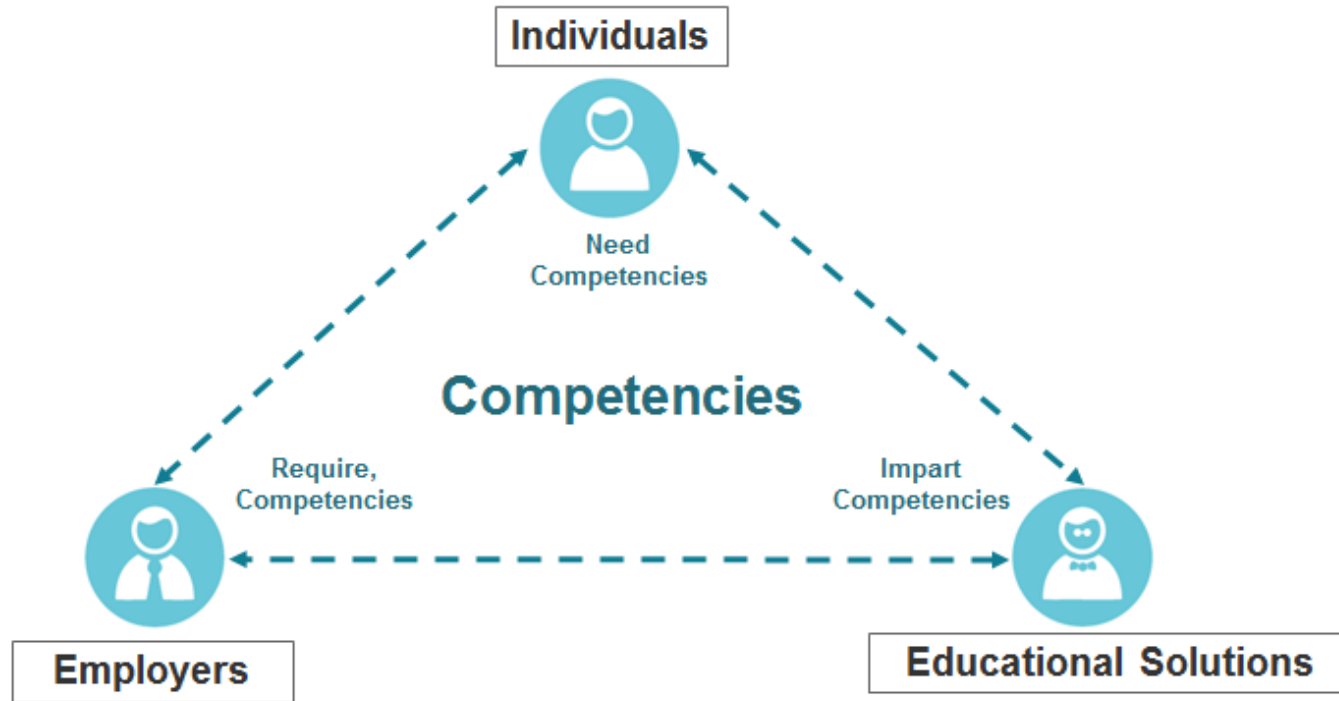
Degrees: Default Currency of Labor Market



Unbundling 101

- Music
 - Album/CD bundle to iTunes
- Television
 - Cable bundle to Netflix and HBO Now
 - Now Verizon and other cable providers starting to offer choice
- Unbundling shifts producer surplus to the consumer
- Bachelor's program is also a bundle
- Does every element provide adequate benefit to every student?
 - Gen. ed. courses
 - Courses in major
 - Distribution requirements
 - Library
 - Extracurriculars
 - Athletics, lazy rivers, research?
- What might prompt “The Great Unbundling”?

