College Disrupted

The Present and Future of Higher Education

November 2016

Part I

State of Higher Education

U.S. Election Result

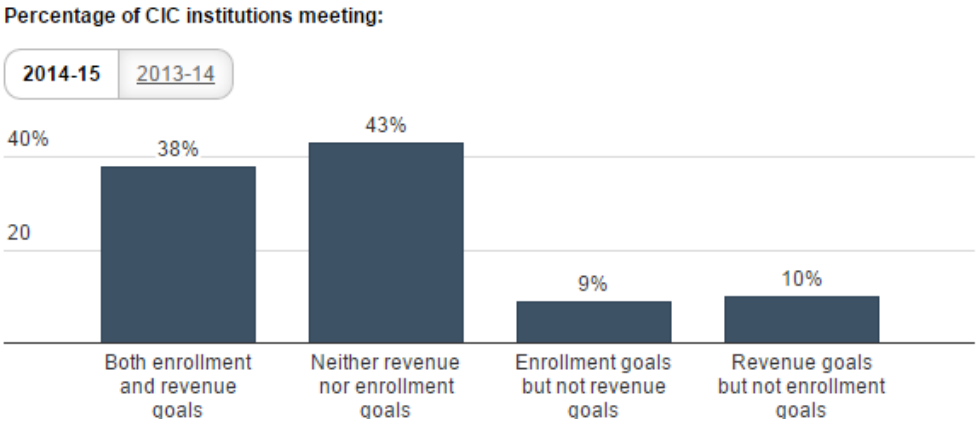
- ~ 70% of Clinton supporters thought “free college” was key issue.
- Only 30% of Trump supporters felt the same way

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 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

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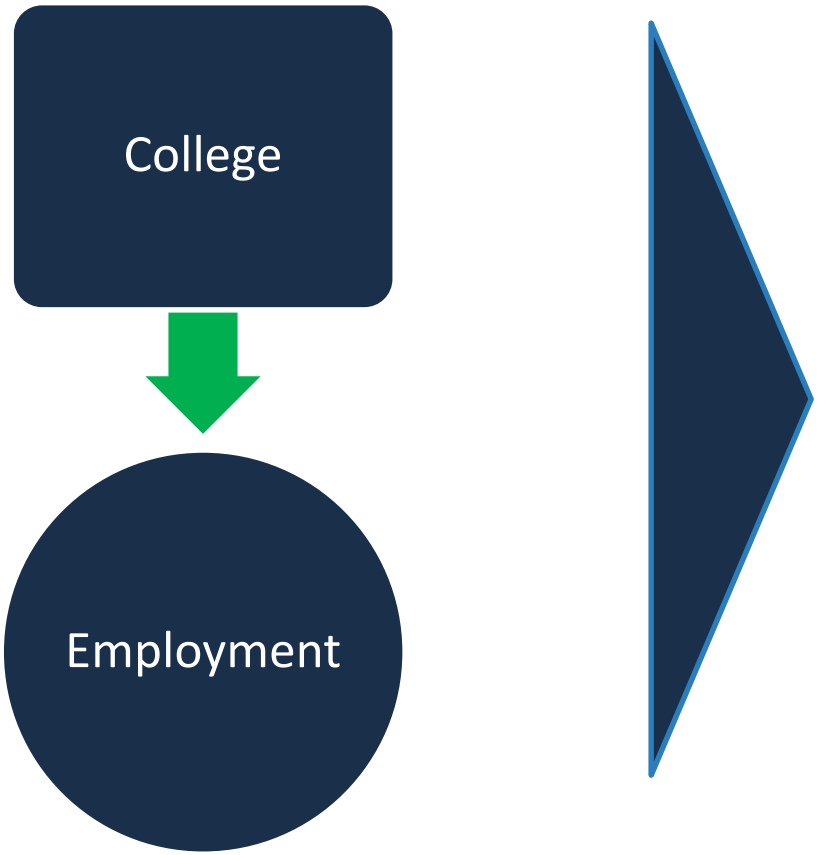
Part II

What Matters To Students: Employability

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

Becoming a “Full Stack” University

UBER

alt school

Q. What is at top of higher education “stack”?

A. Jobs

Full-stack companies need to:

- Develop and deliver specific high-quality educational experiences that produce graduates with capabilities that specific employers desperately want
- Work with students to solve for the financing of the educational experiences
- Connect students with employers during and following the educational experience and make sure they get the job

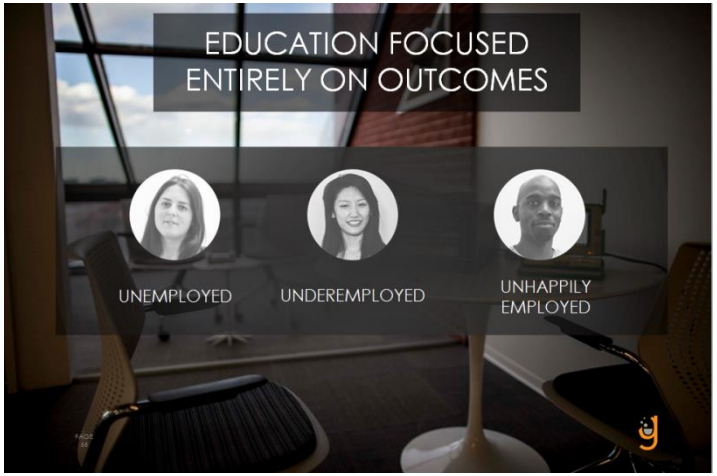
They may not look like traditional universities

“Full-Stack”: “Just-In-Time” Education

“Top-Up” Programs

Alternative Models

galvanize



University of New Haven

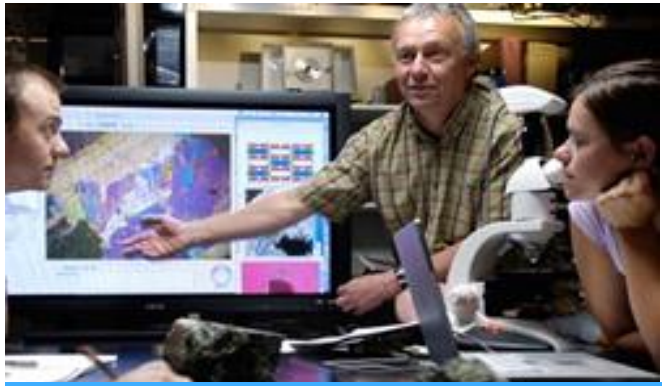
Master of Engineering in Big Data

Powered by University of New Haven in partnership with Galvanize

A NEW CLASS OF DATA SCIENTISTS

Just-In-Time Model for…

Healthcare

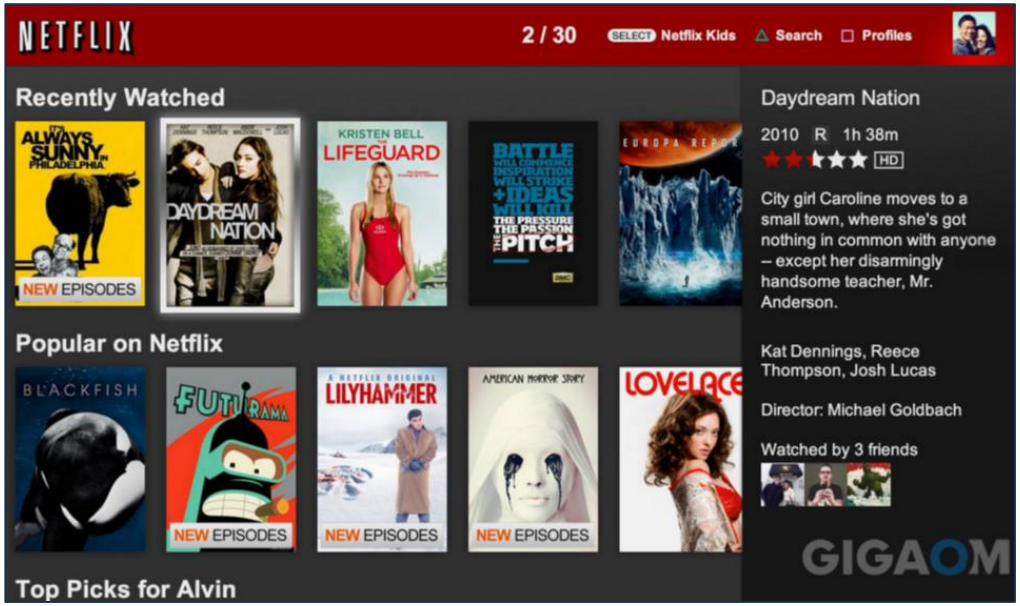


Energy

Biotech

Financial services

Importance of the Interface

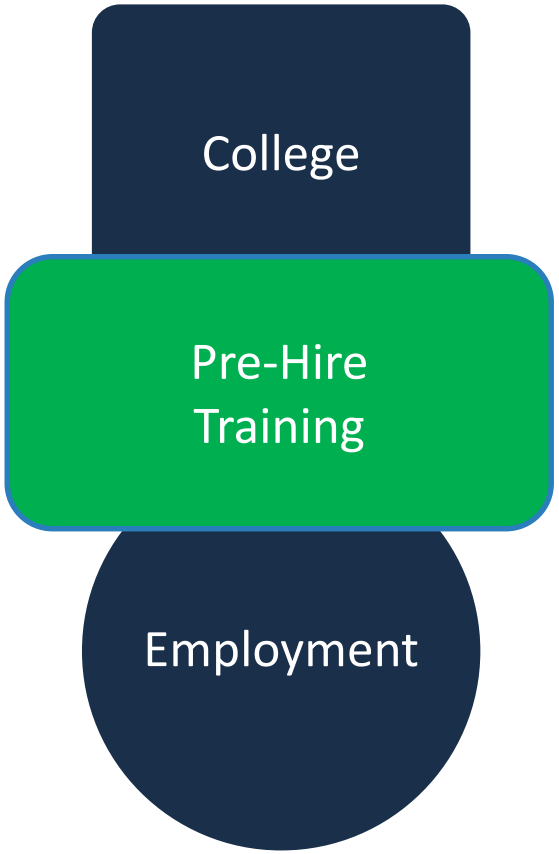


In "Age of Netflix" students seeking:

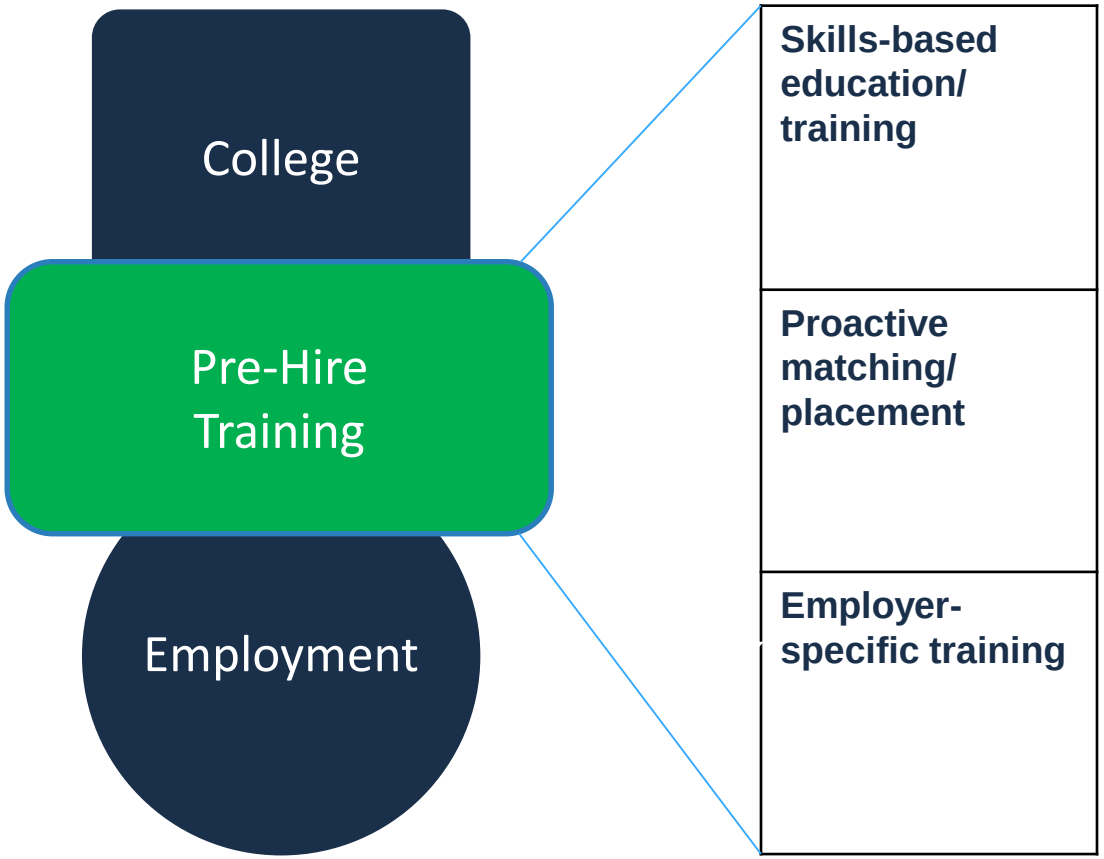
- Sleek, modern programs
- Discrete, short, accessible programs
- Leading to well-paid jobs
- No complex financing (Title IV)

Today's students are less resilient/ tolerant of poor interfaces

How Will Colleges Fill The Gap?



Combining Training + Placement



Intermediary Business Models

Revenue model

Product	B2C	B2B	B2U
Training svs.	Bootcamps Online skills courses	Screening/ interview training	Skills training curricula
Training + matching/ placement svs.	Bootcamps w/ placement Online training with employer engagement	Staffing 2.0 Employment broker	Outsourced career services
Matching/ placement products & svs.	Career assessment (offline and online)	Competency marketplaces ePortfolios	Credential mgmt. Curriculum mgmt.

Proliferation of Companies in Each Category

Revenue model

Product	B2C	B2B	B2U
Training svs.	FULLBRIDGE UDACITY	LearnUp	OPLERNO MENTAT
Training + matching/ placement svs.	galvanize GENERAL ASSEMBLY PROSKY	REVATURE WorkAmerica	experience by symplicity handshake
Matching/ placement products & svs.	kuder QUINTCAREERS.COM	LinkedIn Portfolium	parchment credentials unleashed Credly

No-Risk Pathways to High-Value Careers

- Hypothesis: elite universities select for deep failure aversion; grads therefore choose known problem domains over ones w/uncertainty.
- Elite university grads will therefore tend to choose succeeding at low-value problems over higher-value problems with more risk to fail.
- Hypothesis 2: the problems needing solving (econ or social) are increasingly poorly-structured, low-certainty, high-risk.
- Returns to traditional (known-problem, known-execution strategy e.g., banking, law) high-return professions are falling, risk returns increasing.
- At what point will elite parents say, "What do you mean you want to be a DOCTOR? Your sister is a 3x serial entrepreneur w/ 2 exits!"

HARVARD LAW SCHOOL

McKinsey

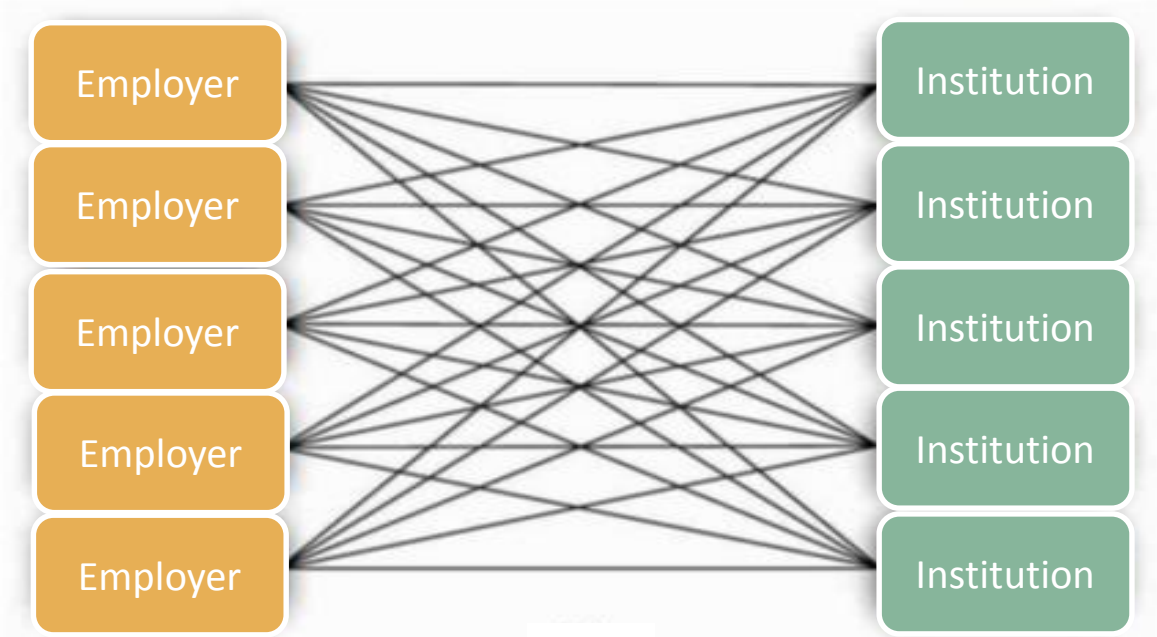
Goldman Sachs

New pathways to careers in:

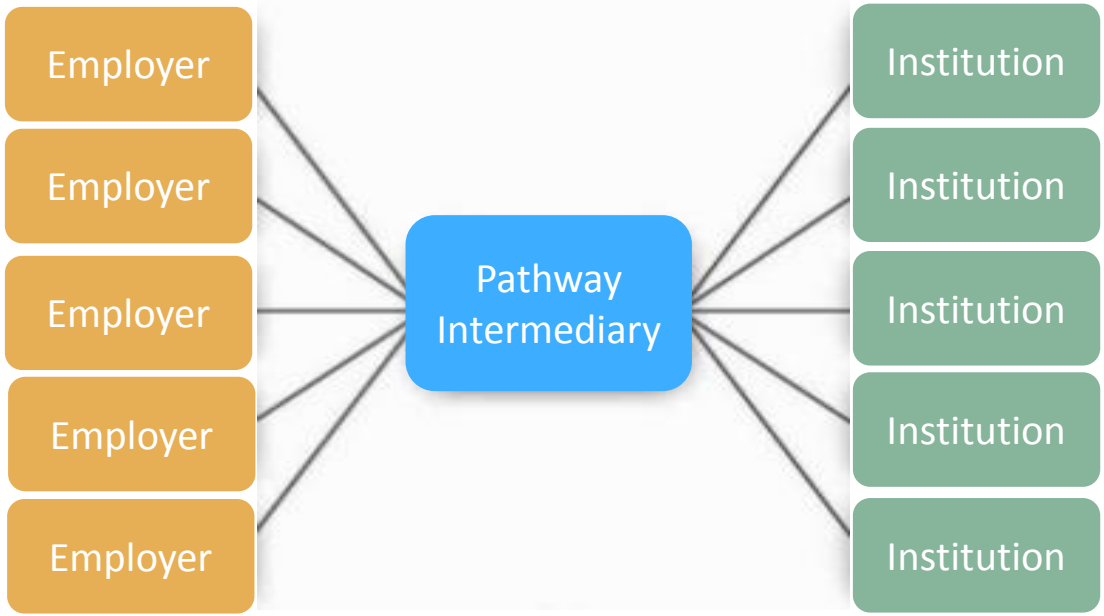
- Technology
- Healthcare
- Entrepreneurship

One-to-One Relationship

Generally not scalable solution



Emergence of Intermediaries



Revature Model

Identify talent

- Computer science background or aptitude test

Train

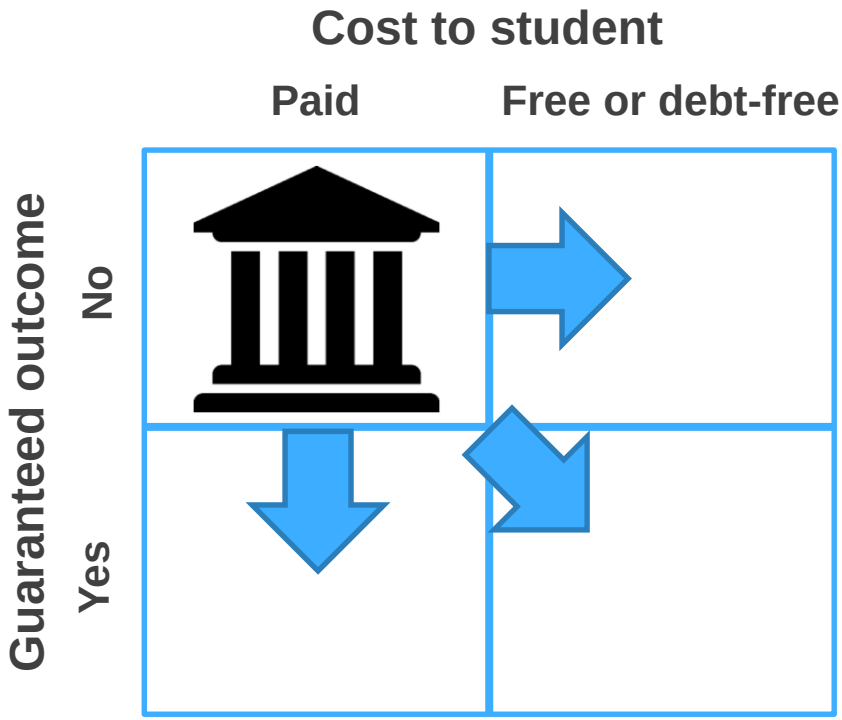
- Custom bootcamp on specific critical path technology

Hire + employ

- Hire talent and employ at client

- ✓ 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



Partnerships: Higher/Hire Education

Staffing companies provide last-mile training on technical skills + placement.

Manpower®

ALLEGIS GROUP
People. Service. Performance.