Finer Currency Increases Market Efficiency



A Better Term for “Competencies”

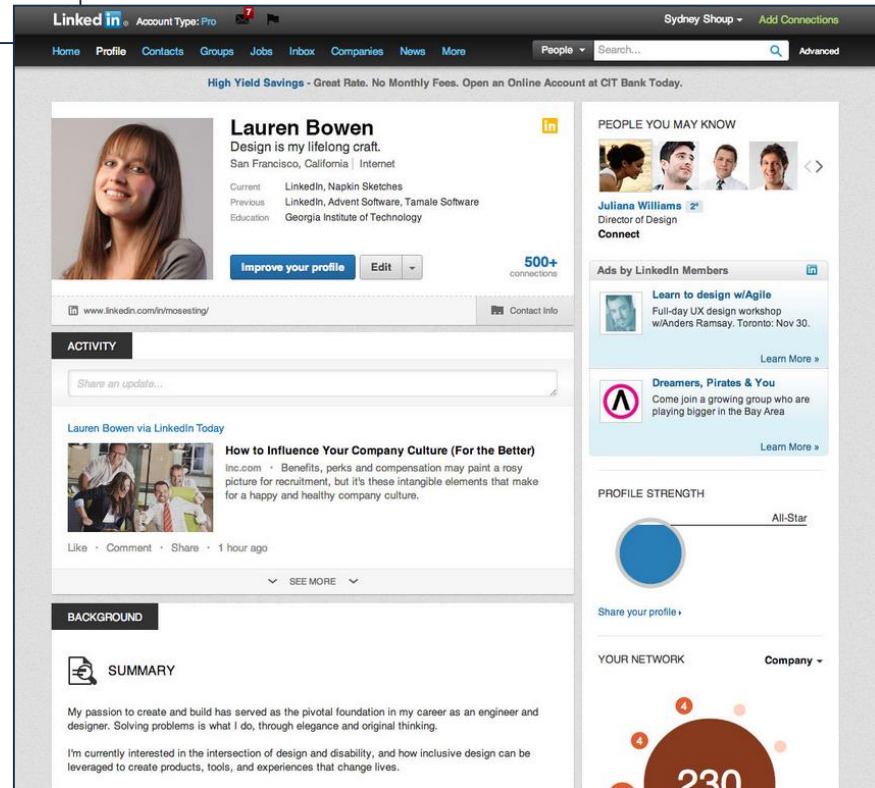
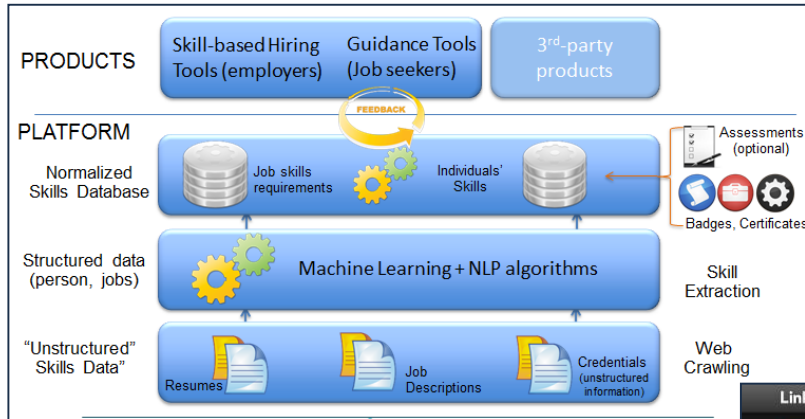
WIRED

FOR ONLINE TO REALLY MATTER IN EDUCATION, WE NEED TO REDEFINE COMPETENCY

IN THE EARLY '90s, I could tell what someone thought about the Internet's prospects for transforming higher education by listening to their vocabulary. If they used terms like “distance learning” or “distance education,” they'd probably been working in continuing education for some time and saw the Internet as simply the latest in a line of technologies — beginning with correspondence courses, and including the latest two-way video systems – to expand the reach of colleges and universities. The Internet wasn't going to disrupt the field. So why should it define it?

In contrast, those of us who rejected “distance learning” in favor of “online learning” understood that

Competency Marketplaces



LinkedIn Declared Strategy

- We're going to have a profile for every member of the global workforce.
- We're going to have a profile for every company in the world.
- We're going to have a digital representation of every job and every skill required to obtain those jobs offered through those companies
- We're going to have a digital presence for every higher educational organization and university that enables people to obtain those skills.
- We want to make it easy for every individual, every company and every university to share their professional development knowledge.
- In doing so, we will lift and transform the global economy.

- Jeff Weiner, CEO LinkedIn

Higher Education Waking Up

THE CHRONICLE OF HIGHER EDUCATION

April 18, 2015

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Technology

April 17, 2015

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How LinkedIn's Latest Move May Matter to Colleges



LinkedIn's purchase of the online-course company Lynda.com has the potential to do to higher education what Airbnb has done to the hotel industry, says one observer.

[Enlarge Image](#)

By Goldie Blumenstyk

Whether or not college leaders realize it, last week's announcement by LinkedIn that it would spend \$1.5 billion to buy Lynda.com, a provider of consumer-focused online courses, carries notable consequences for higher education.

THE WALL STREET JOURNAL.

The Case for 'Unbundling' Higher Education

By ROBERT LITAN

























































Certifying skills employers want may be one way universities can make education more effective and affordable. Pictured, new college graduates take part in the annual Toss Your Caps class photo May 8 on the steps of the Philadelphia Museum of Art in Philadelphia. — Associated Press

The Great Recession and its aftermath have exposed a major mismatch between the skills of many college graduates and the skills employers are seeking. If anything, as technological change marches on, this problem may get worse.

Power of the Competency Marketplace

- “People analytics”
- Enterprises track performance and career progression of employees.
- Gain clarity as to which competency profiles and individual competencies are most predictive of success for each position.
- Feedback to job description.
- Better matches for new hires: no more false positives or false negatives in final set of candidates.
- Material reduction in bad hires (est. cost ~\$15k per).
- Material improvement in human capital allocation.
- Material improvement in productivity/economic growth.

Emerging Competency Marketplaces

Job Boards     					
Freelance Marketplaces  					
Advanced Job Boards        					
Career Discovery          					
Natural Language Processing, Machine Learning or Artificial Intelligence          					
Competency Identification       					
Games and Competitions    					
Case Study or Short Courses     					
Last-mile Training   					
Bootstrapped	Seed	Series A	Series B	Series C-F	Acquired

We May Find...

More value in owning competency profile
than in delivering postsecondary education



Major question: If competency marketplace
attributes competency to you, who owns that
competency?

Will Degrees Go Way Of Debutantes?



- Unclear ROI
- Too exclusive

College MVP + last-mile training could become preferred path for all but elite/out-of-touch few.