Adecco

KELLY® SERVICES

rh Robert Half®

Two Short Steps to Disruptive Credentials

Step 1:

REVATURE

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:

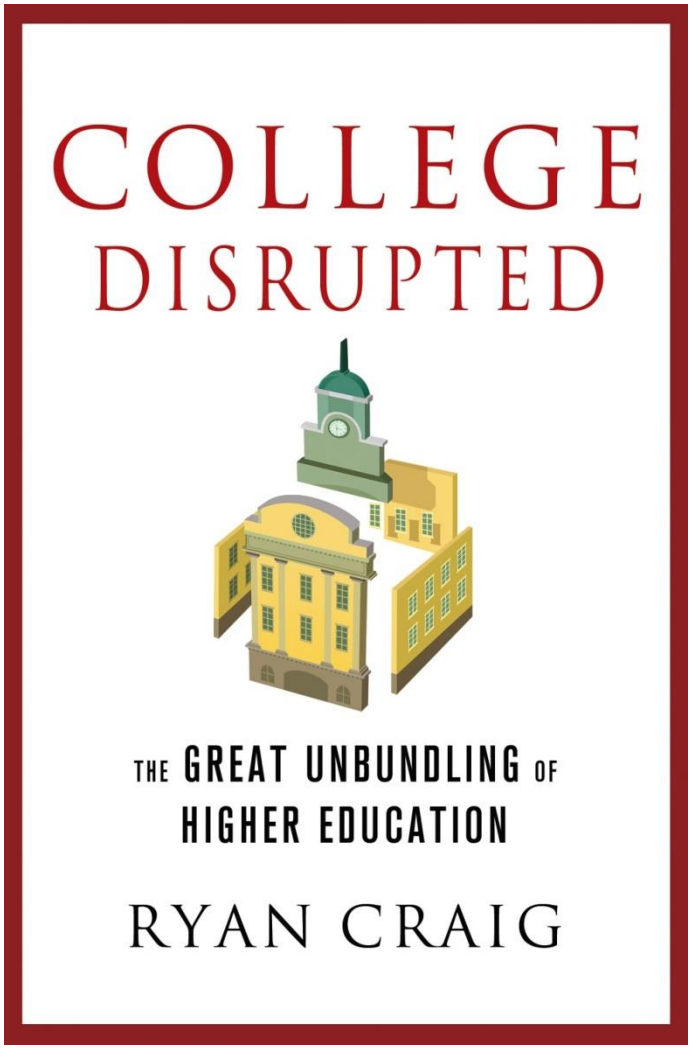
MISSION U

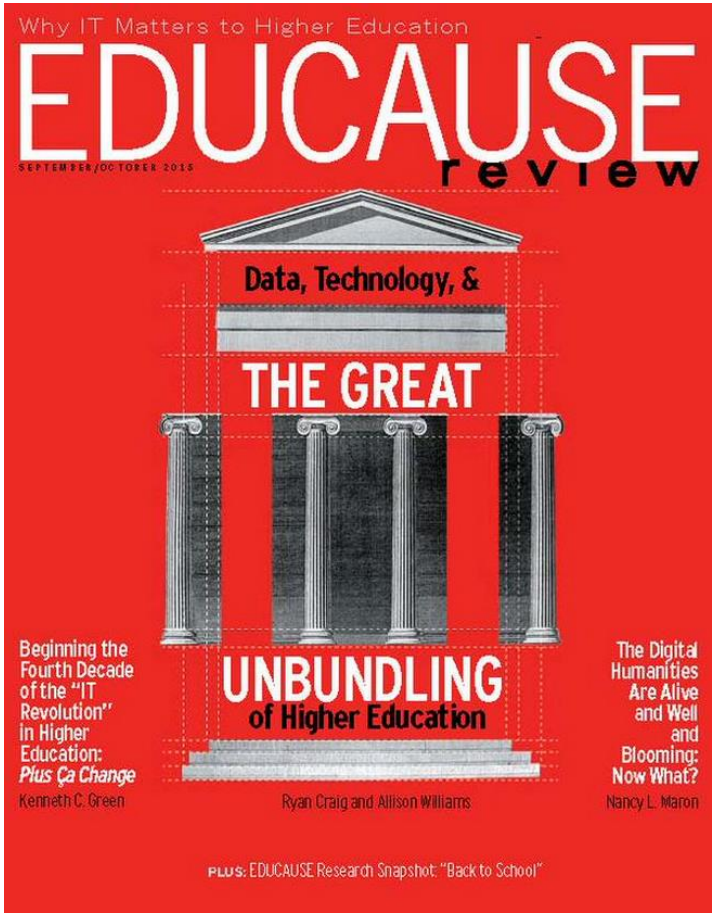
Staffing/placement provider extends training to cognitive + non-cognitive skill development – displacing role of university.

Part III

The Great Unbundling

The Great Unbundling



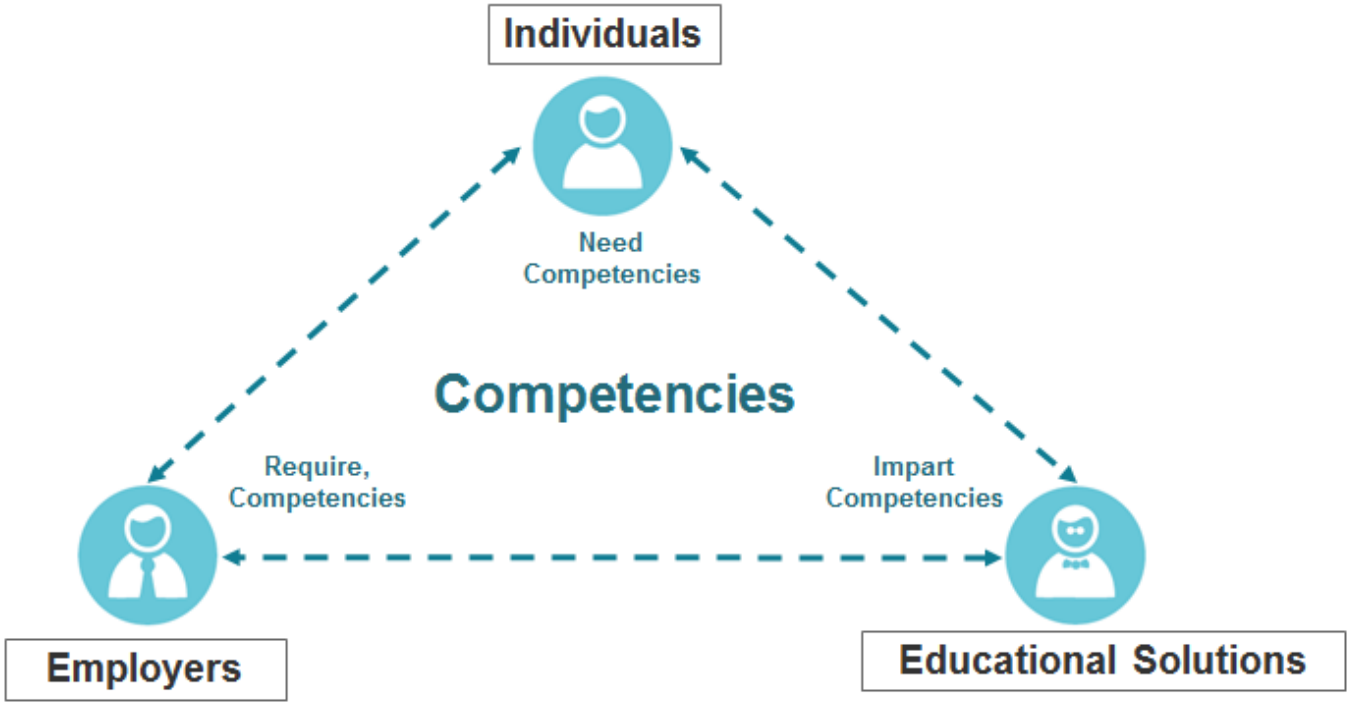


Degrees: Default Currency of Labor Market

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



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A Better Term for “Competencies”

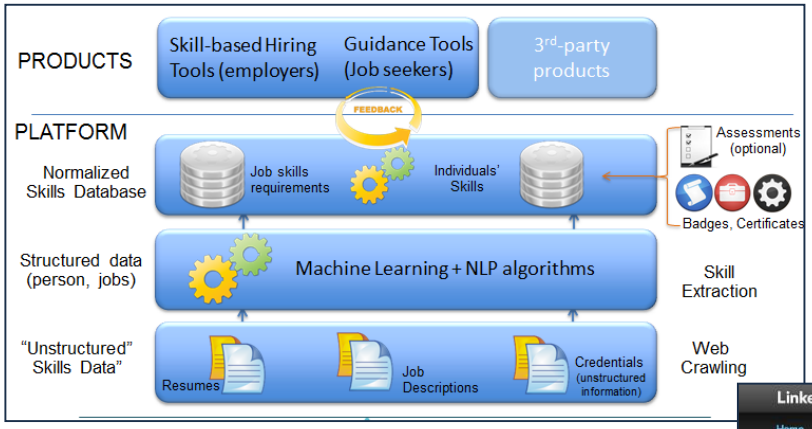
WIRED

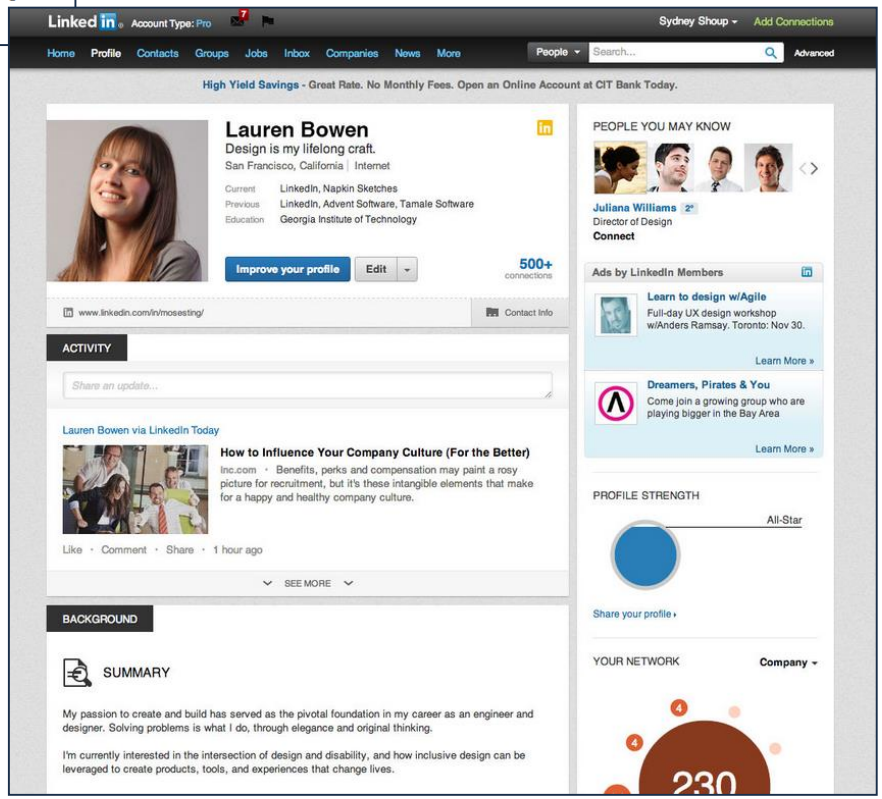
FOR ONLINE TO REALLY MATTER IN EDUCATION, WE NEED TO REDEFINE COMPETENCY

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 Progress

- Current capabilities:
  - 40 million recent graduates on its platform.
  - University Finder: students input dream career; LinkedIn names university.
  - Field of Study Explorer: analyzes students' profiles and suggests programs.
  - University Rankings based on alumni finding jobs in "desirable" companies.
  - Ability for students to add qualifications from participating universities to their LinkedIn profile in one click, or without even visiting LinkedIn.
- Acquired Bright.com for $120M in 2014
- Acquired Lynda.com for $1.5B in 2015

"Skills is one of the final pieces of the puzzle. It's not enough to just standardize the data around the skills required to obtain a role. It's also important that we can actually help people obtain those skills themselves."