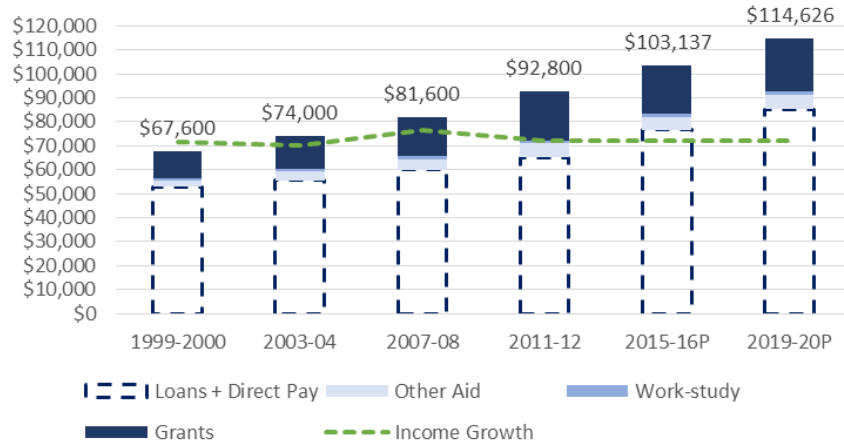
Part IV

**Accelerating Change
via Skin in the Game**

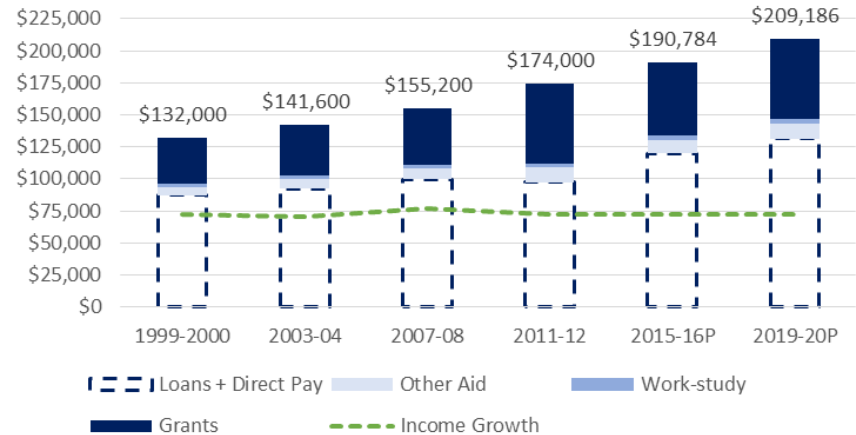
Sources of Student Funds (Full-Time Undergrads)



Public 4-year



Private nonprofit 4-year



- Tuition & Fees primarily funded through Direct Pay + Loans.
- States already fund \$135B+.
- Situation is unsustainable.

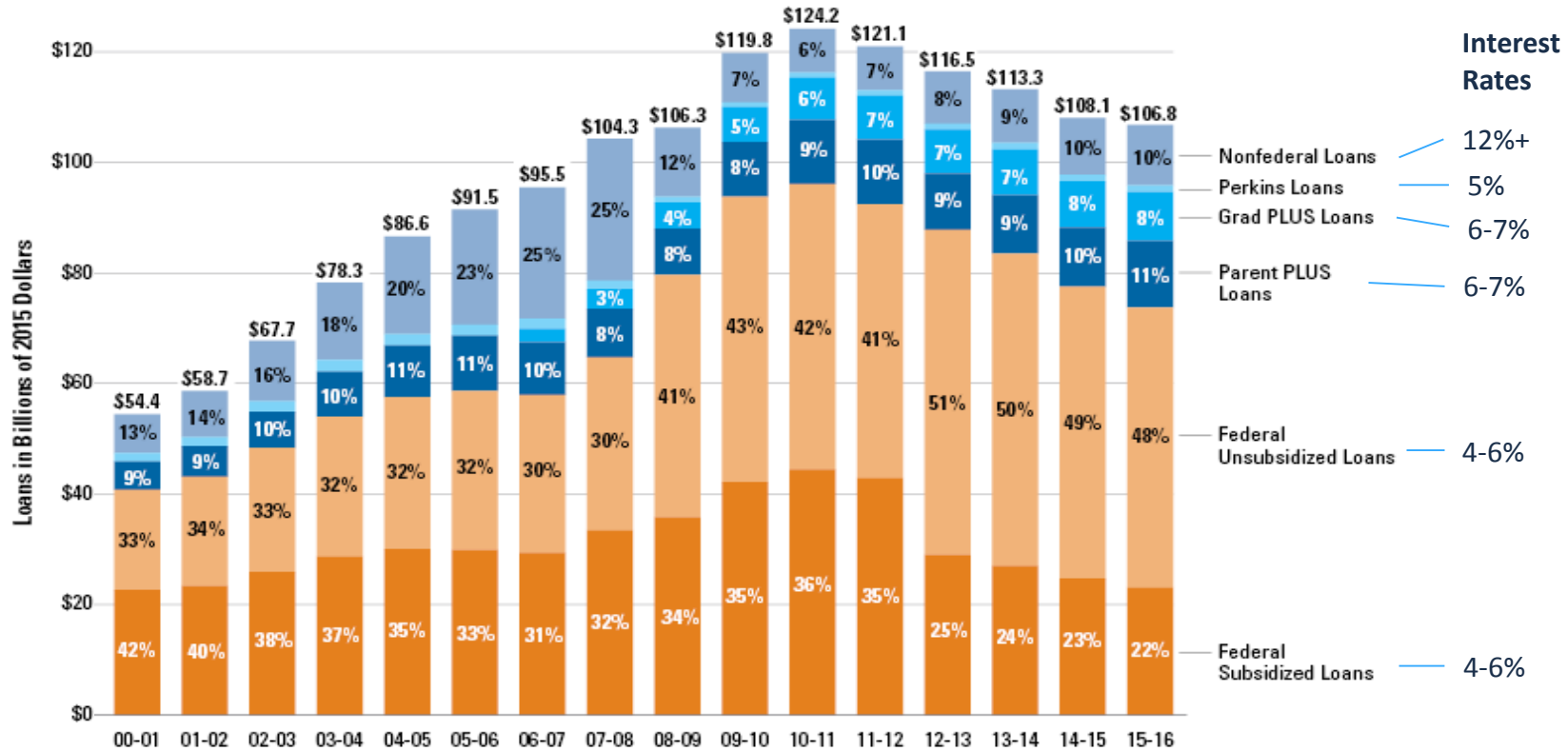
Notes:

- "Other Aid" includes federal Parent PLUS loans, institutional graduate teaching and research assistantships, state vocational rehabilitation and job training grants, federal veterans benefits, and military tuition aid

- Tuition & Fees are inflation adjusted to 2012 \$

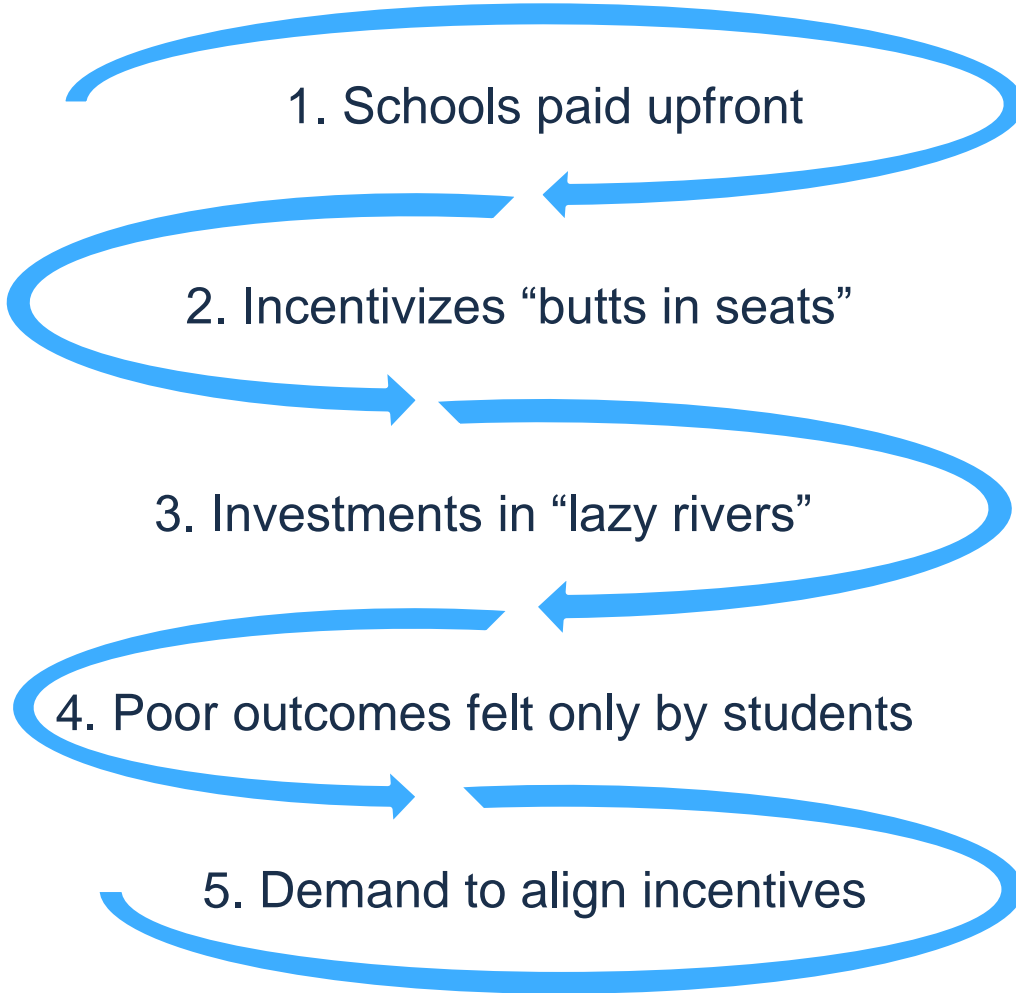
Sources: U.S. Department of Education, National Center for Education Statistics, National Postsecondary Student Aid Studies