- Jeff Weiner

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 obtained 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

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Higher Education Waking Up

THE CHRONICLE OF HIGHER ED

April 18, 2015

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Technology

Comments (21)

April 17, 2015

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.

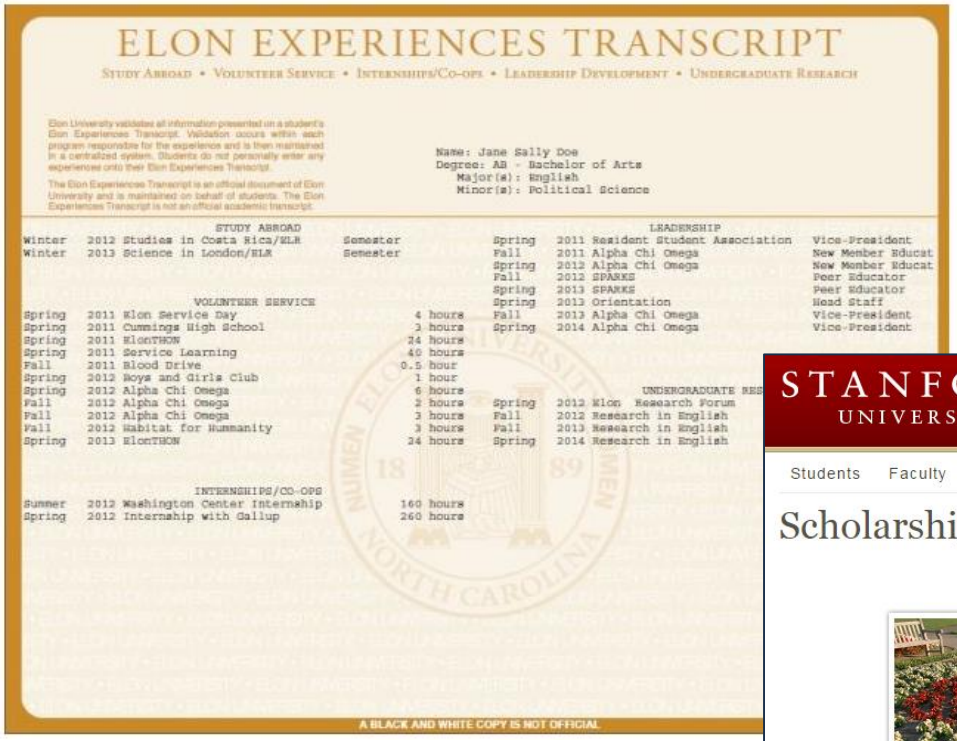
The Case for 'Unbundling' Higher Education

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.

Double-Click Degrees



ELON EXPERIENCES TRANSCRIPT

STUDY ABROAD • VOLUNTEER SERVICE • INTERNSHIPS/CO-OPS • LEADERSHIP DEVELOPMENT • UNDERGRADUATE RESEARCH

Elon University validates all information presented on a student's Elon Experiences Transcript. Validation occurs within each program responsible for the experience and is then maintained in a centralized system. Students do not personally enter any experiences onto their Elon Experiences Transcript.

The Elon Experiences Transcript is an official document of Elon University and is maintained on behalf of students. The Elon Experiences Transcript is not an official academic transcript.

Name: Jane Sally Doe
Degree: AB - Bachelor of Arts
Major(s): English
Minor(s): Political Science

STUDY ABROAD

Winter	2012	Studies in Costa Rica/ELR	Semester
Winter	2013	Science in London/ELR	Semester

VOLUNTEER SERVICE

Spring	2011	Elon Service Day	4 hours
Spring	2011	Cummings High School	3 hours
Spring	2011	ElonTHON	24 hours
Spring	2011	Service Learning	40 hours
Fall	2011	Blood Drive	0.5 hour
Spring	2012	Boys and Girls Club	1 hour
Spring	2012	Alpha Chi Omega	6 hours
Fall	2012	Alpha Chi Omega	2 hours
Fall	2012	Alpha Chi Omega	3 hours
Fall	2012	Habitat for Humanity	3 hours
Spring	2013	ElonTHON	24 hours

INTERNSHIPS/CO-OPS

Summer	2012	Washington Center Internship	160 hours
Spring	2012	Internship with Gallup	260 hours

LEADERSHIP

Spring	2011	Resident Student Association	Vice-President
Fall	2011	Alpha Chi Omega	New Member Educat
Spring	2012	Alpha Chi Omega	New Member Educat
Fall	2012	SPARKS	Peer Educator
Spring	2013	SPARKS	Peer Educator
Spring	2013	Orientation	Head Staff
Fall	2013	Alpha Chi Omega	Vice-President
Spring	2014	Alpha Chi Omega	Vice-President

UNDERGRADUATE RES

Spring	2012	Elon Research Forum	
Fall	2012	Research in English	
Fall	2013	Research in English	
Spring	2014	Research in English	

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STANFORD UNIVERSITY | OFFICE OF THE UNIVERSITY REGISTRAR

Students Faculty Staff Everyone Resources and Help

Scholarship Record

Scholarship: The character and qualities of a scholar; attainments in science or literature; erudition; learning
-- *Webster's Dictionary* (1913)

What is the Scholarship Record

The Scholarship Record is a pilot for a new kind of record designed with the student in mind. Its aim is to help you foster discussion with advisers, mentors, and career counselors by putting the learning outcomes of your classes in the foreground.