Debt Options



- Federal government reduced subsidized loans from '10-11 peak.
- Growth in most expensive credit (PLUS and private loans)

Current Mismatch of Interests



**Lack of data / transparency
drives misalignment**



Tiger Paw Jacuzzi @ Auburn



Surf Wave @ Pensacola Christian



Lazy River @ Texas Tech

“Purple” Solution: Both Parties Have Same Idea



**Income-Driven
Repayment**



**Income Share
Agreement**

Income Share Agreements (ISAs): The Next Generation of Student Financing



Purdue University Offers Income Share Agreements as Alternative to Student Loans

FINANCE

POSTED BY DONNA FUSCALDO ON JUNE 1, 2016 AT 9:59 AM

BROOKINGS

Lower the risk of investing in college with Income Share Agreements

Higher Education



Some investors, universities see a return in fronting students' tuition

The idea of taking a piece of graduates' future earnings starts to pick up steam



The Potential Market for Income Share Agreements Among Low-Income Undergraduates

AN ISSUE BRIEF FOR POLICYMAKERS AND ADVOCATES



Now You Can Sell Shares in Yourself to Pay for College

Kim Clark @Money_College | Nov. 16, 2016



Taking out another high-interest private student loan seemed like the only option for Amy Wroblewski this fall. The 21-year-old native of Lafayette, Ind., was working two part-time jobs and had maxed out her federal student loans. But she still needed about \$13,000 more to fund her junior year at Purdue University.



Back A Boiler – Early Success

PURDUE
UNIVERSITY

+ vemo
EDUCATION



May 2016 Launch significant operational lift:

- Train financial aid officers
- Call center support for students
- Price and originate ISAs across dozens of majors
- New form of ISA contract compliant with law

First Cohort

- ~175 ISA contracts written
- \$2.3M in funding
- Estimate 10% fewer private loans
- Roughly same Pell demographic as Purdue student
- Decrease dependence on private loans by ~\$13,000 per student

Media Attention

Getting a Student Loan With Collateral From a Future Job

OPINION | REVIEW & OUTLOOK

The Other Debt-Free College Idea

Purdue University tries income sharing to finance higher education.

Opinion / #OnCampus

AUG 30, 2016 @ 11:20 PM 5,920 VIEWS

Purdue's Income Sharing Agreement Solution To The Student Debt Crisis



Jon Hartley, CONTRIBUTOR

I write about macroeconomics, markets and economic policy. [FULL BIO](#)

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WSJ

The
New York
Times

The Washington Post



CNBC

Forbes

Chicago Tribune

Next Steps

- Multiple universities want to launch ISA programs
- Vemo and Purdue teaming up to expand program
- Building ISA-specific service center in Tampa due to unique nature of product

10/90 Rule?



If Federal Government required that Title IV institutions put up \$0.10 in their own (or external) capital for every \$0.90 in Direct Subsidized + Unsubsidized Federal Loans

Colleges and universities would need to come up with over \$8B in annual financing.

Conclusion: We Are In Agreement



Despite increasing partisanship, there's may be more bipartisan agreement in higher education than any other area.

1. Completion is the most powerful lever
2. Bachelor's degree "addiction" is hurting students
3. Colleges need to do much more to help graduates get great first jobs
4. Employers bear much of the blame
5. Accountability shouldn't start and end with for-profit colleges
6. Outcomes should be about "distance traveled"
7. Technology is key to improving learning ("dynamic" classrooms)
8. Assessments are needed to save the liberal arts
9. Follow the money
10. Colleges are worth saving (especially the one you attended!)