When you graduate, your education at Stanford will be summarized in two official documents – a diploma and an academic transcript. While these records include your key academic achievements with respect to your choice of major, important courses, and perhaps an honors or doctoral thesis, there is much that is not represented, from interactions with faculty, staff, and peers to the diversity and range of in-class and out-of-class learning experiences that make your Stanford education truly unique.

The Registrar's Office is exploring new approaches and different kinds of academic records to help students tell the story about their Stanford education as they have lived and experienced it, and not just how it was defined by the institution and delivered to them.

The Scholarship Record is meant to assist you in expressing what you have learned while on campus. We hope it will help you gain a greater understanding of the skills you have acquired so you can better articulate the value of your education to external audiences such as families, friends, graduate programs, and especially prospective employers.

What SaaS Has Done to Enterprise Software…

SaaS MODEL:

ADOBE CREATIVE SUITE BECOMES ADOBE CREATIVE CLOUD

- Build product from Day 1 with focus on customer experience and value
  - Unbundle into component parts
- Decide on your business model
  - There may be many
- “Customer for life” mindset
  - Major opportunity

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Evolution of Competency Marketplaces

Step 1

Credly

Portfolium

Step 2

Taleo

Talent Drives Performance

Step 3

People ANALYTICS

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.

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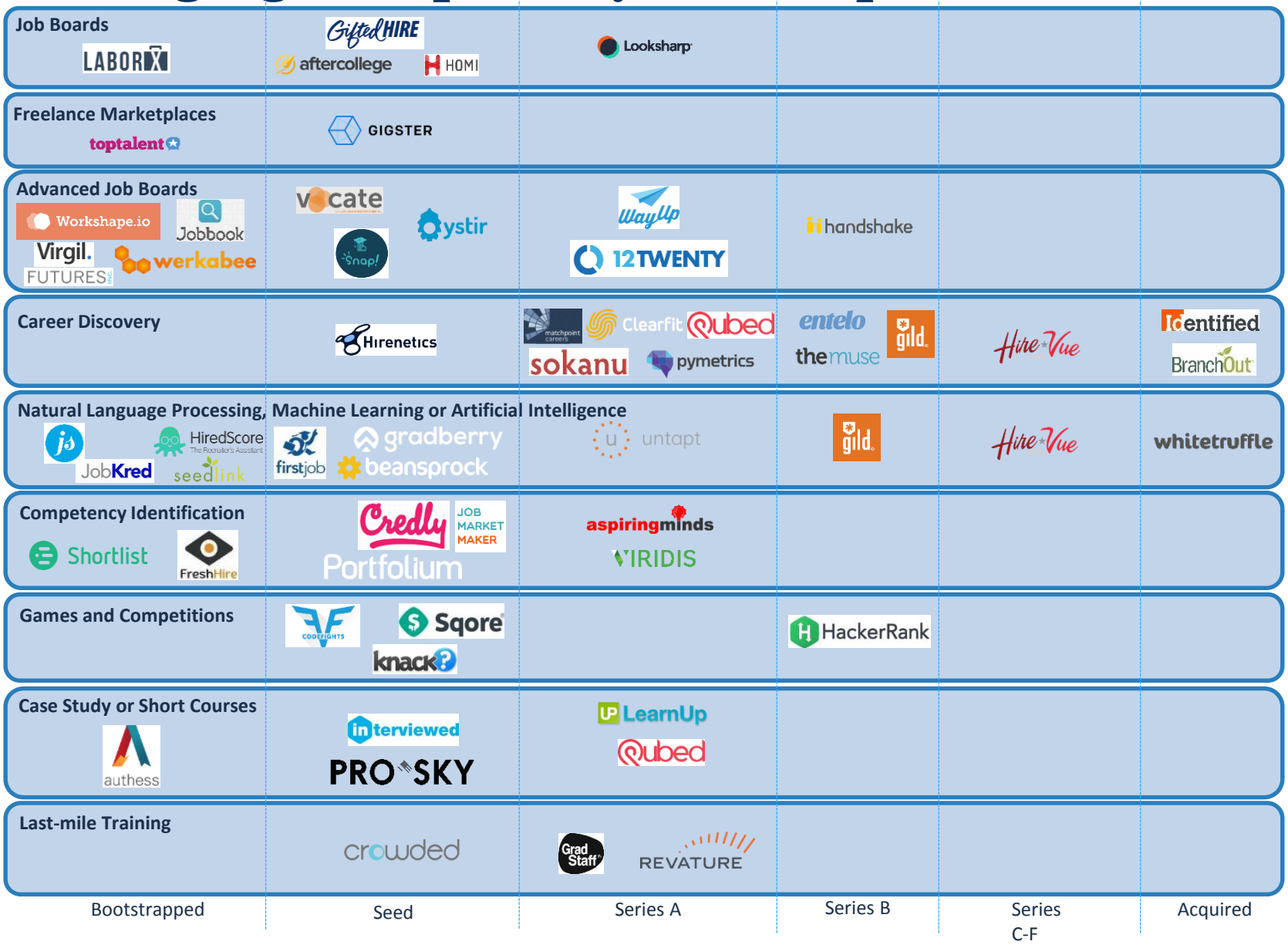
Emerging Competency Marketplaces



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

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www.universityventures.com

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